

Labour Exploitation, Trafficking and Migrant Health:

Multi-country Findings on the
Health Risks and Consequences
of Migrant and Trafficked Workers



International Organization for Migration (IOM)

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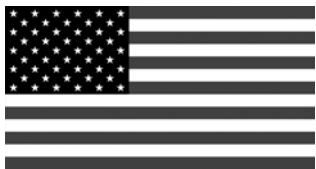
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CONTENTS

1	EXECUTIVE SUMMARY	3
2	INTRODUCTION	15
	Study objectives	17
	Conceptual framework.....	18
	Study methods	18
	Recruitment procedures and sample	19
	Topic guide	21
	Data collection and analysis	22
	Ethics	22
3	ARGENTINA: STUDY RESULTS	27
	3.1 Participant description table	27
	3.2 Context	27
	3.3 Summary of the health literature review	30
	3.4 Pre-departure	33
	3.5 Summary implications	48
	3.6 Recommendations Argentina	50
	3.7 Further research priorities.....	53
	Argentina health literature review bibliography	54
4	PERU: STUDY RESULTS	59
	4.1 Participant description table	59
	4.2 Context	59
	4.3 Summary of the health literature review	63
	4.4 Main findings.....	67
	4.5 Summary implications	82
	4.6 Recommendations Peru	84
	4.7 Further research priorities.....	89
	Peru health literature review bibliography.....	90
5	KAZAKHSTAN: STUDY RESULTS	93
	5.1 Participant description table	93
	5.2 Context	94
	5.3 Summary of the health literature review	96
	5.4 Main findings.....	100
	5.5 Summary implications	126
	5.6 Recommendations Kazakhstan.....	128
	5.7 Further research priorities.....	132
	Kazakhstan health literature review bibliography	133
6	MIGRANT WORKER EXPLOITATION AND HEALTH: COMPARATIVE MULTISECTOR, MULTI-COUNTRY FINDINGS	141
7	SUMMARY RECOMMENDATIONS	167
8	ANNEX	171

TABLES AND FIGURES

Table 1:	Overview research objectives and methods.....	19
Table 2:	Participant inclusion and exclusion criteria.....	19
Table 3:	Study populations and sample size per country	21
Table 4:	Participant characteristics (Argentina).....	27
Table 5:	Informal textile industry: Health risk exposures and outcomes	32
Table 6:	Participant characteristics (Peru).....	59
Table 7:	Artisanal and small-scale gold mining: Health risk exposures and outcomes.....	66
Table 8:	Participant characteristics (Kazakhstan).....	93
Table 9:	Indicators of living standards in some CIS countries.....	94
Table 10 :	Construction sector: Health risk exposures and outcomes	98
Figure 1:	EXTRMHE conceptual framework.....	18
Figure 2:	Conceptual framework	171





1

EXECUTIVE SUMMARY

I. EXECUTIVE SUMMARY

There are an estimated 232 million international migrants and 740 million internal migrants worldwide, most of whom are in search of work. Global assessments also suggest that a substantial proportion of labour migrants ends up in situations of extreme exploitation, sometimes formally identified as victims of human trafficking. However, despite the numerous occupations in which extreme exploitation has been found to occur, health research has been limited, with most research focused on the health of victims of trafficking for sexual exploitation. As greater attention turns to people who have been exploited in labour sectors, it is necessary to understand the range of occupational health and safety risks and hazardous working and living conditions of workers exploited in specific sectors.

Moreover, because large numbers of migrant workers fall into a “grey area” along a spectrum encompassing varying degrees and types of exploitation, including human trafficking (as defined by international and national law), there is good reason to explore the differences and similarities between the health needs of those who have been identified as trafficked compared to other migrants working in the same labour sector who have not.

In order to achieve these objectives, we set out to explore the types of exploitation and harm people experienced in certain so-called “low-skilled labour sectors” that are commonly considered to be exploitative or known for practices associated with human trafficking: textile work, construction and artisanal gold mining. Each of the selected study countries – Argentina, Kazakhstan and Peru – has destination locations for either international or internal trafficking into these sectors. As concerns about the human effects of global trade, increasingly mobile and precarious labour forces and extreme levels of exploitation – including human trafficking – have received greater policy attention and donor investment, there is now a need for a stronger evidence base to understand the links between low-skilled labour migration, human trafficking and health, to inform appropriate and effective responses.

Methodology

Study design

The *Labour Exploitation, Trafficking and Migrant Health* (EXTRMHE) research was a cross-sectional, observational study using qualitative methods that included two components. In the first component, literature reviews were conducted to identify occupational health risks associated with the migrant worker sectors chosen for the study. In the second component, researchers undertook a qualitative study based on semi-structured interviews designed to collect detailed descriptive and case data for each of these sectors.

Sample

Participants were men and women aged 18 to 55. In total we interviewed 71 people; of these, 18 were formally identified victims of trafficking and 53 were migrant workers. Trafficking survivor participants were identified through IOM counter-trafficking partner networks or an IOM Assisted Voluntary Return and Reintegration Programme. Eligible service users were initially approached by a support worker, social worker or health provider. We explored available sources to identify migrant workers in each setting (for example, via IOM mobile health units or local service partners) and used snowball sampling among migrant workers. Workers were generally approached outside their workplace, while in a health clinic, residence or service provider office. For both trafficking survivors and migrant workers, support professionals judged the potential risks associated with participation and, if they deemed it safe, described the study aims and the nature of informed consent, and discussed with the possible participant any potential concerns about participating.

Data collection and analysis

Research interviews were conducted by members of the EXTRMHE project team or by research assistants selected and trained by the EXTRMHE team during a one-week training course. All interviews were conducted by the researchers in the local language without need for an interpreter;¹ all interviews were audio-recorded. In Kazakhstan, when the researcher did not speak the interviewer's first language, interviews were conducted in Russian. Data was analysed using a thematic approach, including a comparative component to identify the similarities and differences in experiences, risks and health outcomes between migrant workers and trafficked persons in each of the study countries.

Ethics

Ethical approval for the study was granted by the London School of Hygiene & Tropical Medicine and by local ethics boards in each country. In Argentina, approval was granted by the Hospital de Clínicas "José de San Martín", a teaching hospital that is part of the University of Buenos Aires. In Peru, ethical approval was granted by the ethics committee of the Cayetano Heredia University. In Kazakhstan, the School of Public Health's Ethics Committee approved the EXTRMHE study.

Summary of study findings

Argentina

The research team conducted 21 interviews in total, with fifteen Bolivian migrant workers and six victims of trafficking, all of whom who had worked in the textile sector in Argentina. Interviews were carried out with 10 men and 11 women who were between ages 18 and 47, of whom 7 reported being married. Interviewees had a range of work experiences and varying education levels. Women usually worked as cooks, ironers, assistants (to the sewing machine operators) and sewing machine operators, while men mainly worked on the last two tasks. Sewing machine operators earned money by the piece, whereas cooks, ironers and assistants tended to earn a fixed (lower) salary.

All interviewees aspired to have a better income and expected to receive better pay than in their country of origin. Many were supporting (or hoped to support) their families. Migration was common and seen in a positive light by their families and communities of origin.

Victims of trafficking tended to be recruited in their country of origin, while the migrant workers interviewed were often recruited or secured jobs during transit or after arrival, through migrant networks and other sources (for example, radio stations, while on the bus, and in other ways). Both migrant workers and victims of trafficking reported knowing the general work area (textiles) without having real information about the conditions; they lacked regular contracts, because agreements were verbal. Social networks (friends, relatives, acquaintances) constituted a key element of the migration and recruitment pathway for migrant workers and trafficking survivors. Discussions with their networks seemed to affect not only the final decision to migrate but also created among migrants and trafficking victims a sense of security, with many migrants not asking about working conditions or terms before travelling. Therefore, counter-trafficking efforts should account for the fact that recruitment offers often come from someone the migrant knows and not only from strangers.

It is notable that the international migration that took place was legal, but that misinformation about their rights in Argentina as migrants and workers (including about such aspects as access to health care and the ability to stay in the country) was used as a threat or to restrict movement and prevent employees from leaving. This was particularly common for the victims of trafficking, who had seemingly fewer social contacts in Argentina, making their access to correct information more limited. Interviewees were aware that the textile workshops they worked in were clandestine or not following all legal requirements, but spoke of fear of police and migration officials being based on what they had been told by often exploitative employers. Those interviewed not only did not understand their legal protections under the law, but seemed to not understand the concept of having inherent human rights, both as migrants and as informal workers. This perception and gap in information appeared to contribute to their exploitation and should be addressed in policy and

¹ Russian and Spanish language versions of this report were under production at the time of publication.

programmes, particularly given that Argentina is a country that has clear legislative protections for both migrants and workers.

Initiatives to improve safe labour migration and decrease the risk of exploitation should focus on helping prospective migrants gain better information prior to accepting jobs and migrating for work. Radio stations and newspaper advertisements were mentioned by both victims of trafficking and migrant workers (either in the Plurinational State of Bolivia,² or in Argentina on the local radio stations of the Bolivian diaspora) and may provide very useful access points for these populations for future interventions. All interviewees travelled by bus from Bolivia and entered Argentina through regular border controls, which indicates that campaigns or other interventions could also take place in bus terminals in various Bolivian cities and in Argentina.

In terms of working conditions, neither migrant workers nor victims of trafficking had contracts, which had an impact on their access to labour rights established by law, such as sick leave or maternity leave. They endured long working hours and bad working conditions, and those living in the workshops were exposed to unhealthy living conditions. Some interviewees recognized that the conditions for those in the “live-in” situations were not adequate; but, generally, the hazardous working and living conditions had started to seem normal to them because these conditions were so common.

Physical hazards were similar for migrant workers and victims of trafficking, although the victims of trafficking worked longer hours. Occupational hazards included cuts (often deep cuts) on hands or fingers, a common accident that might be related to the absence of personal protective equipment. Respiratory problems resulting from dust inhalation, as well as tuberculosis (TB), were reported as common problems among interviewees. They also commonly reported musculoskeletal problems, including back, arm and neck pain. Sleep deprivation due to long working hours was mentioned by many, particularly those who had been trafficked. Poor nutrition related to the poor quality and quantity of food provided in the workshop was also a common complaint.

Psychological distress was commonly discussed by both migrant workers and victims of trafficking, although victims of trafficking reported more threats and less freedom and were pressured to work without actually receiving payment, which increased the stress of not being able to contact or send money to their loved ones. Migrant workers and victims of trafficking reported threats by their exploitative employers, particularly threats related to their immigration status and the fact that they were informal workers; they often received misinformation about local authorities and the migration law in Argentina. Victims of trafficking reported more threats and abuse, while migrant workers witnessed abuses.

Victims of trafficking slept and rested less than migrant workers because they worked the longest hours and because of their uncomfortable, stressful living conditions (for example, lack of privacy, sleeping in a common area). Conditions were generally bad for both migrant workers and victims of trafficking, but victims of trafficking worked more, had less freedom, were more often threatened; and, because they tended to be paid less or not at all, they spoke more about being hungry and unable to leave the workshop, and being unable to contact their families.

Among the interviewees, access to medical care was delayed until pain became unbearable or illnesses were of serious concern, particularly for victims of trafficking. Migrant workers tended to have access to information outside the workshop as well as more freedom of movement, such as contact with relatives, neighbours or co-workers who told them where to go and that they had the right to access medical services for free. As a result, migrant workers reported better access to health care. However, migrant workers who were sewing machine operators were particularly reluctant to seek out health care because they did not want to lose days of work as they were paid by piece. Even for those who could access medical care, when extended treatment was required, they reported it often could not be completed because the migrant workers needed to keep working and the movements of the victims of trafficking were highly restricted. Workers continuing to work even while suffering from illnesses (such as TB) exposed the other co-workers to infection.

² For the sake of space, Bolivia will be used hereinafter.

It is interesting to note that some interviewees seemed to believe their status as informal workers justified their working conditions. As an example, some mentioned that “working off the books” permitted owners to shirk responsibility for providing personal protective equipment. Interviewees believed that being informal workers meant workshop owners did not have to provide them with a safe or fair working environment in terms of working hours and social benefits; and that it also meant they did not have the right to complain about conditions or other abuses. In reality, according to Argentine law, an employer can be fined for not formalizing workers to ensure their access to social benefits and protections extended to formal workers under the law. Future interventions must focus on ensuring that migrant workers in the textile industry in Argentina are aware of their rights under Argentine law.

Peru

Twenty-one interviews were carried out with men and women (eight men and thirteen women, ages 18–54) who had migrated within Peru to the region of Madre de Dios to work in illegal or informal small-scale gold mining settlements. Most reported being unmarried but in domestic partnerships. No victims of trafficking could be interviewed in Peru, as only those trafficked for sexual exploitation were being identified at the time of the study. Although many accounts revealed serious levels of labour exploitation, none of those individuals interviewed had been identified formally as a victim of trafficking, an important finding in and of itself.

Poverty, unemployment and limited education had driven many individuals interviewed to migrate, with the hope of earning a high income in a relatively short period. The move to Madre de Dios for work was often undertaken with little information gathering or preparation, because migration seemed to be a community norm in the interviewees’ places of origin. This seemed to make it less likely that prospective migrants would assess the potential risks of migrating or modes of migration and job placement. The absence of victims of trafficking in our sample meant that we did not have accounts of recruiting practices by traffickers. Migrant workers who were interviewed migrated on their own and then brought their families once established. Interviewees reported improvements in the journey that had occurred since they themselves had migrated, due to recent construction of highways and bus routes operating in the area. Findings suggest that bus terminals both at the point of origin and in Madre de Dios would be potential intervention points.

Women usually worked as cooks, whereas men worked clearing the land or operating the extraction engines and diving into the pit to help the extraction process. Those who operated the equipment or dove into the pits earned a percentage of the gold extracted, whereas the others (the cooks and land-clearers) tended to earn a fixed (lower) salary. Most migrant workers appeared to be in exploitative labour circumstances: they had no contract or benefits and experienced long working hours and hazardous working and living conditions. Some interviewees recognized the poor conditions. However, such exploitation seemed to have become normalized; it was often viewed by interviewees as justified because of the illegal/informal nature of the activity. Many of the migrant workers interviewed felt that they were better off compared to those in their communities of origin. Among most participants there was a limited understanding of concepts such as labour rights.

The main occupational risk exposures were related to extremely long working days (including 24 hour shifts in some cases) without appropriate breaks, inadequate training and lack of protective equipment. Key risks included exposure to toxic chemicals (in particular mercury), operating heavy machinery, being submerged in water for long periods and clearing the jungle. Workers were highly exposed to mosquito bites and snake bites. Living conditions in the camps were reported to be extremely difficult: There was poor access to fresh water to cook and bathe, consumption of mercury contaminated water and fish, inadequate living quarters including filthy toilet facilities, lack of electricity and poor nutrition. The main reported physical outcomes of exposure to these hazards and poor conditions were related to accidents with pressure or suction hoses, precarious infrastructure falling, or human error associated with poor or no training on equipment and fatigue. Other physical health outcomes included skin conditions and fungi from being submerged in water, kidney problems, parasites, malaria, dengue and leishmaniasis. Reported sexual and reproductive health outcomes



included urinary infections and gynaecological problems for women, in particular pregnant women. Participants regularly mentioned mental health symptoms that signalled depression and anxiety problems generated by constant worry and by job and financial insecurity.

Camps did not have first aid kits and basic supplies such as antivenin for venomous snake and insect bites. Access to health services was limited and often far from camps – which could be fatal in cases of serious injuries or infections. Workers were reluctant to access health care because they had to pay for it themselves and they did not want to lose work days, so as a result they only sought health services in extreme cases. Many opted for traditional remedies (herbs and plants) that were often provided by the women living in the camps and working as cooks. Interviewees described their limited access to health services; however it is important to highlight that health services in the area were, in general, inadequate. Those interviewed also mentioned barriers to accessing national health services because of being internal migrants officially registered elsewhere in the country, thus requiring costly travel to receive care, when needed.

Migrant workers tended to focus on those health outcomes they could see or feel, so they did not recognize as problematic some of the most important hazards such as mercury contamination and other chemicals involved in artisanal gold extraction, because the effects on health were not as observable as other health problems, for example skin problems. Future interventions should focus on creating awareness of these issues and ways of protecting against them such as the use of personal protective equipment (PPE) and amalgamation procedures which do not include burning mercury in open air.

Overall, state entities (health, labour, law enforcement, human rights, etc.) were generally absent from the interviewee's experiences in Madre de Dios. Interviewees noted that the political conflict with the illegal mining sector had had a negative impact on their earnings and the number of jobs available in the area. The combat against illegal mining should take into account the future of the internal migrants who find themselves without jobs and who could therefore turn to riskier solutions – and who should be seen as people who have suffered labour exploitation and abuse, including trafficking in persons.

Kazakhstan

Twenty-nine interviews were conducted with migrant workers and victims of trafficking who had worked in the construction sector in Kazakhstan. The twelve individuals who were victims of trafficking came from China, Kazakhstan, Kyrgyzstan and Uzbekistan, while the 17 migrant workers were from Kyrgyzstan and Mongolia. Overall Kyrgyzstan and Uzbekistan were the two primary countries of origin among the interviewee group. All but one participant was male. Ages ranged from 20 to 55, and the majority were married with children. Victims of trafficking and migrant workers largely travelled to Kazakhstan for economic reasons; they described the desire to pay off debts or pay for future expenses. As a group, the migrant workers appeared to be wealthier before migration than the victims of trafficking.

Migrant workers were recruited via an official employment agency or through migrant networks. Those recruited via the official employment agency had specific construction vocational certificates, migrated with proper documentation, did not have personal contacts at the destination and worked for large construction companies. Migrant workers recruited more informally were recruited via known contacts and had someone they knew at the destination. Nearly all participants described the importance of having a trusted contact in the destination country to ensure safe migration. Migrants did not always follow the proper in-country registration or work permit processes. In contrast, victims of trafficking did not travel via an official employment agency and did not have contacts in Kazakhstan. They were typically recruited through an intermediary. Victims of trafficking took on debts to their future employers, who either gave them a cash advance prior to travelling or paid their travelling costs. The traffickers used this debt as a tool to manipulate and detain the victims of trafficking.

Safe migration in this study arm occurred for two groups: those who travelled formally through the employment agency in Bishkek, Kyrgyzstan and those who had trusted contacts at their destination. Findings suggest that future research should explore whether prospective migrants are safer if they have one of these processes in place prior to leaving home to ensure they are not exploited.

Traffickers took the migrants' passports at the earliest possible moment; they used the leverage of the registration laws to further extend the monetary debt the victims of trafficking owed them. Policies should target these exploitative practices.

Both migrant workers and victims of trafficking were exposed to and described health outcomes that are typical for the construction industry, including musculoskeletal injuries, lacerations, lung infections and ocular injuries. Both migrant workers and victims of trafficking learned most of their construction skills on the job, with the victims of trafficking tending to be engaged in more unskilled tasks. PPE use was rare among victims of trafficking and inconsistent among the migrant workers. Most of the injuries described were avoidable with proper use of PPE. Both groups of interviewees noted the negative impact of the harsh environmental conditions, including the extreme cold and heat and the presence of dust. The intensity and duration of the workday was similar for migrants and victims of trafficking but their control over their schedules differed. Victims of trafficking were forced to work long hours with tightly observed breaks, if given; migrant workers were more able to control if and when they took breaks, when they finished the workday and the tasks they did. Construction is a dangerous industry, and migrants and victims of trafficking alike inadequately protected their head, ears, eyes, lungs, hands and feet with PPE. Helping migrants understand the real risks associated with not wearing PPE may be beneficial. Employers should be engaged in creating incentives to wearing PPE, as well as ensuring safer work conditions.

Migrant workers experienced psychological abuse and occasional physical altercations associated with ethnic conflicts among co-workers. Victims of trafficking experienced pervasive psychological violence – including constant monitoring, threats, insults and sleep deprivation – often perpetrated by employers and managers as well as by co-workers; this continued throughout their exploitation. Physical violence and threats were meant to deter escape.

Migrant workers and victims of trafficking described crowded, cold, wet living conditions with poor access to running water and electricity. Victims of trafficking noted that they were monitored while they were sleeping; some appeared to have worse access to basic hygiene than the migrant workers. Both groups largely lived at their worksite, although migrant workers had the option to live elsewhere. Living conditions among victims of trafficking and migrant workers seemed to be conducive to the spread of TB; yet migrant workers had a very low awareness of the symptoms associated with TB, possibly leading to its spread to other migrants. Increasing migrant knowledge of TB and its effects on health, as well as improving access to treatment, may help reduce the spread of TB, including drug resistant strains, in the region. The Government could consider implementing mobile health screening and care, particularly during the height of the migration season, and placing these clinics along commonly accessed migration routes and migrant destinations.

Migrant workers, and in particular those of Kyrgyz origin, were able to move about quite freely. Those without all of the proper legal documentation were fearful of encountering the police. The movements of victims of trafficking were extremely restricted; this was reinforced with guard dogs, guards, geographical isolation, monitoring systems, threats and withholding of documentation and by victims' perceptions of indebtedness to their traffickers.

Migrant workers generally had the freedom to access medical services, but barriers to care included undocumented status and cost. Migrant workers and victims of trafficking typically self-treated with pills that they brought with them from their countries of origin, or, in the case of the victims of trafficking, those that were supplied to them by guards. Victims of trafficking were released to return home if they sustained a disabling illness or injury. Access to medical care was poor for both



migrant workers and victims of trafficking, suggesting the importance of extending health care for all migrants, including undocumented workers.

Irregular migrant workers were fearful of law enforcement and migration authorities because of concerns about their legal status; they would circumvent possible fees or detainment through regular, negotiated bribery of the police. Two victims of trafficking cited migration police as complicit with their trafficking because these police had received payment for helping kidnap them. Police corruption, exemplified in this study by officers actively involved in trafficking interviewees, should be detected and prosecuted.

Synthesis

Across all study settings, most interviewees, particularly those with children, viewed migration for work as the best way to achieve better income to support basic needs as well as invest in education. Migration choices and patterns often reflected community migration norms and local experience, knowledge and practices. To ensure that messages and practical information about how to migrate safely are well-communicated and well-targeted, programmes should draw on greater evidence about local migration perceptions, patterns and migrant decision-making processes, as well as on migrants' understanding of and expectations around their future employment.

Findings suggest that there may not be clear advice to offer most prospective migrants that will keep them from being exploited. Few formal recruitment mechanisms were mentioned by the interviewees, and there did not appear to be a clear method of recruitment that was protective of migrant workers (except the IOM service in Central Asia). Current interventions advising migrant workers to obtain written contracts may be impractical, because written contracts are so rare and requests for them may jeopardize job opportunities. The advice that is given by many pre-departure programmes for migrants to maintain identity documents may also be impractical because foreign workers generally must give over their passports or identity documents to agents or employers to be registered to work and/or for temporary residence permission. Yet, the absence of job information is problematic, particularly in highly informal sectors. Further research, including migrant-led and employer-informed insights, is needed to identify messages that might reduce the risk of exploitation.

Workers in each study country experienced common risk exposures similar to those described in previous research on migrant worker health. Long hours with limited break time are among the most significant risk factors for work-place accidents; interviewees in our study appeared to labour extremely long hours in jobs they knew or suspected were harmful to their health because of individual financial aspirations and payment methods (that is, per garment, based on a percentage of the gold extracted per day, or based on edifice constructed).

Specific occupational risk exposures differed by labour sector and often by particular tasks within each sector. However, common risks across study sites included equipment-related injuries, dust-related lung diseases, musculoskeletal problems from repetitive activities and TB.

In textile work, common occupational hazards were: inhalation of cloth-related dust particles; injuries from iron burns, musculoskeletal problems from repetitive actions and long-held postures and cuts or punctures from sewing machine needles, blades of cutting machines, yarn cutting scissors or tagging guns. Workers reported accidentally "sewing up" their hands; they also reported infection with TB from working and living in crowded facilities.

In gold mining, among the most serious long-term health hazards is mercury poisoning. Other risks faced by the migrant workers included: snake bites incurred when clearing the land; malaria and dengue; leishmaniasis from sandflies; infectious diseases and parasites from contaminated water; being hit by heavy objects; landslides; burns from heated engines; inhalation of toxic fumes; falls from unstable scaffolding; and nail and dermal fungi.

In construction work, common hazards were: dust inhalation (both from construction-site dust and dust storms); electric shock; falling from a height or being hit by falling objects; vision loss from welding or penetrating objects; back injuries and hernias from lifting heavy objects; lacerations while cutting metal or from being hit with concrete shards during drilling; harms due to extreme temperatures; and chemical hazards such as asbestos or lead, which can cause mesothelioma, a form of lung cancer, or brain damage such as leukoencephalopathy.

Few participants in any country studied reported receiving or using any PPE and few believed employers were responsible for supplying PPE. Training for workers appeared to be most commonly “on-the-job”, in the form of informal apprenticeships, and primarily via the generosity of other workers. Workers were often more aware of the hazards that were visible and direct and less likely to discuss risks associated with longer-term harm (for example, mercury poisoning).

Access to and use of medical services was limited across study contexts, often because of cost, legal status, and lost wages from missing work. Some interviewees were misinformed about rights to services. In Peru, access to health care was influenced by the overall weakness of the health system. In all countries studied, lack of access to health care for those who contracted TB was particularly worrisome because of the risks of further transmission and poor adherence to TB medication, which can lead to increased multi-drug resistance. Better information is warranted about occupational and other health risks and potential options for safety and services. There is also larger role for labour inspections. Moreover, good mobile health units and wider-reaching occupational health promotion are needed in locations with high numbers of migrant workers.

Psychological and verbal abuse was more common among interviewees than was physical abuse, although identified trafficking survivors reported severe physical abuses and confinement. Threats – and in particular threats to report workers to immigration authorities or police – served to control both migrant workers and victims of trafficking. Confinement and surveillance were particularly common among victims of trafficking.

Regardless of work sector, country or gender, both migrant workers and victims of trafficking frequently reported sources of stress that included long hours, financial worries, poor living conditions and pressure from colleagues. Compatriots seemed to provide a good source of comfort, formed a useful network for assistance and were sources of information that helped counter misinformation provided by exploitative employers. Interviewees indicated that law enforcement and migration officials were more often a greater source of stress and fear than a potential resource for assistance.

Findings indicate notable similarities and differences between the experiences of migrant workers and workers who were identified as trafficked. General occupation-related hazards, poor living conditions and health consequences were similar for workers in the same sector. Use of health services was similar, though victims of trafficking appeared to have much more restricted movement. Both migrant workers and victims of trafficking preferred to avoid contact with law enforcement officials and labour inspectors and both had poor awareness of rights. Critically, for both groups, efforts to raise awareness of trafficking seemed to have questionable influence.

Among key differences in the experiences of migrant workers and victims of trafficking, identified victims of trafficking were more likely to be physically abused than migrant workers; work and live in worse conditions; work more hours per day; and be paid less.

Findings on risk factors for exploitation prior to migration were mixed and sometimes even contradictory, and generally site- or even case-specific. Kazakhstan findings suggest that risky pre-migration arrangements often included receiving some payment or loan. Yet this was not always the case. Across study countries, engagement with known migrant networks did not necessarily prove to be protective either. Prior to migration, many workers arranged their jobs through someone known to them. Some were exploited; some were not. Most Bolivians who were victims of trafficking in the



textile industry in Argentina had arranged their job prior to migrating, while those who had found their job upon arrival in Argentina were less likely to end up in exploitative situations. In Kazakhstan, none of the migrant workers who had a known contact at the destination were trafficked.

The research found that many of the abuses reported by victims of trafficking were also reported by numerous migrant workers who were NOT identified as victims of trafficking. Policymakers and programme staff need to look more carefully at what is happening to the larger population of people working in unregulated, informal sectors, because there are many similarities in the harm experienced by migrant workers and that experienced by identified victims of trafficking. We hope these findings will raise some of the pressing questions about the distinctions – and the limits of distinctions – between both groups’ health and service needs, and that future interventions will aim to include the larger populations of those who are in need of assistance. We believe, as many have noted in the field of human trafficking, that there has been a terminological “elephant in the room”: determining who “fits” within the definition of “trafficked” or “slave” and therefore who should benefit from certain entitlements and for whom should we target interventions. Yet, our results suggest that many – if not most – of people’s protection and assistance needs are similar.

This is among the first studies to explore and compare the influence of occupational and other risk exposures on people’s health and well-being and compare the experiences of migrant workers and victims of trafficking across sectors and regions. We would like these results to open a wider policy and programming dialogue on labour migration and human trafficking, and, in particular, raise questions about the distinctions between, and the commonalities of, the service needs of migrants and people identified as trafficked.

As dialogue progresses on achieving the Sustainable Development Goals, we hope these findings make it clear that strategies to reduce poverty and support people’s aspirations to a better life must address the larger context that puts migrant workers at risk of significant and long-term harm. By investing to ameliorate the larger problem of labour exploitation, we can simultaneously gain added value by protecting and promoting people’s health and well-being.

Summary of recommendations

General

- Support and invest in achieving the Sustainable Development Goals (SDGs), particularly SDG 8 to “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” and “to eradicate forced labour, end modern slavery and human trafficking”. Specifically, protect labour rights and promote safe, secure, non-exploitative work environments for all, particularly migrants working in informal, under- or unregulated sectors.

Ministry of Health

- Recognize the health and safety needs of migrant workers, particularly trafficked people.
- Fund health outreach initiatives in locations with high migrant populations, regardless of whether they are engaged in informal work or have irregular migration status.
- Provide information and training for health practitioners about occupational health risks, especially for sectors known to be exploitative and under-regulated.
- Implement a protocol for health providers to provide care for migrant workers and victims of trafficking for labour exploitation, including identification, safe referral and trauma-informed care.

Ministry of Labour

- Strengthen the capacity of labour inspectors to monitor workplaces and recognize health and safety violations, particularly in under-regulated sectors or irregular work situations.
- Develop labour inspection guidelines and build the capacity of inspectors to recognize situations of extreme exploitation, including human trafficking and safely refer individuals to support services.
- Fund strategies to inform migrant workers of their rights to health and other services and their rights as migrants and as workers.

Private sector (business, employers and industry)

- Engage employers (and contractors within their supply chains) to ensure safe workplaces, including well-monitored workplace safety conditions, provision and use of relevant protective gear and clear responses to accidents and injuries.

Further research priorities

- Conduct quantitative surveys to identify broader patterns of migration risk, protective factors and decision-making, migrant health and health service access and use.
- Carry out longitudinal research to identify migrants' long-term health needs.
- Conduct intervention research to develop evidence-based strategies to improve migrant worker conditions, especially: protection and response mechanisms; outreach clinics for health and legal services; labour inspections of registered and irregular enterprises; worker coalitions and victim-centred law enforcement responses.





2

INTRODUCTION

2. INTRODUCTION

Globally, there are an estimated 232 million international migrants and 740 million internal migrants, most of whom migrate in search of work.³ Global assessments also suggest a substantial number (approximately 21 million)⁴ of labour migrants end up in situations of extreme exploitation – including victims of human trafficking or forced labour.⁵

The United Nations' *Protocol to Prevent, Suppress and Punish Trafficking in Persons, especially Women and Children, Supplementing the United Nations Convention against Transnational Organized Crime* (also referred to as the Trafficking Protocol or Palermo Protocol) states:

“Trafficking in persons” shall mean the recruitment, transportation, transfer, harbouring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. Exploitation shall include, at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs.⁶

As criminal levels of exploitation have gained global attention, so has recognition of the health dimensions of such abuses.⁷ Yet there remains little evidence on the health risks and consequences associated with many forms of labour trafficking, because most data have come from studies on sex trafficking.⁸ Despite the large number of occupations in which extreme exploitation has been found to occur, health research has been limited.^{9,10} However, studies on labour trafficking and health are beginning to emerge, for example, the recent publication of findings on the health of more than 1,100 trafficking survivors in the Greater Mekong Subregion.¹¹ Results from this study show that survivors had been exploited in more than 15 different sectors, experienced numerous abuses and sustained high rates of injury, physical pain and symptoms of post-traumatic stress disorder and depression.¹² As greater attention turns to people who have been exploited in such labour sectors as fishing, mining, construction and textile work, it is necessary to understand the range of occupational health and safety risks they face as well as the hazardous working and living conditions associated with specific sectors.

³ United Nations Department of Economic and Social Affairs, “The number of international migrants worldwide reaches 232 million”, *Population Facts*, No. 2013/2, September 2013. Available from http://esa.un.org/unmigration/documents/The_number_of_international_migrants.pdf.

⁴ International Labour Organization, “Forced labour, human trafficking and slavery: Facts and figures”, web article. Available from www.ilo.org/global/topics/forced-labour/lang-en/index.htm. Accessed 31 October 2015.

⁵ Terminology for this field (that is, such terms as “modern slavery” and “forced labour”) remains a matter of contention and is constantly shifting. We use the term “human trafficking” because it is the language in the United Nations Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, Supplementing the United Nations Convention against Transnational Organized Crime.

⁶ United Nations General Assembly, United Nations Convention against Transnational Organized Crime (A/RES/55/25), adopted by the General Assembly 15 November 2000.

⁷ World Health Organization and Pan American Health Organization, “Human trafficking”, *Understanding and addressing violence against women*, WHO, Geneva, 2012. Available from http://apps.who.int/iris/bitstream/10665/77394/1/WHO_RHR_12.42_eng.pdf; Erin Williamson, Nicole M. Dutch and Heather J. Clawson, “Medical treatment of victims of sexual assault and domestic violence and its applicability to victims of human trafficking”, U.S. Department of Health and Human Services, web article, 30 March 2010. Available from <http://aspe.hhs.gov/basic-report/medical-treatment-victims-sexual-assault-and-domestic-violence-and-its-applicability-victims-human-trafficking>. Accessed 31 October 2015. Heal Trafficking, Health Professional Education, Advocacy & Linkage website: <https://healtrafficking.wordpress.com>. Accessed 31 October 2015.

⁸ Siân Oram et al., “Prevalence and risk of violence and the physical, mental, and sexual health problems associated with human trafficking: Systematic review”, *PLoS Medicine* 9, no. 5 (2012), e1001224, doi: [10.1371/journal.pmed.1001224](https://doi.org/10.1371/journal.pmed.1001224). Accessed 2 November 2015.

⁹ Eleanor Turner-Moss et al., “Labour exploitation and health: A case series of men and women seeking post-trafficking services”, *Journal of Immigrant Minority Health* 16, no. (2014), pp. 473–480, doi: [http://dx.doi.org/10.1007/s10903-013-9832-6](https://doi.org/10.1007/s10903-013-9832-6). Accessed 2 November 2015.

¹⁰ United States Department of State Office to Monitor and Combat Trafficking in Persons, *Trafficking in persons report 2015*, United States Department of State, Washington, D.C., July 2015.

¹¹ Ligia Kiss et al., “Health of men, women, and children in post-trafficking services in Cambodia, Thailand, and Vietnam: An observational cross-sectional study”, *The Lancet Global Health* 3, no. 3 (2015), e154–161.

¹² Cathy Zimmerman et al., *Health and human trafficking in the Greater Mekong Subregion: Findings from a survey of men women and children in Thailand, Cambodia and Viet Nam*, International Organization for Migration and London School of Hygiene & Tropical Medicine, Geneva, Switzerland, 2014. Available from http://publications.iom.int/bookstore/free/Steam_Report_Mekong.pdf.

Moreover, because large numbers of migrant workers fall into a “grey area” between trafficking (as defined by international law within the United Nations protocol) and exploitative and/or hazardous labour situations,¹³ there is good reason to explore the differences and similarities between the health needs of those who have been identified as trafficked compared to other migrants working in the same labour sector, who have not been formally identified as trafficked. It is possible, if not probable, that individuals working in sectors known for exploitative practices will have similar health needs whether formally identified as victims of trafficking or not, and that they could therefore potentially benefit from many of the same health and safety interventions.

Importantly, exploring the situation of migrant workers in sectors renowned for being exploitative will also contribute to our understanding of exploitation – the core concept in the UN definition of human trafficking. As noted by experts of the Global Migration Group:

“Exploitation” is a concept that is not clearly understood...The resulting categorization of exploited migrants into those who are victims of trafficking and those who are not has meant that some exploited migrants have been overlooked or deprioritized, irrespective of the fact that they suffered a similar type and level of exploitation as their trafficked counterparts.¹⁴

Although exploitation is recognized as a fundamental element of the crime of human trafficking^{15,16} and is key terminology used in numerous other international conventions,¹⁷ to date the term has been poorly defined, particularly with respect to harm.¹⁸ For example, we currently have little knowledge of how much and in what ways exploitation harms migrant workers physically or psychologically. Similarly, we have scant documentation of the range of occupational health and safety risks or availability or of use of personal protective equipment (PPE) in sectors known for exploitation. Moreover, there are very few – if any – studies that have attempted to compare how various health hazards affect workers in different labour sectors. Nor has there been sufficient research on how migrant workers’ perceptions of their legal rights or of such authorities as law enforcement or migration officials might affect their responses to their working conditions and, subsequently, their health and safety.

An important question that has lurked quietly around definitional debates is: *Which types and what degrees of exploitation harm workers in what ways?* Seeking answers to this question may lead us to better interventions to prevent or respond to various forms of labour exploitation not only for those who are identified as “trafficked”, but also for the wider population of workers (both migrant and non-migrant workers), regardless of how they are ultimately labelled and whether or not they fall into the legal definition of a person who has been trafficked, or are identified as such.

To begin to approach this question, we set out to explore the types of exploitation and harm people experienced in certain so-called “low-skilled labour sectors” that are commonly considered to be exploitative or are known for practices associated with human trafficking: textile work, construction and artisanal gold mining.

¹³ Janie A. Chuang, “Exploitation creep and the unmaking of human trafficking law”, *The American Journal of International Law* 108, no. 4 (2014), pp. 609–649; also as American University, WCL Research Paper No. 2014–49. Available from SSRN: www.jstor.org/stable/10.5305/amerjintelaw.108.4.0609#fndtn-pdf_only_tab_content.

¹⁴ Global Migration Group, *Exploitation and abuse of international migrants, particularly those in an irregular situation: A human rights approach*, United Nations Office on Drug and Crime, 2013. Available from www.unodc.org/documents/human-trafficking/2013/2013_GMG_Thematic_Paper.pdf.

¹⁵ The UNODC Model Law against Trafficking in Persons (2009) notes that a common understanding of exploitation is particularly harsh and abusive conditions of work or “conditions of work inconsistent with human dignity”. See www.unodc.org/documents/human-trafficking/UNODC_Model_Law_on_Trafficking_in_Persons.pdf, p. 36.

¹⁶ The IOM Glossary on Migration defines exploitation as follows: “The act of taking advantage of something or someone, in particular the act of taking unjust advantage of another for one’s own benefit (e.g. sexual exploitation, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs).” From “Glossary on Migration”, 2nd Edition, *International Migration Law* No. 25, International Organization for Migration, Geneva, 2011, p. 35.

¹⁷ Global Migration Group, *Exploitation and abuse of international migrants, particularly those in an irregular situation: A human rights approach*, United Nations Office on Drug and Crime, 2013. Available from www.unodc.org/documents/human-trafficking/2013/2013_GMG_Thematic_Paper.pdf.

¹⁸ Janie A. Chuang, “Exploitation creep and the unmaking of human trafficking law”, *The American Journal of International Law* 108, no. 4 (2014), pp. 609–649, doi: <http://dx.doi.org/10.5305/amerjintelaw.108.4.0609>; also as American University, WCL Research Paper No. 2014–49. Available from SSRN: <http://ssrn.com/abstract=2315513> or <http://dx.doi.org/10.2139/ssrn.2315513>.

Each of the selected study countries – Argentina, Peru and Kazakhstan – has destination locations for either international or internal trafficking into these sectors. In Argentina, the capital, Buenos Aires, and its environs host a growing textile sector where individuals, including a majority of Bolivian migrants to Argentina, are drawn into small- and large-scale production work, mostly informal, that exposes them to various occupational and other hazards, including violence.¹⁹ In Peru, the Madre de Dios region has a well-known gold mining sector that includes legal medium- and large-scale mines as well as artisanal and small-scale mines that are often informal or illegal and that lure high numbers of internal migrant labourers, particularly those from poor rural areas. Kazakhstan has had a rapid growth in the construction industry; this has drawn migrants from other countries in Central Asia. Workers in each of these sectors – textiles, gold mining and construction – are frequently exposed to serious health hazards, potential abuse and deprivation.

The multiple opportunities for exploitation of migrant workers engaged in work in low-skilled sectors mean that common hazards and occupational health risks specific to the sector are likely to be exacerbated and assistance needs greater.²⁰

As concerns about the human effects of global trade, increasingly mobile and precarious labour forces and extreme levels of exploitation – including human trafficking – have become more prominent in international dialogues, including within the Sustainable Development Goals, there is now a need for a stronger evidence base to understand the links between low-skilled labour migration and human trafficking and health in order to feed into appropriate and effective responses.

Study objectives

Aim

The aim of this study was to qualitatively explore the experiences of exploitation and exposures to occupational risk (both physical and psychological), and how these impacted the health of trafficked persons and exploited migrant workers in Argentina, Peru and Kazakhstan working, respectively, in textiles, artisanal gold mining and construction.

Objectives

The study research objectives were:

1. To identify, through literature reviews, occupational risk exposures and their impact on health in selected sectors according to each country;
2. To explore and describe, through semi-structured interviews, experiences and perceptions of exploitation, occupational risk exposures and health impacts among identified trafficked persons and exploited migrant workers in selected labour sectors; and
3. To compare experiences of exploitation, health risks and health impacts among identified trafficked persons and exploited migrant workers in selected labour sectors and across countries.

This report presents the results from interviews with the study participants. These interviews explored interviewees' experiences of exploitation and the health hazards and exposures they faced, as well as the impact of this on their health.

¹⁹ Fabiana Frayssinet, "Garment sweatshops in Argentina an open secret", Inter Press Service, 30 May 2015, Buenos Aires. Available from www.ipsnews.net/2015/05/garment-sweatshops-in-argentina-an-open-secret/. Accessed 2 November 2015.

²⁰ Cathy Zimmerman and Marc B. Schenker, "Human trafficking for forced labour and occupational health", *Occupational and Environmental Medicine* 71, no. 12 (2014), pp. 807–808, doi: [10.1136/oemed-2014-102452](https://doi.org/10.1136/oemed-2014-102452).

Conceptual framework

The study was designed around a conceptual framework that identifies migration-related²¹ risk as a mediator between occupational health exposures and outcomes (see Figure 1).

Figure 1: EXTRMHE conceptual framework

SOCIAL, POLITICAL CONTEXTS	Pre departure Travel (vulnerability)	Health risk (exposures)	Health consequences (outcomes)
	<ul style="list-style-type: none"> • Push-pull factors • Recruitment • Social norms for migration, gender, etc. • Travel arrangements • Documents 	<p>Occupational Risks</p> <ul style="list-style-type: none"> • Work-specific tasks and related hazards • Personal protective equipment • Skills training <p>Work and Living Conditions</p> <ul style="list-style-type: none"> • Deception • Hours, breaks, etc. • Deprivation • Violence, abuses • Social networks 	<ul style="list-style-type: none"> • Physical health • Mental health • Sexual health • Health-care access • Coping • Access to other support, trafficking information

This conceptual framework incorporates the social and political context in which migration occurs, as well as the pre-departure conditions that place the individual in a state of heightened vulnerability from the outset. The framework also recognizes that occupational risks for migrants are related not only to work-specific tasks but also to the conditions in which migrants work and live. Finally, the framework incorporates the potential health outcomes resulting from these exposures, and includes access to health care. This framework underpinned the design of the study aims and objectives and guided the construction of the data collection tools and analysis strategy. An additional conceptual framework about occupational exposures, migration-related risks and health outcomes can be found in Annex I.

Study methods

Study design

The *Labour Exploitation, Trafficking and Migrant Health (EXTRMHE)* research was a cross-sectional, observational study using qualitative methods. It included two components. In the first component, literature reviews were conducted to identify occupational health risks associated with the migrant worker sectors chosen for the study. The literature reviews²² also informed the development of data collection tools (topic guides) and the conceptual framework on exploitation and health. We conducted:

- A narrative review of the textile industry, particularly in middle- and low-income settings;
- A narrative review for the gold mining industry in Peru; and
- A systematic review of occupational health risks among construction-sector labour migrants, particularly in middle- and low-income settings.

In the second component of the study, qualitative methods in the form of semi-structured interviews were conducted to collect detailed descriptive and case data for each of these sectors. Table 1 describes the research objectives and corresponding methods.

²¹ Throughout this report, the term “migration” refers to both international and internal migration.

²² Summaries of these reviews are presented in tables in the country chapters of this report.

Table 1: Overview research objectives and methods

Research objectives	Methods
1. To identify occupational health risks associated with the following sectors in which migrants work: artisanal gold mining, textiles and construction	Literature reviews
2. Explore experiences and perceptions of exploitation, risk and health among identified trafficked persons and exploited migrants in selected labour sectors	<p>Argentina</p> <ul style="list-style-type: none"> • In-depth interviews with <u>identified trafficked persons</u> in the textile sector • In-depth interviews with <u>migrant workers</u> in the textile sector <p>Peru</p> <ul style="list-style-type: none"> • In-depth interviews with <u>migrant workers</u> in the gold mining sector <p>Kazakhstan</p> <ul style="list-style-type: none"> • In-depth interviews with <u>identified trafficked persons</u> in the construction sector • In-depth interviews with <u>migrant workers</u> in the construction sector
3. Compare types and descriptions of exploitation, health risks, outcomes and service needs of trafficked persons and migrant workers	<p>Comparative thematic analysis:</p> <ul style="list-style-type: none"> • Within each country between identified trafficked persons and migrant workers • Across countries between identified trafficked persons and migrant workers

Recruitment procedures and sample

Recruitment procedures

In order to recruit the participants for our study we used purposive sampling and “snow-balling” techniques following inclusion and exclusion criteria as detailed in Table 2.

Table 2: Participant inclusion and exclusion criteria

Research objectives	Methods	Exclusion
Identified trafficked persons in post-trafficking services	<ul style="list-style-type: none"> • In contact with post-trafficking care • Age 12 and above • Male or female • Had been trafficked either internally (that is, domestically) or internationally • Trafficked for a low-skilled labour sector (not sexual exploitation) into selected sectors in each country: Peru for artisanal gold mining; Argentina for textiles; and Kazakhstan for construction 	<ul style="list-style-type: none"> • Considered by support worker, health provider or researcher to be too unwell or distressed to participate • Unable or unwilling to give informed consent to participate in the study • Trafficked exclusively for sexual exploitation • Never cared for by a recognized post-trafficking service
Migrant workers	<ul style="list-style-type: none"> • Age 12 and above • Male or female • Had migrated internally or internationally • Migrated into selected sectors in each country: Argentina for textiles; Peru for artisanal gold mining; and Kazakhstan for construction 	<ul style="list-style-type: none"> • Considered by health provider, or researcher to be too unwell or distressed to participate • Unable or unwilling to give informed consent to participate in the study • Not possible to conduct interview outside of workplace

Recruitment of people identified as victims of trafficking²³

Interviewees were identified through the IOM counter-trafficking partner network or an IOM Assisted Voluntary Return and Reintegration Programme. Eligible service users were initially approached by a support worker, social worker or health provider. These support professionals judged the potential risks associated with participation and, if deemed safe, described the study aims and the nature of informed consent, and discussed with the possible participant any potential concerns about participating.

Recruitment of migrant workers

We explored available sources to identify migrant workers (for example, IOM mobile health units, local service partners) and used snowballing sampling among migrants. Workers were initially approached by a health provider, social worker, support worker or, in the case of Kazakhstan, diaspora contacts. People were generally approached outside their workplace, for example, while in a health clinic, residence or service provider office. Researchers and service staff judged the potential risks associated with participation and, if they deemed it safe, described the study aims, the nature of informed consent, and discussed with the possible participant any potential concerns about participating. For individuals who agreed to proceed with the informed consent procedure, a member of the EXTRMHE research team carried out the informed consent procedures appropriate to an adult or young person.

Sample

The participants were men and women aged 18 to 55. In total, we interviewed 71 people; of these, 18 were identified victims of trafficking and 53 were migrant workers. For a breakdown of how many of which type of interviewee were interviewed in each country, see Table 3. People who were identified victims of trafficking were recruited from post-trafficking services and had been identified by either government or non-governmental counter-trafficking actors.

²³ Recruiting victims of trafficking and conducting research in some of these settings proved very challenging. Different issues arose in the different locations, which made recruitment and data collection difficult. In Peru, we did not have access to victims of trafficking, because the identification of victims of trafficking for labour is still very rare and challenging because of poor awareness of labour trafficking versus sex trafficking in the country. This meant that only migrant workers were recruited in Peru. A further hurdle in Peru was access to the study sites. The local IOM team advised against accessing the mining camps because these areas were geographically isolated and regarded as potentially very dangerous. Their illegal status means that these camps were kept clandestine, located deep in the jungle, with their location kept secret among workers, they do not want to be identified, fearing police raids; therefore trying to access them would have been putting our team in danger. Additionally, the political context was not ideal because at the time of the fieldwork, police raids to dismantle illegal mining camps had escalated and the situation was very tense. The strategy devised to overcome these issues was to accompany *La Caravana de la Vida*, a mobile health project launched in July 2012 and implemented by the Regional Government of Madre de Dios, with support from IOM and the President's Office for Welfare and Social Action; *La Caravana de la Vida* entailed a mobile health clinic providing health services to hard-to-reach populations. The itinerary of *La Caravana de la Vida* included areas close to the camps and we hoped that some people working in the camps would attend. Despite being under the umbrella of *La Caravana de la Vida*, the presence of the interviewers attracted some attention, which meant that the fieldwork was cut short after two outings. In Argentina, interviewing victims of trafficking was not possible due to concerns on the part of the governmental service providers about the vulnerability of the victims. Instead, it was decided to interview victims of trafficking who had already returned to Bolivia after receiving assistance in Argentina following their experience as trafficking victims. However, it was difficult to trace the victims of trafficking due to lack of updated contact information, so the number of interviews we could conduct was limited. In terms of interviewers' safety it is important to highlight that the clandestine textile industry operated in slum areas that posed security issues. This meant that interviews with migrant workers could only be conducted during certain times of the day and the researcher had to take many precautions when travelling to these areas of the capital. Interviewees had to return to work and had little time to spare for the interviews, which made it challenging to persuade them to stay for the length of the interview. Despite this, all interviews lasted at least 45 minutes. Some of the interviewees were recruited in tuberculosis (TB) clinics, which meant that interviewers had to take precautions when interviewing these individuals. In Kazakhstan, the main challenges were related to extreme weather conditions that made it difficult for the interviewers to conduct the work. Furthermore, it was difficult to find victims of trafficking within the fieldwork time constraints due to the seasonal nature of construction work. Some of the richness of information was lost in a few interviews where the conversation could not be conducted in the interviewees' first language but were instead carried out in Russian. The interviews took place across regions and therefore required travelling long distances for the interviewers; the interviewers therefore had to plan several interviews during the same day, which made it difficult and stressful for them. In some cases interviewers reported that building a trusting relationship and rapport with the interviewees was challenging and they had to be flexible and creative when asking the questions in order to access the information they were interested in. Finally, overall, there were emotional stressors on the interviewers due to various factors including sad stories told by the participants, tense interview contexts and extreme weather conditions (hot in Peru and cold in Kazakhstan). In order to deal with this the EXTRMHE team held regular debriefing meetings with the interviewers and talked through the feelings and emotions that had come up during the fieldwork.

Table 3: Study populations and sample size per country

Country	Sample population	Sample size
Argentina	1. People identified as trafficked in post-trafficking services	6
	2. Migrant workers in the textile sector, in and around Buenos Aires	15
	Total	21
Peru	1. Migrant workers in the mining sector in Madre de Dios region	21
	Total	21
Kazakhstan	1. People identified as trafficked in post-trafficking services	12
	2. Migrant workers in the construction sector, in and around Astana	17
	Total	29

Topic guide

We based our topic guide on previous research^{24,25} on health and human trafficking in the Greater Mekong Subregion and in Europe, plus our review of the literature, particularly the occupational health literature for the gold mining, construction and textile industries. Topics included:

1. Sociodemographics (for example, gender, age, country of origin, education status, pre-trafficking employment status, marital status, living situation, number and location of children)
2. Pre-migration-related factors (for example, past abuse, recruitment, migration network, health problems)
3. Exploitation (for example, duration of exploitation, types of exploitation, abuse, work conditions, pay)
4. Occupational hazards (related to type of labour and environment)
5. Personal protective equipment (equipment, hats, gloves)
6. Physical abuse, punishments (violence, financial deductions)
7. Living conditions, deprivation (housing, hygiene, food)
8. Psychological abuse, marginalization (threats, legal status)
9. Physical health symptoms and injuries (medical history-type checklist)
10. Psychological symptoms (drawn from psychometric tools used in previous trafficking studies, with open-ended responses)
11. Access to health and other services (types of care contacts, use)
12. Coping and resilience (hopes, empowerment, ability to plan)

The topic guide was reviewed and amended by each local team to ensure the guide covered the range of topics needed to achieve the study objectives, and that questions were clear, culturally and occupationally relevant and that wording would be easily comprehended. The topic guide was then further discussed and amended during the local training sessions and piloted for feasibility and acceptability by the local interviewers. After piloting the guides were further revised, as needed.

²⁴ Ligia Kiss et al., "Health of men, women, and children in post-trafficking services in Cambodia, Thailand, and Vietnam: An observational cross-sectional study", *The Lancet Global Health* 3, no. 3 (2015), e154–161.

²⁵ Cathy Zimmerman et al., "The health of trafficked women: A survey of women entering posttrafficking services in Europe", *The American Journal of Public Health* 98, no. 1 (2008), pp. 55–59, doi: [10.2105/AJPH.2006.108357](https://doi.org/10.2105/AJPH.2006.108357).

Data collection and analysis

We designed a topic guide and adapted it for each population. We also designed a screening sheet that interviewers completed for every potential interviewee. The questions included in this sheet allowed the interviewers to determine if participants fit the inclusion criteria for the study. Research interviews were conducted by members of the EXTRMHE project team or by research assistants selected and trained by the EXTRMHE team in a one-week training course that covered familiarization with the study, its objectives, principles of qualitative research, discussion of the topic guide and ethical considerations when conducting research with vulnerable populations (in particular vulnerable migrant workers), human trafficking and security.

In Argentina interviews were conducted by a member of the EXTRMHE team and in Bolivia they were carried out by two trained local IOM staff members; in Peru, interviews were conducted by local IOM personnel. Finally, in Kazakhstan, an independent researcher leading a team of two other researchers was hired to conduct the interviews. All interviews were conducted by the researchers in the local language without need of an interpreter; all interviews were audio-recorded. In Kazakhstan, when the researcher did not speak the interviewees' first language, interviews were conducted in Russian.

Data was analysed following a thematic approach, including a comparative component to identify the similarities and differences in experiences, risks and health outcomes of migrant workers and trafficked persons in each of the study countries. The project included the following two fundamental comparative dimensions, aiming to compare experiences of exploitation and impact on health:

- a. Comparison between low-skilled migrant workers and identified trafficked persons within each country and across countries;
- b. Comparison of dimensions of exploitation across different labour sectors and across countries.

Interviews were audio-recorded and transcribed verbatim. Transcripts were uploaded into NVivo (a software for qualitative data analysis) and coded following the topic guide main themes and then through themes emerging from the data. First- and second-level codes were the same for all three countries, whereas third- and fourth-level codes were modified according to each context.

Ethics

The study adhered to the guidance in the *WHO Ethical and Safety Recommendations for Interviewing Trafficked Women*²⁶ as well as the IOM Data Protection Principles.²⁷ Among many ethical considerations the following were prioritized:

- Local risk assessment of the field sites through trusted local partners;
- Support and necessary services available to trafficking survivors through trusted local partners;
- Consent that was truly “informed” and in language that could be easily comprehended by participants;²⁸

²⁶ Cathy Zimmerman and Charlotte Watts, *WHO ethical and safety recommendations for interviewing trafficked women*, World Health Organization, Geneva, 2003.

²⁷ International Organization for Migration, *IOM data protection manual*, IOM, Geneva, 2010.

²⁸ Potential participants were offered clear information in their own language, verbally and in writing, as possible, about the purpose, subject and nature of the study and what would be required of them if they consented to participate. It was emphasized that participation was voluntary and that the study was separate from any support they might receive from local providers, including IOM, and was not in any way related to government, immigration or policing matters. During the formal consent procedures, each participant was informed that their responses were anonymous and confidential, for example, no names would be used in transcriptions, which were to be anonymized, with names replaced with code numbers. Participants were advised that they did not have to answer any questions if they did not wish to, that they could take a break or terminate the interview at any time. All participants were interviewed in private by experienced researchers. In Argentina and Peru, interviewers were female; in Kazakhstan the interviewers were male, reflecting the mostly male composition of that sample. In cases where participants travelled for the interview, took time off from work or participated during meal or snack hours, we reimbursed or paid for these expenses.

- Anonymity and confidentiality through coding and secure data storage and publication;²⁹
- Referral options to problems reported by interviewees;³⁰
- Emergency security responses for interviewees and researchers.³¹

Ethical approval for the study was granted by the London School of Hygiene & Tropical Medicine and by local ethics boards. In Argentina, approval was granted by the Hospital de Clínicas “José de San Martín”, a teaching hospital that is part of the University of Buenos Aires. In Peru, ethical approval was granted by the ethics committee of the Cayetano Heredia University. In Kazakhstan, the School of Public Health’s Ethics Committee approved the EXTRMHE study.

²⁹ The information provided by participants was confidential. In some situations, however, it could have been necessary to disclose personal information without a participant’s consent (where a failure to do so may expose the participant or others, for example, their children, to risk of death or serious harm). This was explained on the participant information sheet and was discussed with all participants as part of the informed consent process. All participants were made aware of these limits to confidentiality as part of the informed consent process. The researchers were to contact their line manager (local study lead) to discuss all situations where confidentiality might have had to be breached. However, we did not need to do this in any of the cases. All participants were assigned a unique ID number and referred to only by this number during management of the research data. Electronic data that identified individuals was stored separately from the research data.

³⁰ Participants were closely monitored during interviews for signs of distress and, if signs of distress were observed, appropriate action was taken, including asking the participant if he or she would like to take a short break, offering to complete the interview at another time, skipping questions that caused particular distress or terminating the interview. All participants were offered information about the services that IOM could provide or received referrals for various additional forms of assistance through non-IOM service providers.

³¹ Fieldwork staff followed strict procedures for checking in and checking out before and after interviews to ensure their safety in the field. If possible, interviews were conducted at IOM offices, at local support organizations (such as shelters in Kazakhstan) or health services (for example, *La Caravana de la Vida* in Madre de Dios, or a local hospital in Buenos Aires).



3

ARGENTINA:
STUDY RESULTS

3. ARGENTINA: STUDY RESULTS

3.1 PARTICIPANT DESCRIPTION TABLE

Table 4: Participant characteristics (Argentina)

N°	ID number / alias name	Sex	Age	Marital status	Children	Identified victim of trafficking (VoT) or migrant worker (MW)
1	LH01AR / Juan	Male	25	Single	No	MW
2	LH02AR / Pedro	Male	29	Partner	Yes	MW
3	VV01AR / Pablo	Male	30	Single	No	MW
4	VV02AR / María	Female	27	Married	Yes	MW
5	VV03AR / Sofía	Female	36	Married	Yes	MW
6	VV04AR / Ana	Female	35	Married	No	MW
7	VV05AR / Clara	Female	28	Separated	Yes	MW
8	VV06AR / Rosa	Female	31	Married	Yes	MW
9	VV07AR / Dora	Female	46	Single	Yes	MW
10	VV08AR / Hugo	Male	21	Single	No mention in interview	MW
11	VV09AR / Luz	Female	27	Single	Yes	MW
12	VV10AR / Nibia	Female	23	Single	Yes	MW
13	VV11AR / Eric	Male	24	Single	No mention in interview	MW
14	FDBO01 / José	Male	18	Single	No mention in interview	VoT
15	AABO01 / Leo	Male	19	Single	No mention in interview	VoT
16	AABO02 / Omar	Male	26	Married	No mention in interview	VoT
17	FDBO02 / Raul	Male	38	Partner	Yes	VoT
18	AABO03 / Ada	Female	33	Partner	No	VoT
19	FDBO03 / Luis	Male	41	Married	Yes	MW
20	AABO04 / Alba	Female	47	Single	Yes	VoT
21	AABO05 / Dana	Female	24	Married	No mention in interview	MW

3.2 CONTEXT

Argentina is a country of origin, transit and destination for men, women and children who migrate for work. It borders multiple countries, facilitating transit by land,³² making it easier for migrants – and smugglers and traffickers – to travel to Argentina. There was a marked increase in migration to

³² International Organization for Migration Regional Office for South America, *Panorama Migratorio de América del Sur 2012*, OIM, Buenos Aires, 2012.

Argentina between 2000 and 2010; most people migrating to Argentina are from South America, particularly Bolivia, Paraguay and Peru.³³ Seventy-nine per cent of South American migrants in Argentina are between 15 and 64 years old, which means they are mostly working-age migrants. Among the many labour migrants is a subset of people who fall into situations of trafficking for labour exploitation.

The Government of Argentina has signed and ratified the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, Supplementing the United Nations Convention against Transnational Organized Crime (2000), as well as other important human rights instruments including the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (1979); and the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (1990).

In 2008, the Law on the Prevention and Punishment of Trafficking in Persons and Assistance for Victims (Law 26,364) was passed; this law was further updated in 2012 with the passage of Law 26,842. The 2008 federal anti-trafficking law prohibited all forms of human trafficking, prescribing penalties of 3 to 10 years' imprisonment. Among other changes, the 2012 update increased penalties to 4 to 15 years' imprisonment. As part of the establishment of counter-trafficking legislation in Argentina, a Unit Against Human Trafficking and Exploitation (PROTEX) was established within the Office of the National Special Prosecutor to assist with the investigation of the crimes of kidnapping and trafficking in persons; as well as the National Programme to Rescue and Assist Victims of Trafficking under the Ministry of Justice and Human Rights, for the rescue and assistance of victims of trafficking; a Federal Council³⁴ for the fight against trafficking and exploitation of people and for the protection and assistance of victims (within the Cabinet of Ministers and as part of the Ministry of Foreign Affairs and Worship), and an Executive Committee for the Fight against Trafficking and Exploitation of People and for the Protection and Assistance of Victims.

In terms of government policies and programmes for victims of trafficking in Argentina, identified victims are offered services, including shelter, legal services and medical and psychological care. Foreign victims may remain in the country with a humanitarian visa or voluntarily return to their country of origin. All migrants have access to free public health services regardless of their migration status.³⁵ In addition, nationals from the MERCOSUR country Parties and Associated States can enter Argentina as tourists for 90 days without applying for a visa;³⁶ they can also apply for residency in Argentina without having to show an employment offer or any other justification.

According the Special Prosecutor's Unit Against Human Trafficking and Exploitation (PROTEX), 292 cases of human trafficking (on behalf of 1,279 victims) have been prosecuted (or are in process); 72 per cent of these were related to sexual exploitation and 28 per cent to labour exploitation.³⁷ Among the cases of labour exploitation, agricultural (and other rural activities) and textiles were the main sectors where victims were identified. The textile industry is concentrated mainly in the southern part of the city of Buenos Aires; it employs, in particular, migrant workers from the Plurinational State of Bolivia, in houses that are adapted to function as textile workshops, while also including housing for workers.

³³ International Organization for Migration regional office for South America, "El impacto de las migraciones en Argentina", *Cuadernos Migratorios N° 2*, OIM, 2012.

³⁴ The Federal Council is called for by Law 26,842, but the Council had not yet been created as of late 2015.

³⁵ Law 25,871.

³⁶ Documentos de viaje de los Estados Partes del MERCOSUR y Estados Asociados, MERCOSUR/CMC/Decision N° 18/08; Acuerdo modificatorio del anexo del acuerdo sobre Documentos de viaje de los Estados Partes del MERCOSUR y Estados Asociados, MERCOSUR/CMC/DEC. N° 14/11; Segundo acuerdo modificatorio del anexo del acuerdo sobre documentos de viaje de los Estados Partes del MERCOSUR y Estados Asociados, MERCOSUR/CMC/DEC. N° 37/14.

³⁷ PROTEX (2014). "Trata laboral en la Argentina. El tratamiento judicial de los casos en el fuero federal". Procuración General de la Nación. Procuraduría de Trata y Explotación de personas.

Nearly 350,000 Bolivians live in Argentina,³⁸ 76.6 per cent of whom live in Buenos Aires. The Bolivian community in Argentina grew by 32.4 per cent between 2001 and 2010, and is the second-largest migrant community in Argentina, preceded only by Paraguay. In general, migrants make up 4.5 per cent of Argentina's population.

The National Programme for Employment Regularization, in force since 2003, strengthened the state's monitoring and inspection capacities, increased the number of inspectors, and expanded computerization of the process. The Government set up a very active campaign of regularization aiming to improve work quality while fighting against unregistered work. In 2004, Argentina made it compulsory for employers to register their workers but also expanded the state's oversight mechanisms to ensure these provisions were fully enacted.³⁹ This has guided the inspection of companies, and particularly of those with 5–50 employees, where the highest numbers of unregistered workers are found.⁴⁰

The Integrated Plan to Reduce Non-registered Employment, led by the Ministry of Labour, Employment and Social Security, was launched in September 2013; this Plan aimed to strengthen labour inspection, plan specific interventions in critical sectors (domestic work, rural sector and the garment industry), create a public registry of employers with labour sanctions, establish economic incentives for the formalization of workers in microbusinesses, and promote awareness-raising campaigns on workers' rights.⁴¹ While the proportion of non-formal wage employment as part of total employment fell in Argentina between 2003 and 2012,⁴² the informal employment rate in Argentina remains high, at 33.6 per cent. South American migrants account for 52.9 per cent of informal employment in Argentina, and Argentine workers 32.7 per cent.⁴³

The origin of the textile industry in Buenos Aires dates back to the 1960s, when Korean migrants established themselves primarily in neighbourhoods in Bajo Flores (south of the city of Buenos Aires). They worked in textile production with hired Bolivian migrant workers. After the 2001 economic crisis in Argentina, the Korean textile workshops ceased to dominate the sector and Bolivians took over as the primary business owners in the production and sale of textile products.⁴⁴ The small textile workshops established by Bolivian owners are typically small warehouses or abandoned buildings turned into places for people to work and live. Most do not have legal permits to work and therefore function as clandestine workshops, remaining as hidden as possible: for example, some have bricked up windows to prevent people from looking inside. A significant proportion of the owners of these small workshops were previously textile workers themselves; they managed to save money for years to buy machines to establish their own businesses.⁴⁵ Unlike the textile industry in other countries in which the large firms legally outsource their production (such as those countries in southeast Asia, Central America and the Caribbean where such garment factories can be found), Argentina's labour law does not allow for forced labour or piecework.⁴⁶ The global trend towards the reorganization of production through various forms of outsourcing has made the textile sector increasingly flexible and decentralized. This creates a scenario where major companies hire suppliers who distribute the work to subcontractors, many of whom operate in the informal economy⁴⁷ in clandestine workshops, or workshops that do not comply with all legal requirements. In this respect, the garment industry in

³⁸ *Argentine National Census of Population and Housing*, 2010. Instituto Nacional de Estadística y Censos (Argentina).

³⁹ Law 25,877.

⁴⁰ Aranzazu Recalde, "Are We Now Equal?" Recent experiences and perceptions of South American migrants in Argentina under MERCOSUR, doctoral thesis, Anthropology Department of the Faculty of Arts and Sciences, University of Montréal. Available from <http://hdl.handle.net/1866/9055>. Accessed 4 November 2015.

⁴¹ International Labour Organization Regional Office for Latin America and the Caribbean, "Employment formalization in Argentina: Recent developments and the road ahead", *Notes on Formalization*, ILO, 2014, p. 10.

⁴² *Ibid.*, p. 4.

⁴³ International Labour Organization, *Migraciones laborales en Argentina: Protección social, informalidad y heterogeneidades*, ILO, Buenos Aires, 2015.

⁴⁴ Carolina Mera, La inmigración coreana en Buenos Aires: Historia y actualidad, paper, XI International Congress of the Latin American Association of Students from Asia and Africa, Mexico City, 12–15 November 2003.

⁴⁵ Goldberg, "Las Condiciones de Trabajo en los Talleres Textiles en Buenos Aires, factores de riesgo e impacto en la salud enfermedad de los trabajadores". Superintendencia de Riesgos de Trabajo de la Nación. 2012.

⁴⁶ *Ibid.*

⁴⁷ Roberto Benencia, "El infierno del trabajo esclavo: La contracara de las 'exitosas' economías étnicas", *Avá*, no. 15 (2009), pp. 43–72.

Argentina is different from the *maquilas*⁴⁸ in many ways, particularly because the number of people working in a workshop in Argentina is much smaller, usually fewer than 50 employees.

This type of textile production workshop includes several kinds of positions. The lowest-skilled worker performs tasks not directly related to making clothing, such as cooking and ironing. These individuals are often also tasked with general cleaning and housework, such as cleaning all utensils, washing dishes, and cleaning bathrooms and the workshop. The ironer was in charge of ironing the finished clothes for packing. Those in positions related to making the clothing are assistants, who perform tasks to “finish” clothes (packing finished garments, adding buttons, cutting or removing loose threads, labelling and sorting clothes by size). Sometimes assistants are also involved in general cleaning of the workshop. Sometimes people working as cooks or ironers are allowed to perform some assistant duties as a first step to becoming “real” textile workers. The highest position is the sewing machine operator, who is the one who actually sews the clothes. In general, sewing machine operators are paid on a piecework basis while workers in the other positions receive a fixed monthly salary.

In Argentina there is a trade union that represents those employed in legal textile workshops, though they are thought to be a small fraction of the total amount of people employed in this activity.⁴⁹ Government efforts to monitor and carry out inspections and to dismantle illegal workshops have had limited success. National and international clothing brands (including famous brands) have been criticized in the press for manufacturing their products using this black-market network, which includes workshops with poor working conditions, or sweatshops.

3.3 SUMMARY OF THE HEALTH LITERATURE REVIEW

The literature showed that musculoskeletal problems are one of the most common health problems among workers in the sector. Researchers found that the sedentary, repetitive and monotonous nature of sewing machine work resulted in back problems, shoulder and wrist pain and general muscular fatigue. Studies showed that prolonged standing periods without breaks led to physiological discomfort and fatigue in the lower extremities, leg oedema, and degenerative damage to the joints of the spine, knees, hips and feet.⁵⁰ In addition, the literature reported that standing for long periods was also associated with chronic venous insufficiency, circulatory problems and increased risk of stroke. For pregnant women, standing for long periods was found to be associated with preterm birth or miscarriages.⁵¹

The literature also mentioned the impact of textile work and poor lighting in the work area. According to these studies, the lack of appropriate lightning could have an impact on visual acuity, leading to eye strain, fatigue and headaches.⁵² Studies also found that textile workers were often exposed to safety hazards such as the lack of use of personal protective equipment when operating machinery, resulting in cuts and punctures to the hands or wrists. Given the poor infrastructure of the textile workshops, the literature shows that most workers are exposed to frayed cords, improper wiring, shabby switches, and short circuits resulting in electrical burns and electrocution, sometimes leading to deaths.

⁴⁸ *Maquila (or maquiladora)* is a term that refers to a foreign-owned factory in Mexico (or another part of Latin America) that is set up because of tax breaks and inexpensive labour, and is typically associated with poor conditions and large numbers of workers.

⁴⁹ Isidro Adúriz, *La industria textil en Argentina: Su evolución y sus condiciones de trabajo*, Foro Ciudadano de Participación por la Justicia y los Derechos Humanos del Instituto para la Participación y el Desarrollo (INPADE), Buenos Aires, 2009.

⁵⁰ Siti Noor Azzizati Mohd Noor, et al., “A Review of Studies Concerning Prolonged Standing Working Posture”, *Advanced Engineering Forum*, Vol. 10, pp. 131–136, December 2013.

⁵¹ Isa Halim and Abdul Rahman Omar, “A review on health effects associated with prolonged standing in the industrial workplaces”, *International Journal of Research & Reviews in Applied Sciences*, no. 1, pp. 14–19, 2011.

⁵² Devanand Uttam, “Lighting in textile industry”, *International Journal of Advanced Research in Engineering and Applied Sciences*, ISSN: 2278-6252., Impact Factor: 4.817, Vol. 4, No. 2, February 2015.

Psychosocial hazards were also identified in the literature. It was found that the way textile work is designed, organized and managed as well as the economic and social context of the working and living conditions have implications on the textile workers' health. Lack of breaks resulted in insufficient hydration and urinary retention. Lack of natural light caused insufficient vitamin D and contributed to osteoporosis.⁵³ Among working conditions, the psychological stress from employer disciplinary actions and the pressure to maximize production was found to have impacts on mental health. A typical example in the literature is the establishment of prizes for workers who achieve certain (usually unattainable) productivity goals.⁵⁴ This pressure often resulted in psychological disorders such as tension, nervousness, stress, sleep disorders, tension headaches, digestive and cardiovascular psychosomatic disorders, and anxiety.⁵⁵ Another aspect considered in these studies was the social isolation of the workers, when communication with peers was limited. Women, in particular seem to be under extreme pressure as some of them have to balance work and family issues, contributing to high levels of stress, often due to the fact that women must perform household activities in addition to their garment work.⁵⁶ The pressure of having to work extensive hours and take care of the family at the same time meant women had little time to rest, attend to personal health problems, and attend social engagements. Finally, the literature also showed that poorly balanced meals lacking protein and vitamins can produce anaemia, which can have an impact on the immune system impairing its ability to prevent and tackle disease.⁵⁷

Another occupational health problem identified in the literature in relation to textile workers is that of dental issues. Research showed high levels of tooth decay and loss among workers due to lack of access to dental medical care, given the low income status of workers.⁵⁸

Biological hazards such as exposure to bacteria or viruses were also identified in the literature, related to the overcrowding and unsanitary conditions in the textile workshops.⁵⁹ In addition, obstructive respiratory problems were such as byssinosis and occupational asthma were reported as a result of workers prolonged exposure to the inhalation of cotton particles.⁶⁰ Finally, studies found that exposure to chemicals in the textile workshops such as endotoxin, asbestos, polyester could cause skin problems such as dermatitis and respiratory related problems such as respiratory tract infections, bronchoconstriction, cough, excessive mucus, nasal stuffiness, among other impacts described in Table 5.⁶¹

⁵³ Md Zahirul Islam, "Vitamin D deficiency and low bone status in adult female garment factory workers in Bangladesh", *British Journal of Nutrition*, 99(6):1322–1329, doi: <http://dx.doi.org/0.1017/S0007114508894445>, 2008.

⁵⁴ Silvina Pascucci, "Avances y límites de la acción político-sindical en la industria de la confección de indumentaria. Una caracterización del SOIVA y la UTC-Alameda", *Documentos de Jóvenes Investigadores* 26, Buenos Aires: Instituto de Investigaciones Gino Germani, Facultad de Ciencias Sociales, Universidad de Buenos Aires, 2011.

⁵⁵ Alejandro Goldberg, "Contextos de vulnerabilidad social y situaciones de riesgo para la salud: tuberculosis en inmigrantes bolivianos que trabajan y viven en talleres textiles clandestinos de Buenos Aires", *Cuadernos de antropología social*, n.39, 2014.

⁵⁶ Tushar Kanti Saha et al., "Health status of workers engaged in the small-scale garment industry: how healthy are they", *Indian Journal of Community Medicine*, vol. 35, no. 1, 2010.

⁵⁷ Alejandro Goldberg, "Sociocultural factors in the health-care process of patients with tuberculosis, of Vaccarezza Institute of Muñiz Hospital", *Rev Argent Salud Pública*, 2010; 1(5):13–21.

⁵⁸ Norma Lara Flores, et al., "Necesidades insatisfechas de atención odontológica en trabajadores de la costura en México D.F.", *Salud de los Trabajadores*, vol.19, n.1, pp. 35–46, 2011.

⁵⁹ Alejandro Goldberg, "Un abordaje comparativo en torno a la incidencia de la tuberculosis en inmigrantes bolivianos de Buenos Aires y São Paulo", *REMHU, Revista Interdisciplinar da Mobilidade Humana* [online], vol.21, n.40, [cited 26 November 2015], pp. 93–106, 2013.

⁶⁰ William Arciniegas Quiroga, "Función pulmonar y síntomas respiratorios en trabajadores de la industria textil", En *Revista Médica de Risaralda*, Vol. 11, núm. 2, Facultad de Ciencias de la Salud de la Universidad Tecnológica de Pereira, 2005.

⁶¹ Nagoda, M., J.U, Okpapi and M. Babashani, "Assessment of respiratory symptoms and lung function among textile workers at Kano Textile Mills, Kano, Nigeria", *Nigerian Journal of Clinical Practice*; 2012 Oct-Dec; 15(4):373–9, 2012.

Table 5: Informal textile industry: Health risk exposures and outcomes*

Hazard category	Occupational exposure	Health outcome	Reference(s)
Safety hazards (unsafe conditions that can cause injury, illness and death)	Machinery-related hazards (including using labelling machines without the use of personal protective equipment, for example, not using thimbles)	<ul style="list-style-type: none"> Cuts and punctures Injuries to hands and wrists 	Praveen Kumar et al., 2014; Goldberg, 2012
	Electric hazards (frayed cords, improper wiring, shabby switches, short circuits)	<ul style="list-style-type: none"> Electrical burns, electrocution 	Parimalan, Kamalamma and Ganguli, 2007; Goldberg, 2012
Biological hazards (exposure to bacteria or viruses)	Confined spaces (overcrowding)	<ul style="list-style-type: none"> Tuberculosis Upper respiratory infections 	Goldberg, 2013; Goldberg, 2012; Paudyal et al., 2010; Lai, P.S. et al., 2014; Dube, K.J. et al., 2012; Phakthongsuk, P. et al., 2007; Boccia, H. and A. Sancineto, 2007; Mberikunashe et al., 2010
	Unsanitary conditions	<ul style="list-style-type: none"> Tuberculosis Allergies Diarrhoeal diseases 	Goldberg, 2011; Nahar et al., 2010;
Physical hazards (factors that can harm the body without direct contact)	Noise	<ul style="list-style-type: none"> Hearing loss 	Goldberg, 2011; Yildirim, I. et al., 2007; Parimalan, Kamalamma and Ganguli, 2007
	Extreme temperatures (high or low temperatures)	<ul style="list-style-type: none"> Dizziness Headache 	Padmini D.S. and A. Venmathi, 2012; Goldberg, 2012
	Light (poor lighting of work area)	<ul style="list-style-type: none"> Decreased visual acuity Eye strain Fatigue Stress Headaches 	Pulido Navarro et al., 2012; Goldberg, 2012; Uttam, 2015
	Airborne particles (Inhaling cotton particles, exposure to machine)	<ul style="list-style-type: none"> Rhinitis Sinusitis Pharyngitis Laryngitis Chronic bronchitis Asthma Chronic obstructive pulmonary disease Byssinosis Eye irritation Chronic conjunctivitis 	Arciniegas Quiroga, 2005
	Minimum of outdoor activity (no exposure to sun)	<ul style="list-style-type: none"> Lack of vitamin D (Osteoporosis) 	Islam, M.Z. et al., 2008

Ergonomic hazards (working positions that put strain on the body)	Poor posture Prolonged sitting time Repetitive movements	<ul style="list-style-type: none"> • Chronic back pain, spine problems • Arthritis/joint pain: hands, wrists, shoulders, feet, knees • Haemorrhoids • Circulatory problems • Prolonged relaxation of abdominal muscles affecting digestion and breathing • Numbness of hands and fingers 	Pulido Navarro et al., 2012; El Río Quintillán, 2013; Herbert et al., 2001; Ahmed, S. and M. Raihan, 2014; Saha, T.K. et al., 2010
Chemical hazards (exposure to a chemical in any form in the work place)	Exposure to cloth chemicals, such as cotton dust, endotoxin, asbestos, polyester (skin and breath absorption)	<ul style="list-style-type: none"> • Dermatitis • Respiratory tract infections • Bronchoconstriction, cough • Excessive mucus • Nasal stuffiness • Nocturnal asthma • Rhinitis • Wheeze • Chest tightness • Cough • Phlegm • Shortness of breath 	Dasheng Lu, 2013; Lisi et al., 2014; Nagoda et al., 2012; Wanliya et al., 2011
Psychosocial hazards (related to the way work is designed, organized and managed as well as the economic and social context of working and living conditions)	Psychological stress from employer disciplinary action and pressure to maximize production	<ul style="list-style-type: none"> • Anxiety • Depression • Sleep disorders • Neuroses • Headaches 	Benencia, 2009; Pascucci, 2010; Goldberg, 2011; Navarro, M. et al., 2012; Chand, 2006; Goldberg, 2012
	Lack of breaks (insufficient hydration, urinary retention, lack of day exposure)	<ul style="list-style-type: none"> • Digestive and cardiovascular psychosomatic disorders 	
	Poorly balanced meals (meals lacking protein and vitamins and high in carbohydrates)	<ul style="list-style-type: none"> • Anaemia 	Chand, 2006
	Lack of dental hygiene	<ul style="list-style-type: none"> • Dental caries • Tooth loss 	Lara Flores, M. et al., 2011

* Please see bibliography located at the end of this chapter for complete reference information.

3.4 MAIN FINDINGS

In this section the main findings of the 21 interviews with Bolivian migrant workers and victims of trafficking who had experience in the textile industry in Argentina are presented. Areas explored include pre-departure background; recruitment; occupational risk exposures and outcomes; violence, abuse, threats and related reported health outcomes; living conditions; health beliefs and medical care and service access.

Pre-departure

Migration motivations

The desire to achieve a better economic situation seems to have been the primary driver of migration among the interviewees. Low salaries, job insecurity and lack of employment tended to pushed participants to leave Bolivia in search of better salaries in Argentina. Among the main goals they wished to achieve with this improved economic situation were to secure a steady and higher household income in order to complete their education or pay for their children's education, save money to start their own business (such as buying machinery to set up their own textile workshop) or pay off a debt. A few individuals mentioned other motivations, such as receiving free health

treatment (for example, for tuberculosis), getting to know Argentina, and the possibility of attending free or low-cost colleges. Sofia, a 36-year-old migrant worker with a large family, stated that they needed to earn more money to maintain her family: *“The thing is that in Bolivia, we don’t have much money and I have five children and I can’t support all five. [So we decided] We’re going there to work for a while. People come back with a lot of money, so we’re going there to work.”*

In terms of other motivations to migrate, having previous work experience in the textile industry in Bolivia seemed to play a role in the decision to migrate to Buenos Aires, because the same job is better paid there compared to Bolivia. This is the case of Raul, a former worker in the textile sector in Bolivia who explained his motivation to migrate in this way: *“I have daughters who go to school and they need it [money] so that’s why I found the courage to go to Argentina because there were stories. Those who came back from Argentina said they were paid a little more for a sewing job.”*

Decision-making and social norms related to migration

The fact that Argentina is one of the main destination countries for Bolivian migrants made those interviewed see migrating to Argentina as something familiar, a common occurrence. The fact that a Bolivian can enter the country without an entry permit (visa), and the geographical proximity of Argentina, were important factors that contributed to this commonplace migration. Most interviewees reported having a relative, friend or someone they knew who had migrated in the past, such as Dora, a 46-year-old migrant worker who had been encouraged by a neighbour in her town in Bolivia. She said: *“A neighbour told me that things were okay there for one to go and work and he encouraged me and that’s why I came (...) yes, he had been here before.”* Such a context seems to make migration an accepted and normal experience in their society, with an impact on migrants’ expectations and the support that relatives and friends expressed regarding the decision to migrate. This appeared to be a particularly important factor in the migration of victims of trafficking, because most were recruited through people close to the family, which ensured a feeling of confidence.

Some participants mentioned that women migrating alone would be more vulnerable, because they could be exposed to sexual harassment if they migrated without a male partner that could protect them.

Recruitment

Migration contacts and networks

Recruitment was reported to take place in the country of origin (Bolivia), during transit or after a migrant’s arrival in Argentina. Many (though not all) migrant workers reported finding out about work opportunities from other migrants during transit (for example, on the bus) or after arriving in Argentina. While not reflecting the experience of all Bolivian victims of trafficking exploited in the textile industry in Argentina, it is notable that all those individuals interviewed for this study who were victims of trafficking were recruited in Bolivia.

Interviewees who were victims of trafficking reported that their recruiters were relatives and friends who offered them a job in the textile industry in Argentina while giving them limited information about the working conditions. One victim of trafficking was recruited in Bolivia through a job advertisement in the newspaper (also advertised on the radio), offering a job opportunity in textiles in Buenos Aires for USD 150 per month.

Regardless of where the victims of trafficking and migrant workers were recruited, recruiters were primarily acquaintances or friends who either owned a workshop or were employees who introduced them to their employer. Another recruitment avenue for migrant workers was through neighbours living in parts of Buenos Aires such as Flores or Liniers, the neighbourhoods where many Bolivian migrants live and work. Many textile workshops are located in these parts of the city.

In addition, recruitment also took place at the bus station in Liniers, where migrants arrived in Buenos Aires. Pedro, a 29-year-old migrant worker, spoke about this type of recruitment: *“We were at the terminal and so, we started meeting people little by little and we got a job.”* Some migrant workers were recruited upon arrival, either at the bus station or in their new neighbourhoods, when they were approached by people offering job opportunities in the textile industry.

Finally, Eric, a 24-year-old migrant worker, reported radio advertising on the Bolivian diaspora radio station⁶² as a well-known source of recruitment: *“I was living in my home town and I moved to Cochabamba. When I arrived I asked at the bus ticket office where was a radio [station] and said that I was looking for a job (...) if you go to the radio [station] and say that you that you have just arrived from the farm, so I wanted to do the same here (...) here are some Bolivian radios advertising for job in textiles.”*

Recruitment among compatriots is a common practice; in general people mentioned having been recruited by “uncles or cousins” but when asked further about blood ties, these alleged relatives turned out to be family acquaintances or friends. This seemed to be common among migrant workers but was also reported by Ada, a 33-year-old victim of trafficking: *“In Argentina we know someone who is a relative (...) she’s the one who proposed us to go and work there (...) we dived into it confident that we would be with someone we knew when we arrived (...) this woman used to call my mother asking if she knew someone who would be willing to go and take on a sewing job.”*

Being approached by or connected to employment through another Bolivian seemed to be a key element to establish trust, and social networks were important for the dissemination of information regarding job opportunities abroad.

Travel conditions

All participants reported travelling by bus from Bolivia to Buenos Aires. The journey usually took two to three days and all crossed the border using their Bolivian identity cards, as permitted by Argentine migration law. The long journey was described by Juan, a 25-year-old migrant worker: *“It was a long trip, yes it was. It took us a while at the border, in La Quiaca (...) where we changed buses to enter with the identity card and all that. The line was so long that we arrived at 6:00 a.m. and had to wait until 2:00 p. m.”* Among the interviewees were two victims of trafficking who had migrated when they were minors. One of them, José, talked about how he obtained a travel permit signed by his parents in advance, to allow him to cross the border with the recruiter: *“Uhm, the paperwork at the court, the permit (...) at ‘el Alto’ to take out a permit if I’m not wrong (...) my mother had to sign, with the person I was going with, that I was going with my friend.”* The other, Leo, age 19, went to the border with his mother so she could give permission in person for the recruiter (who in this case turned out to be a trafficker) to cross the border with her son.

Regarding travel preparations, trafficked migrants’ tickets were paid for by their recruiter or employer, with the agreement that the cost would be discounted from their salary upon arrival, something which was later used to coerce and control them. As Alba, a 33-year-old victim of trafficking, recounted: *“Do not let me down, come to the terminal and we are going to go directly because you are not paying for the ticket’, they told me (...) [the owner told her that her pay check] here is USD 100, but I spent USD 400 in all your tickets; this USD 100 will go towards your debt [to reimburse for the ticket] (...) every month was the same.”* This contrasted to the experience of most of the migrant workers, who indicated that they bought their tickets themselves using their savings, or by borrowing money from relatives or friends.

Regarding levels of coercion while people were in transit or travelling to the destination, victims of trafficking who were interviewed said they (with other victims) travelled with their recruiters, who took them to the place where they would be exploited. Leo, 19, said: *“I travelled with two other people, plus the woman who accompanied us (...) the three of us arrived and a man who was supposed to be this woman’s husband took us directly to the house by taxi.”* There was one exception

⁶² There are many diaspora radio stations located in the areas where the Bolivian community lives in Buenos Aires.

to travelling with the recruiter: A trafficked couple was told exactly what to say at the border if they were asked about reasons to travel to the country, and they were picked up at the bus station upon their arrival in Buenos Aires. Ada, a 33-year-old victim of trafficking, recounted what happened: *“We requested a tourist permit only (...) because she taught me, she told me: at the border this is what you’re going to say, because they’ll ask you how long you’re going for, if the purpose of your trip is personal or work. Say you want to visit a relative (...) they gave us a three-month permit (...) my disability card, my identity card, my birth certificate, that’s what they requested.”* Again, all migrant workers and victims of trafficking travelled with the documents necessary to cross the border legally, either their identify documents, or, in the case of the minors, those permits and permissions required to cross the border without parents.

Most of the migrant workers interviewed travelled to Argentina on their own, although one individual travelled with the uncle who had offered him a job in his workshop and another travelled with a friend who had offered him a job in the workshop where he was himself employed. Interviewees mentioned that travelling for the first time with someone they knew made them feel more confident about the decision to migrate.

Contracts, agreements and promises

In terms of hiring and contracting practices, no formal labour contract was signed by any of those interviewed; rather, job offers were made and agreed upon verbally. All interviewees knew they were going to work in the textile industry. When recruited in Bolivia, work-related conversations seemed to be vague: they included partial information about payment, tasks to be performed, working hours and other relevant information. However, interviewees reported that this information was often not accurate.

In terms of the type of textile work offered to the interviewees, most victims of trafficking were promised jobs as assistants (folding clothes, packing finished garments, cleaning the workshop, finishing off the garment by adding buttons, cutting or removing loose threads, labelling and sorting clothes by size). They were also promised a promotion to sewing machine operator – the highest position and better paid because it is paid by the piece – once they learned the job.

In most cases, food and lodging at the workplace were included in the interviewees’ verbal agreements, along with a fixed salary to be paid monthly in the case of the assistants, cooks and ironers (only sewing machine operators were paid on a piecework basis). Most victims of trafficking reported not being paid as promised. They said that employers argued that they had to discount from the workers’ pay the money invested to bring the person to Buenos Aires along with the food and accommodation expenses. Ada, the 33-year-old victim of trafficking, described how this worked: *“They said they’d pay us [USD] 250 monthly, [USD] 250, that’s what they said, we got here thinking that, but when the time came and they gave us the first payment, they deducted the ticket they’d sent us, then the taxi used to pick us up at the bus station, and the food of the two first weeks, I mean the weekends, they deducted that also.”*

Victims of trafficking who were interviewed said that they had been told they would be paid “soon”. This financial arrangement was used to control them; they reported that they felt compelled to continue working, hoping to eventually be able to pay off the debt and leave the exploitative situation, ideally with some savings. Omar, a 26-year-old victim of trafficking, described how frustrating the situation was: *“The payment was more or less 100 dollars, equal to (...) monthly (...) if I asked [for money] for the weekend, because weekends we had to cook for ourselves separately, yes, I asked for an advance but not the payment, meaning that I had to get paid and they wouldn’t pay me, and so on and so forth (...) sometimes they wouldn’t pay me, I had to go ask for it and that made me angry, but I didn’t know what to do.”*

Given that none of the textile workers interviewed, whether migrant worker or victim of trafficking, had a signed legal contract, their work remained informal, which was against Argentinian labour laws. This informality meant that the workers did not receive the social protection that they would have had if they had been formal workers, such as social insurance (pension). Apparent violations of labour rights and laws were evident in most interviews.

Occupational risk exposures and outcomes

Multiple occupational hazards associated with the textile jobs were identified in the experiences of migrant workers and victims of trafficking interviewed for this study.

Working schedule

Working long hours can increase many health risks and accidents because sleep deprivation can lead to fatigue and concentration difficulties and accidents, as well as longer-term effects of exhaustion, illness and poor mental health.⁶³ For all those interviewed, long working hours seemed to be the norm. Participants reported that a typical schedule for a migrant worker was from 8 a.m. to 8 p.m. (12 hours), Monday through Friday, with a half day on Saturday. However, in reality most migrant workers reported working longer hours, with the exception of those with families living outside the workshop. Sewing machine operators, in particular, reported working as many as 16 hours a day. These long hours were a result of the way these workers were paid – on a per-garment basis according to the number of units produced. Aiming for a higher income, sewing machine operators usually worked for more hours than those required by the owner of the workshop.

Compared to migrant workers, victims of trafficking reported the greatest number of working hours. Some of them were forced to work for almost 24 hours, with the average minimum working hours reported being 16 to 18 hours. Alba, a 47-year-old victim of trafficking, described a grueling schedule: *“I started working at 6 a.m., I had to cook (...) [and then] working on the machine (...) we had 30 minutes to eat (...) and then 15 minutes for tea (...) 30 minutes for dinner at 9 p.m. (...) after dinner we keep working, there were others that to earn more worked all night, from midnight ‘til midnight and they rested on Sunday or Saturday, but we did not have a break.”*

While migrant workers were able to rest on weekends, this was not true for the victims of trafficking, who worked even on Sundays. Given that they received little or nothing of their salaries, victims of trafficking were unable to buy food, so one motivation for some to work on Sundays was to get free food, because it was only provided to them when they were working. Victims of trafficking reported being hungry, particularly on the weekends. Raul, a 38-year-old victim of trafficking, spoke of staying in the workshop in order to eat: *“We had Saturdays and Sundays off [but they let me] stay on Saturdays and Sundays, since I told them I had no money (...) because going out would make us hungry, we saw good stuff (...) we wanted to stay in the workshop, and in exchange they told me I had to clean the workshop if I wanted to stay (...) the shower, the bathroom, everything, I had to do all that for staying.”*

Among migrant workers, those who lived and worked in the same physical space tended to work more hours compared with those living outside the workplace with their families. Usually those residing at the workplace wanted to use as much time there as possible to earn money, so they worked more hours. Some men, like Pedro, a 29-year-old migrant worker, reported sleeping in the workshop during the week in order to avoid spending time and money commuting to their home where their wives and children lived: *“Only once I lived in the workshop, but because it was very far, the bus ticket was very expensive. But I always went because I lived with my family, they were already here [in Argentina], and I had to go and see them sometimes. It feels different to leave them for a week and then after a week go back home. I had to see my son, I had two children.”*

⁶³ Cathy Zimmerman et al., *Health and human trafficking in the Greater Mekong Subregion: Findings from a survey of men women and children in Thailand, Cambodia and Viet Nam*, International Organization for Migration and London School of Hygiene & Tropical Medicine, Geneva, Switzerland, 2014. Available from http://publications.iom.int/bookstore/free/Steam_Report_Mekong.pdf.

Women who lived outside the workshop had to perform family and household chores after work. When these responsibilities are considered as part of their workday, these women had a double shift, and were unable to rest, which can lead to pathological fatigue.⁶⁴

Breaks during the workday were associated with meals. The victims of trafficking interviewed reported having fewer breaks; hence they had less food and less time to rest. Lunch and dinner breaks lasted 30 minutes to an hour, while breakfast and the afternoon snack lasted 10 to 15 minutes. All meals were taken within the workshop, with no outside recreation. Some migrant workers interviewed mentioned eating in less than 10 minutes at their workspace (for example, at the sewing machine table) to avoid wasting time, or even skipping meals on occasion. As Pablo, a 30-year-old migrant worker, put it:

“(Breaks were) at breakfast time, lunch time, afternoon snack they call it, and at 10 we finished working and we also had dinner (...) many people have their goals, their objectives, they don’t want to waste time, they have lunch at their machine and keep working and many of them never took breaks.”

Interviewees mentioned that the wages (or payment per garment in the case of sewing machine operators) received for the work were often insufficient to pay for their living expenses such as rent, food and other basic necessities, and therefore they had to work as much as they could to cover their needs. Sofia, a 36-year-old migrant worker, explained that her salary and her husband’s was not enough: *“We made [ARS] 300 (a month), each week we need to get money for my children, for their yogurt and I have to buy oil at least to cook on Saturday and Sunday; we would cook with oil, pasta, potatoes, we had no money, yes, my husband also made [ARS] 300 and it wasn’t enough money.”*

Given that they were not working with a formal contract, those interviewed did not have the benefit of the labour rights guaranteed for formal workers under Argentine law – including paid annual holidays, weekly rest periods, sick leave, maternity or paternity leave and other social benefit such as pensions. Some interviewees reported that this situation made them work more hours, further contributing to inadequate time for rest and recuperation.

Use of personal protective equipment

Overall, interviewees reported not being provided with any personal protective equipment (PPE), although most of them had knowledge of personal protective measures to prevent health problems (for example, they knew that masks protected their health). The only protective gear or device sometimes provided by the owner of the workshop was a simple protective mask for covering the mouth to avoid inhaling dust and fibres. Most interviewees, however, reported not using these masks, even if they were aware of their benefits, because they found it uncomfortable to breathe, especially during summer when high temperatures could reach 35 degrees Celsius. Omar, a 26-year-old victim of trafficking, said: *“They gave us a face mask (...) for the dust, so that we didn’t inhale it (...) I didn’t know what the mask was for, I didn’t really follow the recommendations they gave us because it was very hot.”* Some interviewees mentioned that they would have liked to use masks and they resorted to using a piece of fabric if the owner did not provide one. Eric, a 24-year-old migrant worker, spoke of the difference between those legally employed and workers in his situation:

“Those who are legally employed get a face mask but while you work off the books, you don’t get one, you have to buy it yourself, or if not, you can make yourself one using a thin kind of fabric.”

⁶⁴ Pulido, M., A. Garduño, S. Morales and N. Lara-Flores (2009). Perfil de patología y doble jornada, en trabajadoras y trabajadores de la maquila de confección en el D.F. Informe de investigación para la Secretaría del Trabajo del Gobierno de México D.F.: UAM-X.

Cuts and punctures of the fingers or hand were the most common accidents reported by both victims of trafficking and migrant workers. It appeared that most interviewees were not provided with cut-resistant gloves made of flexible metallic strings or thimbles to protect their hands. Luis, a 41-year-old victim of trafficking, put it this way: *“There were always people cutting their fingers, that is why there was the protective glove, but sometimes they were so selfish that we didn’t even use it.”*

All those interviewed worked in their regular clothes, based on the season (for example, shorts and t-shirts during summer).

Workplace-related health risks and outcomes

Respiratory problems – colds, flu, asthma and in particular tuberculosis – were the main physical problem reported by the interviewees. This was likely related to combined exposures to dust, working in crowded places with other tuberculosis-infected colleagues and the chronic or prolonged sleep deprivation that weakens the body’s immune system.⁶⁵ Participants clearly associated the dust with respiratory problems. Said Clara, a 28-year-old migrant worker: *“Because most workshops have windows you know, because of the dust (...) because if you absorb that it gives you broncho, bronchiolitis, you know? It attacks the lungs and those things (...) I don’t know what they call that disease but it’s caused by the dust in the lungs (...) coughing, spitting up blood, I don’t know what the disease is called (...) where I lived, there was a man next door in another room who spit up blood. That’s contagious, and it happens because of the dust in the workshop.”*

Musculoskeletal symptoms such as back problems, neck pain and numbness in the extremities (arms) were reported. Ana, a 35-year-old migrant worker, spoke of the effects of bending over the sewing machine: *“This part here would get numb [motions to arm] from bending over the machine (...) or from having the neck twisted like this, you see? (...) there are times when it gets numb from being bent over, so the only thing I do is step outside for a while and move my arms, and it goes away (...) I noticed that bending over like this hurts a lot.”* These problems may have resulted from bad ergonomics and the working posture, as sewing machine operators had to sit in a bent-over position for long periods of time and make repetitive movements. Those working as assistants lifted heavy objects when moving packed piles of clothes or managing heavy kitchen items, like heavy pots. Ironers and assistants reported standing for long periods of time.

Sewing machine operators reported eye problems such as blurred vision, eye pain (itching or conjunctivitis) and loss of eyesight. Luz a 27-year-old migrant worker, reported suffering from eye irritation that she related to be exposed to dust: *“When you rub [your eye with] your hand and you are working with the fabric it hurts, or if you place the light near the machine because you want to see more, the light so close can hurt (...) sometimes got irritated, that was because of the dust (...) I went to the eye doctor because he told me I wasn’t in good shape, I got conjunctivitis from an infection.”* This could be related to having to concentrate on very fine work for long periods of time, the presence of dust in the environment and the overall lack of adequate illumination.

Skin conditions were also reported. Some interviewees said that they suffered from skin irritation due to constant contact with dust particles. Hugo, a 21-year-old migrant worker, noted: *“It is normal (...) after finishing working I had to change my clothes and take a shower (...) if not it stings (...) you scratch (...) it becomes red.”* There were reports of bug bites (although from which type of bug was not specified) on the legs, which caused them to swell up. There was also one case of the skin infection scabies that resulted from unhygienic conditions – an infected dog living in the workplace. Alba, a 47-year-old victim of trafficking, spoke of this particular problem: *“There were dogs and cats. The dogs were sick and I had a rash that I could not stand the stinging, there was something of a dog disease and I am not used to be with many dogs and this dog had scabies and he jumped on me, they didn’t take me to the doctor, no, I was cooking and could no longer endure the itchiness.”*

⁶⁵ Zimmerman, C., M. Hossain, K. Yun, B. Roche, L. Morison and C. Watts (2006) Stolen smiles: a summary report on the physical and psychological health consequences of women and adolescents trafficked in Europe. London. London School of Hygiene & Tropical Medicine; Siân Oram et al., “Prevalence and Risk of Violence and the Physical, Mental, and Sexual Health Problems Associated with Human Trafficking: Systematic Review”, *PLoS Medicine* 9, no. 5 (2012), e1001224, doi: <http://dx.doi.org/10.1371/journal.pmed.1001224>.

Environmental hazards such as extremely high or low temperatures were also mentioned by interviewees, who worked without protection against extreme temperatures or other environmental elements. Many interviewees worked in small, humid and crowded rooms, under tin roofs with no air conditioning or ventilation. Exposure to high temperatures can produce heat stroke. For those living in the workshop, these temperatures and the humidity made it impossible to rest during the few hours they had to sleep and needed to take a shower. As 30-year-old migrant worker Pablo said: *“You can get a shower at the end of the day every day but in the summer, you need more frequent showers because you sweat more, you may even take a shower at noon or in the afternoon to get some rest; it’s like three times a day in summertime, which you can’t do in the winter, you can’t take three shower with the cold.”*

Ana, a 35-year-old migrant worker, suffered from excessively high temperatures in a workshop that did not have proper construction material: *“Sometimes I wet a washcloth and put it on my head to lower the direct heat (...) Because the roof was made of metal, so it was too hot.”*

Because all participants were from Bolivia, where the weather tended to be cooler than in Buenos Aires, the difference in weather conditions was something that they reported having to adjust to.

Interviewees also mentioned urinary infections. This could be related with poor hygienic conditions at the work place, poor options for personal hygiene and to the lack of access to the toilet when needed. Some victims of trafficking who were interviewed said that the toilet was locked and they had to ask the owner for the key to open it.

Pregnant workers had no paid sick leave, maternity leave or other related benefits. Lack of obstetric check-ups during the first month of pregnancy was reported. The lack of access to medical care (either due to lack of knowledge about existing services and their rights, or due to unwillingness to miss work) and the long working day could expose women to preterm delivery, miscarriage, small-for-gestational-age babies, low birthweight, preeclampsia/gestational hypertension.⁶⁶ Women in advanced stages of pregnancy also reported the additional discomfort and physical stress of certain tasks such as operating the sewing machines. One woman interviewed, 23-year-old Nibia, mentioned hiding her pregnancy to be able to work longer, and she also noted a difference between the smallest workshops and the larger ones. Nibia described her situation like this:

“I didn’t want to be sitting at the machine anymore, sitting there learning to use the overlock, I couldn’t sit anymore, my back hurt and I went to work as an assistant (...) I couldn’t bend over anymore like that (...) I worked (at the machine) until I was five months along (...) after five months I went for a check-up because I worked and I didn’t want to, I couldn’t go [stop working], now I work somewhere else because of the baby, they don’t let me work at the Koreans’ (...) I went with big clothes so that I wouldn’t show, to the Koreans I went, you could barely notice it, and then a Korean woman said, she touched my belly, I took off my jacket, it was already showing and she said: you’re carrying a baby, she found out, she found out and didn’t say anything, you work here until you’re seven months pregnant and then you can’t work anymore, you have to take care of yourself, said the Korean woman, and I worked until I was seven months along (...) I had to work, I had to pay for my room, for my food and my clothes, and to buy clothes for him, I needed to work (...) I stopped working (with the Koreans), I came back to the slums here to work with a lady until I was eight months along, and then I couldn’t work anymore so I rested (...), I couldn’t even bend over, not even put my shoes on, nothing, that’s why I stopped.”

⁶⁶ Palmer, K., M. Bonzini and J.P. Bonde, “Pregnancy: occupational aspects of management: concise guidance”, *Clinical Medicine* 13, no. 1 (2013), pp. 75–79, Available from www.rcplondon.ac.uk/guidelines-policy/pregnancy-occupational-aspects-management.

Accidents and injuries

When asked about workplace-related accidents, all participants reported having been involved in an accident. The most common workplace accidents were cuts or punctures produced by the sewing machine needle, the blade of the cutting machine, yarn-cutting scissors or the tagging gun. They reported accidentally “sewing up” their hands, and being hurt by the needle, which could penetrate the fingers and even bones. María, a 27-year-old migrant worker, spoke about how she hurt her hand: *“Sewing up my hand (laughs) with the straight-stitch (...) if you step hard the machine sprints and your hand gets pulled together with the garment, and so your finger gets sewn up sometimes.”*

Cooks and ironers reported that burns as a result of accidental contact with hot irons or pots were common. One interviewee mentioned the possibility of falling due to carrying a large number of garments too quickly, or as a result of tripping over machines when doing this. This happened to Hugo, a 21-year-old migrant worker: *“Sometimes when you’re picking up the clothes, you can slip (...) when the fabrics arrive, and I’ve seen workshops that I visited where you have to go up the stairs (...) also after you’re finished you have to carry them before they take them (...) maybe packs of 20 pants (...) because I wanted to lift it up quickly and I kicked it, since I was wearing flip-flops, I kicked the machine and tripped next to the machine and cut myself, I mean, those things happen.”* The space between machines was reported to be very limited without much room to move.

Violence and abuse, threats and reported related health outcomes

A few interviewees (both migrant workers and victims of trafficking) reported witnessing another person being assaulted by owners or managers of their workplaces. José, an 18-year-old victim of trafficking, mentioned being physically assaulted, kicked and hit by a drunk boss: *“The owner, when he was drunk, and I wasn’t, he attacked me with a bottle (...), he was drunk, he attacked me, well, first he kicked me, and when I wanted to defend myself he grabbed a bottle.”* A few migrant workers reported witnessing fights between co-workers and the owner.

Both migrant workers and victims of trafficking reported that the owners threatened them with reprisals from Argentine authorities (migration and police), implying that the informal Bolivian migrants could be detained or deported, which is not the case under Argentine law. Raul, a 38-year-old victim of trafficking, spoke of being threatened: *“If I want right now I can dump you. Go and complain if you want, but you are Bolivian (...) [the owner said] I have my residence, because my children are studying here, I live here, but you do not, so I will get support, you won’t.”* Such threats were supported with false information regarding interviewees’ rights in the country as migrants. For example, one interviewee mentioned being told that if the police saw them they could be detained and deported to Bolivia, which is contrary to Argentine law. As noted previously, all interviewees had migrated legally into Argentina, and their rights as irregular migrants were protected by law.

Traffickers, in particular, used these and other threats to maintain control over their victims by implying that the environment outside the workplace was not safe, and by emphasizing the victims’ isolation. Owners threatened to increase their debts or harm their children and families. These threats were taken seriously, as traffickers usually knew where the victims’ families lived. Owners also threatened to “kick them out” of the workshop without pay, which is what happened to the 18-year-old victim of trafficking, José:

“Just once he said that he wouldn’t pay me if he didn’t feel like it, and he could throw me out on the street with all my stuff, and wherever I went, no one knew me, he said that once.”

Verbal abuse was also used to intimidate victims of trafficking and as a punishment for perceived errors or disobedience. Most of the interviewees, both migrant workers and victims of trafficking, mentioned symptoms of stress due to working hard and fast to finish whatever task they had to perform. As migrant worker Dora, 46, put it:

"I had a headache, I was stressed out, so much, every day I'm there at the machine, and I got so stressed out, being in the machine constantly, sewing (...) so nervous, to move quickly, to grab more fabric (...) How can I put it? You don't want to be in the machine anymore but you must, you have to because you need the work."

Interviewees mentioned they had to pay close attention to avoid being injured, with some participants stating that workers chatting with colleagues and not paying attention to their tasks were at risk of suffering accidents, for example cuts as a result of poor coordination between their foot on the pedal and their hand while operating the sewing machine. They spoke of fatigue and gastrointestinal problems, including stomach or abdominal pain in addition to headaches. These were all symptoms that could be stress-related. Feeling nervous, tense, and experiencing mood swings and lack of motivation were also mentioned, particularly by those with dependants to take care of financially. Both migrant workers and victims of trafficking mentioned their concerns about making enough money in order to support their families.

Migrant workers working as assistants mentioned conflicts between co-workers when bringing garments to one sewing machine operator over another; because the operators were paid by piece this was an important issue. This was the experience Nibia, a 23-year-old migrant worker who had a problem with a co-worker. *"Sometimes it was OK, sometimes, because there are always differences, some ask you to work faster, to prepare the garments faster so that they can sew, I also had to pass them the threads, everything (...) sometimes they would get angry because of the threads, you know? I had to give the same number of cuts to all operators and sometimes I would give more cuts to one and she would finish more quickly, and the other one was slower, so the first would finish and make more items (...) and that's why she would get angry sometimes (...) they would only get angry, they didn't talk to me in an angry way like that (...) don't know why because I'm giving preference to the other person who finished before her, I think that's why she got angry, she was jealous and wouldn't talk to me, if someone doesn't talk to you at work you feel bad, same work every day, so you have to see her (...) the next day I'd go to work and I said: she must be angry (...) a lady who worked there yelled at me: pass me the garments!"*

In big workshops, groups were reportedly created inside the workshop depending on which machine operator they worked with, with jealousy causing conflicts between them. Rosa, a 31-year-old migrant worker, spoke about the challenges of integrating into a larger workshop: *"Since it is sort of a small family business...it's more quiet. When there are more people, if you go to other workshops, like the Korean ones, there are like 50, 40 or 30 people. It's not the same to work in a small workshop than a big one (...) mostly because of the people, when you start working at a new workshop, people who've been there longer treat you badly, or they are indifferent (...) there are groups already established and I, well, I don't like it (...) the groups were by sector, the huskylock workers vs. the overlock workers, or a group of assistants that had been there longer, or were friends for more time, like that (...) that group did not get along with the other, I don't know."* This hostile working environment also affected the workers who felt they had to work fast not only for their work but also for their workplace relationships.

Compared to the largest workshops, better relationships between co-workers in small workshops were reported. Workers felt that in a small workplace they could start working as an assistant, eventually become a sewing machine operator and achieving their goal of earning more money. The feeling of having the opportunity of becoming a sewing machine operator seemed to be an incentive for working in a smaller workshop. Migrant worker Luz, 27, spoke of being able to learn more in a smaller workshop: *"In a workshop that was small... that was family-owned and I started sewing there, using the over [overlock] machine, then the straight-stitch machine, little by little and then I got the hang of it and in three months I was able to use all machines (...) in a family-owned workshop you tidy up quickly and then you don't do anything else and you get the chance to learn a little more*

while in a big workshop there are a lot of operators and you have to organize and tidy up and keep tidying up and you can't learn how to use the machine, it may take you at least six months or a year to be able to sit at the machine (...) (small workshop) with three people, mother, husband, the son if he's old enough (...) I guess a big workshop has 15, 20 people, (...) I had to work in one with 25 people (...) and we were three assistants, yes, three, we had to assist all three groups and I was not allowed to sit at the machine to learn, while in the family workshop I got the chance to sit and sew."

Victims of trafficking were not able to spend their limited free time with friends or family. They typically did not know anyone in Buenos Aires. Because they did not have money to call their families in Bolivia frequently, they had limited emotional support. Social networking sites were not widely used for contact with family and friends; contact was generally by phone. Despite being able to make brief phone calls home, victims of trafficking reported not wanting to tell their loved ones what was really happening. José, 18 and a victim of trafficking, spoke of wanting to call home:

"I did (contact his family) only three times when I wanted to come back, I called my mother (...) yes, when my boss was in the mood (resigned smile) well, I wanted to call them every night if possible (...) no, they didn't let me call (...) there was a telephone in the house where I lived, there was a store on the corner and a phone booth around the corner and we called from there."

He also spoke about feeling isolated among so many Argentines: *"I could not go out quietly because, obviously I was Bolivian and there were all Argentines, the thing is I was living among all Argentines, I did not live in a place that had also Bolivians, we were the only Bolivians in the neighbourhood, then it was dangerous too."*

Migrant workers appeared to be less isolated than victims of trafficking. Most, particularly those living outside the workshop, had a relative or friend in Buenos Aires to whom they could talk during their free time. Lack of money was also mentioned as a barrier to frequent contact between the migrant workers and their families, but because they received their salary – unlike the victims of trafficking, who received little to no pay – they were able to contact their families, just not as frequently as they would have liked. As Luz, a 27-year-old migrant worker, put it: *"During the first week I missed my family but I called them every weekend or anytime I could and then I got used [to it] already, also I had to concentrate on my work, I would be in vain to leave my son and come here to do nothing."*

Both migrant workers and victims of trafficking spoke of symptoms of acculturative stress. Interviewees mentioned discrimination and homesickness; they spoke of missing their children, their family and their customs. Most of the foods they ate at work were Bolivian dishes; this helped create a sense of familiarity. Sofia, a 36-year-old migrant worker, mentioned having less frequent telephone contact with her father because he cried because he missed her and that made her feel sad: *"[Frequency of contact with family] every month (...) not every day (...) you do not have to speak every day (...) my father cries, he tells me that I made myself sick there, I cry too and I do not want to speak, I am not going to call."* Ana, a 35-year-old migrant worker, reported feeling more comfortable working in a workshop owned by a compatriot because of the similar culture: *"The woman, she was from where I am from, you know? (...) this other woman was Bolivian, so she cooked the same stews we ate back home, so it was more comfortable being around her, she listened to the same music as us, I felt more comfortable."*

Living conditions

Housing

Interviewees reported poor living conditions. In general, their work offers included accommodation at the workshop, where the owner also lived with his or her family. Interviewees reported sharing bunk beds in small, overcrowded rooms with six to eight people per bedroom. They mentioned that toilets were dirty, because generally everybody shared one toilet. This situation potentially exposed them to infections or diseases due to poor sanitation. In general, the interviewees had no recreational spaces to use in their free time inside the workshop space, which was often a house.

Victims of trafficking reported suffering from worse living conditions. They had less access to private space. This was the case of Alba, a 47-year-old victim of trafficking. As she put it, *“Everything was outdoors, I could not change [clothes] anything for the situation I was in the open and that was uncomfortable to me.”* Omar, a 26-year-old victim of trafficking, talked of the bad conditions: *“Quite damp, quite boring, a little while in that room, inside, it was very uncomfortable (...) maybe it was a bit different (...) I mean, I thought the houses would be OK, but they weren’t, there was humidity, the walls were of a different class but it was a bit uncomfortable (...) those bunk beds let’s say, like a two-floor bed (...) that’s where we slept (...) very empty, very, well, I had nothing to distract myself.”*

Victims of trafficking reported being forced to sleep in the kitchen on a mattress or on a piece of wood on the floor; they mentioned unhygienic conditions and related concerns such as rats, cockroaches and insects. Raul, a 28-year-old victim of trafficking, mentioned having to shower with cold water because the owner turned off the gas, and being denied access to the toilet when needed because he had to ask the owner for permission so that he would unlock the bathroom. *“They shut off the water supply and he’d say: ‘I shut off the water, there’s no water’, then we heard them take a shower, and they lived on the other side (...) at night we’d collect water in bottles and wash ourselves (...) he’d sometimes turn off the supply in the middle of our shower.”*

Some interviewees were disappointed by the living conditions in Argentina. Those living inside the workshops (both migrant workers and victims of trafficking) mostly mentioned aspects of the housing that they would have expected to be better (for example, humidity on the walls, uncomfortable beds, small bedrooms). Some mentioned the neighbourhood. Among those migrant workers who lived outside the workshop, most reported being disappointed about their neighbourhood, stating that they had expected to live in neighbourhoods more like those in their home country but had ended up living in slum areas of Buenos Aires, in unsafe neighbourhoods. Twenty-seven-year-old migrant worker María explained: *“I live in the slums, it’s not a ‘barrio’ (neighbourhood), if it was a ‘barrio’ it’d be like over there [in Bolivia] (...) I thought it was like over there but it’s not (...) a ‘barrio’, a normal one, with wide streets, in the slums the streets are very narrow, it looks like a ‘vecindad’ [low income housing complex] (...) the houses there, in the ‘barrio’ you could walk freely and nothing happened, here it’s always very dangerous (...) the place where I live is a bit like a ‘vecindad’, very narrow streets, walls are very precarious, you know? Built straight up like this, a brick here and there (...) the buses don’t go into those areas.”*

The migrant workers who had families living with them usually lived outside the workshop, in slum areas where they rented a room at a high rent to share with the whole family. They often had to share toilets and kitchens with other tenants. Many of them mentioned that crime and drug trafficking made living in the slums unsafe.

Hugo, a 21-year-old migrant worker who lived in a workshop, mentioned that the buildings were unsafe and could be a potential risk as mud-brick structures can collapse due to heavy rains, and that poor electric connections could produce an electrical fault leading to fires:⁶⁷ *“I heard there are other workshops that burn up (...), when it’s hot I heard, yes I did, not sure why it caught fire I think that*

⁶⁷ In March 2006, an illegal textile workshop burned down due to a short circuit caused by unsafe and excessive electrical wiring in the workshop, killing six people, including four children. On April 2015, another fire in a workshop killed two children who were unable to escape the basement where they were sleeping when the fire began. See “Fire in a textile workshop kills two children”, *The Argentina Independent*, 2015. Available from www.argentinaindependent.com/tag/sweatshop/.

thing you use for heating, um, not sure what it's called but sure, it catches fire because of the heat and sometimes there's a power cut, or a bad cabling system (...) I also heard that some workshops collapse (...) yes, when it rains, that's why sometimes the police comes and inspects, they come and everything and I don't know what they talk about (...) there are other workshops that are not inspected for a long time (...) the rain, I mean when the wall gets wet, all that maybe is made of adobe, so if it rains really hard, really hard and it gets flooded, something like that happened last year." As Nibia, a 23-year-old migrant worker, observed: "Cables here and there, it's not safe (...) I mean, the cables were on the floor, plugs close to the machines, you know? The machine and sometimes, the cables aren't safe, they do the cabling themselves, and no, they're not safe, the cables aren't right, they're not, how can I say it? They're in one spot and something always fails there (...), sometimes when someone stepped on the cables they cut them and sometimes the power went off."

Nutrition

Interviewees reported that the meals provided to them were minimal and lacked nutritional ingredients. Poor or inadequate nutrition appeared to be common among those interviewed. Breakfast and afternoon snack consisted of tea with bread. Lunch and dinner were usually traditional Bolivian meals (soup, rice, potatoes), but without some of the nutritious ingredients they normally used, such as meat. Eric, a 24-year-old migrant worker, noted this: *"We eat food from there (Bolivia), here the cook makes typical food from Bolivia."* Interviewees also reported that when meat was included it was of bad quality or not well preserved. Alba, a 47-year-old victim of trafficking, said: *"A bit of rice, potatoes maybe with a bit of chicken or beef, but they were in a bad state."*

Workers said that the food was provided only during workdays, which made it particularly difficult for the victims of trafficking, because they did not have any money to buy their own food when not working. This resulted in them not taking time off: they worked on weekends in order to receive food from the owners of the workshops every day.

Rest time

Based on their interviews, victims of trafficking seemed never to have had time for rest or leisure activities. When they had a few hours to sleep, most did not have a private place to rest. Because they had no money, their recreation ability was limited and some of them continued working even in their free time. Only one victim of trafficking, whose situation seemed a little less extreme than that of the others, said that he could go to play soccer in his free time.

Female migrant workers living outside the workshop had less rest time than their male counterparts because they reported having to do household chores and take care of their children and husbands when not at the workplace. Clara, a 28-year-old migrant worker, noted: *"On Sundays I take them (her children) for a walk (...) I'm also free on Saturdays, sometimes I have to wash my babies' clothes, I also take care of the cleaning, the children's laundry, all that."* Male interviewees mentioned playing sports such as soccer during their time off, and some mentioned co-workers going to dance clubs on weekends.

One interviewee who lived at the workshop mentioned having to rest due to health problems, but that it was impossible for her to sleep due to the noise of the sewing machines.

Freedom of movement

Most victims of trafficking reported that they were never or only occasionally free to go where they wanted or to do what they wanted. Because they were confined to the employer's home, they were monitored at all times and some were locked in the workshop. One participant mentioned that she could go out to buy groceries, though most of the time she was accompanied by someone. She mentioned that though she was occasionally allowed to go out alone, she thought of escaping but was worried about not having her personal belongings and documents, because her documents had been retained by her trafficker. One trafficked couple reported being allowed to go out during weekends but they did not have any money (they worked in exchange for food). Leo, a 19-year-old victim of trafficking, reported being told to come and go from the workshop secretly, to avoid being seen by the authorities:

“He gave us permission, supposedly when nobody could see us, in secret, to avoid being seen, then we could go (...) we went out in threes, we said: first you go and get in, then I go, all in very little time (...) it all made me laugh because it seemed like a game, all in secret, I don’t know, it only made me laugh.”

The fact that victims of trafficking did not receive their pay and were waiting for the supposed debt to be paid or the minimal agreed working period to finish (for example, a three-month work agreement) seemed to be a means of control used to prevent them from leaving, even when they could physically leave the workshop. Not having their documents or not being able to take their personal belongs when going out was also a barrier. Alba, a 47-year-old victim of trafficking, mentioned that when the traffickers realized that she was planning to escape they took her documents away, telling her they were going to use them to send money to her family in Bolivia: *“They saw I was taking my stuff and all that, they took my ID surreptitiously (...) he said to me: lend me your card, we will see how to send money to your children, I then thought that was normal.”*

Migrant workers were able to leave when they wanted, but the less they worked, the less they earned, so there was often a self-imposed decision to stay in the workshop to work more.

The workshop owners threatened participants with potential supposed consequences (prison, deportation) if caught by the local authorities, because they were told that the migration legislation did not allow them to be in Argentina. While the owners used these threats against both migrant workers and victims of trafficking, it seemed that migrant workers could more easily verify that the information was false because they had more contact with the outside world, whereas the victims of trafficking were more isolated inside the workshops.

Health beliefs

Among interviewees, there was a perception that dust fibres were the main cause of such respiratory illness as tuberculosis, bronchitis and asthma. Interviewees, however, had limited knowledge about the damage that dust could cause. Some participants believed that dust caused tuberculosis or other related diseases and that to avoid getting ill they needed to use protection such as a mask. But all of them stated they did not use or only occasionally used masks (when available) as conditions such as heat and humidity made them feel as though they could not breathe when using masks. Some participants felt milk provided some sort of protection against respiratory problems they believed were caused by the dust, and mentioned that by drinking milk (one person also mentioned consuming yogurt) regularly, the dust would be expelled from their bodies. Luz, a 27-year-old migrant worker, said: *“(Dust) enters your lungs and causes a virus and you don’t know it’s eating up your lungs (...), there are many workers that know about how contagious it is, and, and they don’t let you work, even if you’re off the books or working legally (...) because it’s contagious, with tuberculosis you can’t, if you don’t eat well, nothing, others don’t drink milk and that’s why they get tuberculosis (...) the doctor says that you have to drink plenty of milk so that you don’t catch it, you don’t get tuberculosis (...) it helps you not catch that disease, it expels the dust you may have inhaled.”* Clara, a 28-year-old migrant worker, also believed that consumption of dairy products could prevent lung problems: *“Milk and yogurt (...) they say that helps you to expel all the dust so it does not stay in your lung.”* Participants also mentioned the difference in weather conditions between their hometown in Bolivia and Buenos Aires (humidity, cold and hot weather in Argentina) could be the cause for their disease.

There was also a perception that humidity and cold in the back could cause renal failure (kidney problems) as interviewees stated that cold in the kidneys affected them. They also mentioned that sitting for long periods might affect the kidneys, causing pain. As Pablo, a 30-year-old migrant worker stated: *“Kidneys (...) for the long hours you spend sitting (...) they start hurting, or sometimes you start working (...) and the cold air blows on you, when it’s hot your pores open and the cold is what*

ruins your kidneys the most (...) so to avoid that you have to get checked, or wear warm clothes or use a support belt (...) just to avoid the cold air from blowing on your kidneys.”

Use of alternative or traditional medicine was also reported on those occasions when the person was in pain but felt it was not too serious or could be bearable. Folkloric homecare remedies mentioned by interviewees included putting machine oil on cuts, putting cooking oil on burns caused by the steam iron or hot pans, cleaning their eyes with tea in the case of eye irritation, and inhaling steam with water and chamomile to cure the common cold. That is what Nibia, a 23-year-old migrant worker, made to treat her burned hand: *“The first time I was ironing I burned my hand (...) with the iron (...) I kept working and just put some cooking oil on it, it was right there, that’s all there was (...) because I think it cools down the burn, until the hand heals.”* For back pain one participant mentioned the use of a mentholated ointment manufactured in the highlands of the Bolivian Andes, which was also used to alleviate flu symptoms.

María, a 27-year-old migrant worker who was working in her sister’s workshop, mentioned that her husband told her not to work on the sewing machine when she was more than six months pregnant because sitting so much could hurt the baby, so she kept working as an assistant and cook. *“I got pregnant and I had to take care of me, [her brothers and husband] did not let me sit because it was bad for the baby (...) because supposedly at being sat like this [sewing position] I pressed the baby.”* María also was diagnosed with tuberculosis after having her child and believed she had a weakened immune system due to her pregnancy: *“I am skinny and have few defences, any disease can attack me (...) maybe [because] I had my baby.”*

Medical care and service access

Access to medical care

Most of the interviewees sought health care⁶⁸ for various reasons at some point, but respiratory-related problems and cuts and punctures to their hands were the main reasons they sought medical attention.

In general, both migrant workers and victims of trafficking interviewed knew they could access health services because their co-workers, relatives or neighbours told them where to go and that they had the right to access to medical services for free. Most were told about the primary care facilities (*salitas*) located in communities, which usually do not provide care for complex pathologies.

Victims of trafficking reported that they experienced many restrictions to accessing health services because workshop owners did not let them go out or gave them false information about their rights in Argentina. They only went (or were taken by the traffickers) when the pain became unbearable or the condition seemed serious; as a result, health problems were not treated in the early stages, but only when they became critical. One victim of trafficking stated that after several requests to his boss, the boss referred him to a doctor from the Bolivian community who did not treat him properly.

Both migrant workers and victims of trafficking reported problems in adhering to treatment that required them to go outside the workshop. Victims of trafficking reported that the owners did not allow them to return to a health-care provider for further treatment, while migrant workers often decided not to miss work, because they would earn less if they left work to go offsite for treatment. Ada, a 33-year-old victim of trafficking, described trying to get needed treatment for a kidney problem: *“The doctor said I had to be treated for my kidneys, that at least every other day I had to get an injection, a saline solution, I said it was very difficult because I worked under strict conditions, no, then talk to your boss, you must get treated, I went to work and told my boss, I said the results of the test were bad, I said, but they didn’t want that, they said no, that I’d gone there to work so no way, they wouldn’t let that person come with me, I had to go alone, I went with that person from the store that I met, he was very kind, and helped me and came with me (...) until I started getting worse,*

⁶⁸ Note that almost all migrant workers were interviewed in medical facilities in Argentina. The victims of trafficking were interviewed in Bolivia (not in medical facilities).

they didn't want me to go (...) I even had blood in my urine and all that, I showed my boss, but she still didn't want me to go even seeing that."

Sustaining a deep or serious cut was a frequent reason for seeking medical attention, with the level of severity of the cut determining whether the interviewees looked for medical assistance or not. When a cut was considered superficial, home care was enough, but when it seemed to be a deep injury, such as a needle in the bone, interviewees looked for medical attention.

Self-medication

A few interviewees mentioned that the workshop owner or manager provided them pills for back and neck pain, flu, gallbladder problems, or to stay awake, or with hot oil with lemon vinegar for abdominal pain. It was not clear what types of medication the employers offered the interviewees because they often referred to these pills by their colour.

It is possible that by providing the workers with pills for pain, the owners may have avoided taking workers to the hospital or giving them time off work. Some interviewees expressed that they felt the owners did not want to take them to medical services, so they were given medication without knowing what they were taking. As Alba, a 47-year-old victim of trafficking, noted, *"I was in pain due to my gallbladder and it gave me an attack and they did not want [to take me to the hospital], they wanted me to take some things that were like earth colour."*

3.5 SUMMARY IMPLICATIONS

Our group of interviewees was composed of men and women who were working or had worked in textile workshops in Buenos Aires, with a range of working experience in this and other sectors. They were either migrant workers or victims of trafficking for labour exploitation in the textile sector. Women usually worked as cooks, ironers, assistants and sewing machine operators; men mainly worked in the last two tasks. Sewing machine operators earned money based on their production, whereas as cooks and assistants tended to earn a (lower) fixed salary.

The education levels of the interviewees varied. Some interviewees had advanced university studies. In all cases, they aspired to having a better income than in the country of origin and hoped to progress financially and achieve certain goals. The challenging economic situation in Bolivia, their country of origin, tended to be linked to their family contexts of many siblings or children, and to being parents (or single mothers) who were unable to cover their families' basic needs. Many interviewees were supporting – or hoped to support – their families. Migration, which was common, was seen in a positive light by their families and communities in Bolivia.

Victims of trafficking tended to be recruited in Bolivia, while the migrant workers were often recruited during transit or after arrival, through migrant networks and sources (for example, via radio stations or while on the bus). Both migrant workers and victims of trafficking reported knowing the general work activity (textiles) without having real information about the working conditions; they also lacked regular contracts (agreements were verbal).

The international migration that took place was legal. However, misinformation about interviewees' rights in Argentina as migrants and workers (including access to health care, their ability to stay in the country, detention and deportation of undocumented or irregular migrants) was used as a threat or to restrict movement and prevent employees from leaving. This was particularly true for the victims of trafficking, who tended also to not have social networks in Argentina, making their access to correct information more limited. Interviewees were aware that the workshops were clandestine or did not comply with legal requirements, but spoke of their fear of police and migration officials being based on what they had been told by their exploiters, information that in most cases was

blatantly untrue. Those interviewed not only did not understand their legal protections under the law, but seemed not to understand the concept of having inherent human rights, both as migrants and as informal workers.

Social networks – friends, relatives and acquaintances – constituted a key element of the migration and recruitment practices among migrant workers and trafficking survivors. Discussions with their networks seemed to affect not only the final decision to migrate but also created a sense of security, with many migrants not asking about working conditions or terms before travelling. Therefore, counter-trafficking education and campaigns should be aware that recruitment offers often come from someone the migrant knows and not only from strangers.

Efforts to increase safe labour migration and decrease risks of exploitation should focus on efforts to gain better and more information prior to accepting work or migrating for work. Radio stations and newspaper ads (either in Bolivia or in Argentina in the local radio station of the Bolivian diaspora) were mentioned by both migrant workers and victims of trafficking and may be key access points for these populations for future interventions. All respondents traveled by bus and entered through regular border controls, which indicates that campaigns or other interventions could also take place in bus terminals in the different cities in Bolivia and in Argentina.

In terms of working conditions, neither migrant workers nor victims of trafficking had contracts; they lacked social protections and benefits, experienced long working hours and bad working conditions. Those living in the workshops had, in addition, unsafe living conditions. Some interviewees recognized that the working and living conditions for those living in workshops were not adequate. The hazardous working conditions had come to seem normal to interviewees; for example, some respondents mentioned as “normal” a 12- hour work shift (despite reporting they worked even more hours). Excessive working time (more than 48 hours per week) was frequent among respondents.

In relation to impact of the textile work on workers’ health, many occupational hazards were identified. Cuts on their hands or fingers were common accidents that could be related to the lack of use of personal protective equipment. Respiratory problems as a result of dust inhalation, as well as tuberculosis, were reported as one of the main severe problems among interviewees. Poor living and working conditions played a key role in respiratory illnesses. Musculoskeletal problems were also one of the most frequently cited health problems among interviewees, and those mentioned included back, arm and neck problems due to repetitive movement and poor ergonomics that generated pain and numbness. Many interviewees, and particularly those who had been trafficked, mentioned sleep deprivation due to long work hours. This affected the interviewees both physically and psychologically. The lack of time for recreation led to a sedentary lifestyle, which also had an impact on health. Poor nutrition due to the poor quality and quantity of food provided in the workshops was also mentioned.

Physical hazards were similar for migrant workers and victims of trafficking, although victims of trafficking worked longer hours. And although both suffered from stress, victims of trafficking appeared to have a greater risk of stress because they were exposed more often to threats, had less freedom and were pressured to work without actually receiving payment. This increased the stress related to not being able to contact their loved ones or send them money. Migrant workers and victims of trafficking reported receiving threats, particularly from their exploiters, related to their status as international migrants and informal workers. They received misinformation about local authorities and the migration law in Argentina. Victims of trafficking reported more threats and abuse, while migrant workers witnessed abuse.

Victims of trafficking slept and rested less because they worked the longest hours and also because of the living conditions, for example, lack of privacy or sleeping in a common area. Conditions were generally bad for both migrant workers and victims of trafficking, but the latter worked more, had less freedom, were more often threatened, and, because they tended to be paid less or not at all, they spoke more about being hungry and unable to leave the workshop, and being unable to contact their families.

Interviewees typically didn't seek medical care until the pain suffered became unbearable or of concern; this was particularly true for victims of trafficking. Migrant workers tended to have access to information outside the workshop, from relatives, neighbours or co-workers, who told them where to go and that they had the right to access to medical services for free. They also had freedom of movement. As a result, migrant workers reported better access to medical services. However, migrant workers who were sewing machine operators and thus paid by the piece were particularly reluctant to access health care because they did not want to lose days of work. Even for those who could access medical care, when a long course of treatment was required, they noted in interviews that it often could not be completed due to the need to keep working (for migrant workers) and the restriction of their movement (for victims of trafficking). The fact that most of them continued their work even when they were suffering from various diseases and illness (for example, tuberculosis) put the rest of the co-workers at risk of becoming ill.

Some interviewees seemed to believe their status as an informal worker justified their working conditions. As an example, some of them mentioned that "working off the books" allowed the owners to not provide them with personal protective equipment because it was not their obligation to do so. Interviewees thought that being informal workers meant that workshop owners did not have to provide them with a safe working environment (in terms of working hours, social benefits) and that they did not have the right to complain (about that or other abuses). In reality, in Argentine law, an employer can be fined for not formalizing workers to ensure their access to social benefits and protections extended to formal workers under the law. Future interventions must focus on ensuring that migrant workers in the textile industry in Argentina are aware of their rights under Argentine law.

3.6 RECOMMENDATIONS ARGENTINA

General

- Support and invest in achieving the Sustainable Development Goals (SDGs), particularly SDG 8 to "promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" and "to eradicate forced labour, end modern slavery and human trafficking". Specifically, protect labour rights and promote safe, secure, non-exploitative work environments for all, particularly migrants working in informal, under- or unregulated sectors.

Ministry of Health, Argentina (related to national policy)

- Increase participation in national and regional counter-trafficking taskforces, and ensure that health services for victims of trafficking are included in the National Counter-Trafficking Plan to be designed and implemented by the authorities according to the national law; ensure training for health providers, and outreach and prevention efforts through health structures.
- Develop coordinated strategy with the Ministry of Labour, to foster better access to services, knowledge of entitlements, knowledge of work-place health, safety and protections and awareness of health problems that require urgent care, in particular communicable diseases such as tuberculosis.⁶⁹ Information should be easy-to-understand and provided by trusted sources (for example, clinicians or peers) in language that is understandable and trustworthy; this information should, to the extent possible, be provided to diaspora leaders, local leaders and others of influence.

⁶⁹ One of the most common health hazards in the concerned work sectors. The symptoms could be part of a targeted campaign so that workers seek medical treatment sooner; it could include information on where to seek health care and on other available support structure. The main aim of the campaign would be to speed up the decision to seek medical care. If such a campaign is endorsed and introduced by the Ministry of Health, this would then ensure that it is implemented in hospitals.

- Strengthen the efforts of the National Tuberculosis and Leprosy Control Programme among the Bolivian population. Consider peer-supported efforts to improve diagnosis and treatment adherence within the Bolivian population in the neighbourhoods where textile work takes place.
- Review and disseminate findings from this study, other research-based evidence and local civil society knowledge and expertise about the health effects of the exploitative conditions in textile workshops. In particular, highlight the dangers of tuberculosis on health and the implications of working without security measures or protective equipment.

Ministries covering health, immigration and labour in Bolivia

- Develop bilateral agreement and an operational strategy to support information and mechanisms to foster safer migration, knowledge of and access to entitlements and support services pre-departure, at destination and post-return. The strategy should include, for example:
 - Free counselling/orientation services linked to an information campaign on, for example, migrant and labour rights and entitlements, job opportunities and listings of reliable/blacklisted employers, ways to report violations and common labour abuses.
 - Counselling/orientation and information services that are located in or targeted to places of high mobility, for example, at bus stations and ticket purchase points in Bolivia, on buses, bus stations in Argentina; diaspora radio stations (physically and on the air) in Argentina/Bolivia; and community clinics (*salitas*).
 - Occupational health risk information, including advice on protective gear, when to seek medical care, dispelling myths about traditional or common treatment that is not effective and could be potentially harmful.
- Improve return and reintegration support by facilitating decent employment opportunities focused on the acquired skills of the migrants.
- Strengthen and fund adequately support and referral services networks to ensure exploited migrants and identified trafficked persons who return with health problems can seek appropriate care; explore potential financial compensation for work-related injuries and illnesses through legal action or other mechanisms.
- Consider supporting skills training centres, for example, for textile work (and similar semi-skilled labour sectors such as construction), including education sessions on workplace health and safety, worker rights and entitlements and job placement advice.

Health service providers

- *Health practitioners (Argentina and Bolivia)*: Improve awareness of the need to diagnose and treat migrant workers, including for sector-specific occupational health risks, injuries and illnesses and abuses associated with extreme exploitation, including human trafficking. Receive targeted training on how to identify possible victims of trafficking and safely refer them to counter-trafficking partners.
- *Health promoters (Argentina and Bolivia)*: Increase recognition of and information about occupational health and safety risks and protection options associated with textile-related work, the physical and psychological risks associated with migration and the abuses associated with human trafficking.
- *Health outreach teams (Argentina)*: Intensify efforts on existing mobile clinics that can go to neighbourhoods with known migrant worker populations to offer diagnosis and treatment. Ensure staff capacity to detect and communicate about risks and protections associated with textile work, symptoms and treatment options for tuberculosis and worker entitlements to current and future health care.

Ministry of Social Development

- Promote working textile cooperatives, in coordination with the Ministry of Labour and labour organizers or worker unions; raise awareness among workers of migrant rights and trafficking.
- Continue to improve coordination among victim assistance focal points at a national, state and municipality level.

Ministry of Security

- Continue training and awareness of the different security forces around the crime of labour trafficking and labour exploitation.
- Strengthen the efforts of the Ministry's programmes/divisions/brigades that deal with human trafficking to enhance the prevention, identification and prosecution of trafficking cases.

Ministry of Justice and Human Rights

- Continue with campaign activities, including actions to alert the public and employers about penalties for human trafficking and labour abuses in the textile industry.

Judicial authorities

- Implement information activities for judges, prosecutors and defence attorneys about the crime of labour exploitation and labour trafficking and its associated harms (financial, physical, psychological, disability related to future income capacity), in order to ensure adequate redress.

Ministry of Economy and Public Finances, Ministry of Industry and Ministry of Labour, Employment and Social Security

- Increase the frequency of workshop inspections, such as those made by the Federal Administration of Public Revenue (AFIP).
- Strengthen the efforts of the National Institute of Industrial Technology to make it obligatory for business owners to obtain the Shared Social Commitment (Compromiso Social Compartido para Empresas de Indumentaria)⁷⁰ to certify garment products and label them to guarantee to consumers that what they're buying was not made in an illegal/ clandestine textile workshop.
- Clarify to large name-brand companies what their role is in the supply chain, and of possible sanctions if they do not respect the law.

Labour organizers or unions

- Carry out awareness campaigns about migrant worker right and human trafficking that include health impacts in the textile sector.

⁷⁰ More information is available from www.inti.gob.ar/certificaciones/pdf/folletoprograma_CCSC_indumentaria.pdf.

International and private donors

- Support worker information and counselling/orientation services for prospective or current migrants, including providing information about entitlements (for example, access to health care and other services, even without residence permit or Argentinian ID documents, and process of obtaining a residence permit).⁷¹
- Support worker health and safety campaigns, including those covering tuberculosis risks, symptoms and treatment, based on other similar health promotion models.
- Invest in research to determine worker information needs, their access to information, and their ability to apply new knowledge.
- Support health clinic outreach to migrant worker neighbourhoods.
- Support regular epidemiological reporting and analysis of health-related data, particularly in relation to tuberculosis.

Non-governmental and international organizations

- Participate in a network of services that support migrant workers and assist people who are exploited, including supporting bilateral coordination between groups in Argentina and Bolivia.
- Strengthen awareness activities within communities about the health risks associated with human trafficking and labour exploitation.

3.7 FURTHER RESEARCH PRIORITIES

- Conduct quantitative studies to understand the larger patterns of risk, health outcomes and pre-migration decision-making among migrant workers.
- Conduct intervention research to develop interventions aimed at improving migrant worker conditions. These could include, for example, information and advisory services; outreach clinics for health and legal advice; labour inspections of registered and irregular enterprises; worker coalitions.
- Conduct a specific study on the incidence of tuberculosis in the field of textile workshops located in Buenos Aires proper and in the greater Buenos Aires metropolitan area.

⁷¹ Law 25,871.

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4

PERU:

STUDY RESULTS

4. PERU: STUDY RESULTS

4.1 PARTICIPANT DESCRIPTION TABLE

Table 6: Participant characteristics (Peru)*

N°	ID number / alias name	Sex	Age	Marital status	Children	Identified victim of trafficking (VoT) or migrant worker (MW)
1	JJPE01 / Edson	Male	38	Partner	Yes	MW
2	JJPE04 / Diana	Female	34	Partner	Yes	MW
3	JJPE05 / Eduardo	Male	18	Single	No mention in interview	MW
4	JJPE06 / Ernesto	Male	30	Partner	Yes	MW
5	JJPE07 / Carlos	Male	27	Partner	No mention in interview	MW
6	JJPE08 / Doris	Female	26	Partner	Yes	MW
7	JJPE09 / Paola	Female	28	Partner	Yes	MW
8	JJPE10 / Cecilia	Female	31	Partner	Yes	MW
9	JJPE11 / Teresa	Female	33	Divorced	Yes	MW
10	JJPE12 / Cesar	Male	54	Married	Yes	MW
11	JJPE13 / Jessy	Female	22	Single	Yes	MW
12	JJPE14 / Olga	Female	Unknown	Partner	Yes	MW
13	MM01PE / Sergio	Male	37	Partner	Yes	MW
14	MM02PE / Rodney	Male	43	Divorced	Yes	MW
15	MM05PE / Elsa	Female	30	Partner	Yes	MW
16	MM08PE / Lisa	Female	32	Divorced	Yes	MW
17	MM13PE / Cindy	Female	24	Partner	Yes	MW
18	MM16PE / Mariana	Female	22	Partner	Yes	MW
19	MM17PE / Josefina	Female	36	Partner	Yes	MW
20	MM18PE / Sandra	Female	26	Divorced	Yes	MW
21	MM19PE / Gustavo	Male	26	Partner	Yes	MW

* All participants were Peruvian with the exception of Diana, 34, who was from Bolivia and migrated to Madre de Dios with her Peruvian husband.

4.2 CONTEXT

Gold mining in Peru

Mining activity provides the main export revenue for Peru, accounting for 59 per cent (USD 27,362 million) of the country's total export revenue.⁷² Currently, Peru is the sixth-largest producer of gold in

⁷² Defensoría del Pueblo, "Gestión del Estado frente a la minería informal e ilegal en el Perú: Supervisión a la implementación de los decretos legislativos promulgados al amparo de la Ley N° 29.815", *Serie Informes Defensoriales*, Informe N° 160, Defensoría del Pueblo, Lima, January 2013. Available from www.gestionpublica.org.pe/plantilla/info_secipu/dp_281013_0003.pdf.

the world⁷³ and the second-largest supplier of gold to the United States.⁷⁴ Since the 1980s artisanal and small-scale mining (ASM) in Peru has flourished due to a mix of factors such as persistent poverty and lack of employment opportunities, a deep economic crisis in the 1980s and 1990s and internal migration due to domestic political conflict. Also a factor was the continuous increase in gold prices, in particular between 2001 and 2011 when the price per ounce of gold rose from USD 256 to more than USD 1,895.⁷⁵ According to the Peruvian Ministry of Energy and Mines ASM activities,⁷⁶ extract more than 18,000 kg of gold every year⁷⁷ and employ 100,000 mostly Peruvian workers throughout the country.⁷⁸ An estimated 60,000 of these workers are based in Madre de Dios.⁷⁹

Artisanal, small-scale, informal and illegal mining

The terms “artisanal”, “small-scale”, “informal” and “illegal” are often used interchangeably in the context of gold mining. However, there are differences among these various forms of mining. According to Peruvian mining laws, artisanal mines are ones that run on fewer than 1,000 hectares of land and produce fewer than 25 metric tons of material a day. Small-scale operations cover fewer than 2,000 hectares of land and excavate up to 350 metric tons of material.⁸⁰ Informal mining activities are ones that are not licensed to operate but have the potential to go through the formalization process to become legally registered because they operate in non-protected areas. Illegal mining, on the other hand, occurs in protected areas where mining is prohibited because of its environmental impact. This type of mining is usually focused on short-term profits and cannot be formalized. Because of this, it is likely to be the most detrimental to the environment and to human health.⁸¹

Artisanal and small-scale mining in Madre de Dios

While artisanal and small-scale mining (informal and illegal) takes place in the majority of Peru, the southeastern Amazonian region of Madre de Dios has recently become the destination of tens of thousands of Peruvian migrants in search of work, and gold.⁸² According to the national census of 2007, Madre de Dios accounts for only 0.4 per cent of the country’s population. With a density of just 1.2 inhabitants per km² (as compared to the national average of 22 inhabitants per km²),⁸³ Madre de Dios is the least inhabited region of the country. However, it is the region with the largest proportion of migrants (over 20%).⁸⁴ It is also home to approximately 70 per cent of the country’s artisanal gold

⁷³ Katy Ashe, “Elevated mercury concentrations in humans of Madre de Dios, Peru”, PLoS ONE (2012) 7(3): e33305, doi: <http://dx.doi.org/10.1371/journal.pone.0033305>.

⁷⁴ Fairtrade Foundation and Alliance for Responsible Mining, *Fairtrade and Fairmined Gold: Empowering responsible artisanal and small-scale miners*, Fairtrade Foundation, London, January 2011.

⁷⁵ Ibid.

⁷⁶ Veiga, M.M. and Meech, J.A. A Brief History of Amalgamation Practices in the Americas. Proc. 16th Brazilian Symp. on Ore Processing and Hydrometallurgy. vol 1, p.581-594. Rio de Janeiro, 17–22 September 1995. Available from www.speciation.net/Database/Links/A-Brief-History-of-Amalgamation-Practices-in-the-Americas-;i617.

⁷⁷ Defensoría del Pueblo, “Gestión del Estado frente a la minería informal e ilegal en el Perú: Supervisión a la implementación de los decretos legislativos promulgados al amparo de la Ley N° 29.815”, *Serie Informes Defensoriales*, Informe N° 160, Defensoría del Pueblo, Lima, January 2013. Available from www.gestionpublica.org.pe/plantilla/info_secpu/dp_281013_0003.pdf.

⁷⁸ Comisión Técnica Multisectorial, Plan nacional para la Formalización de la Minería Artesanal, 2011. Available from <http://spij.minjus.gob.pe/Graficos/Peru/2011/Marzo/30/DS-013-2011-EM.pdf>.

⁷⁹ Madre de Dios Regional Government, Plan Regional de Acción Contra la Trata en Madre de Personas, Madre de Dios 2011–2016, Lima, 2012. Available from www.oimperu.org/docs/PRATP_MADRE_DE_DIOS_BAJA.pdf.

⁸⁰ Defensoría del Pueblo, “Gestión del Estado frente a la minería informal e ilegal en el Perú: Supervisión a la implementación de los decretos legislativos promulgados al amparo de la Ley N° 29.815”, *Serie Informes Defensoriales*, Informe N° 160, Defensoría del Pueblo, Lima, 2013. Available from www.gestionpublica.org.pe/plantilla/info_secpu/dp_281013_0003.pdf.

⁸¹ Peter Low, “Artisanal and small-scale mining in Peru: A blessing or a curse?”, *Update Extra*, Peru Support Group, London, September 2012.

⁸² Ibid.

⁸³ Fabián Novak and Sandra Namihas, *La trata de personas con fines de explotación laboral: El caso de la minería aurífera y la tala ilegal de madera en Madre de Dios*, International Organization for Migration and the Institute for International Studies of the Pontifical Catholic University of Peru, Lima, 2009.

⁸⁴ Jaris Mujica, *Elementos comparados del impacto de la trata de personas en la salud de víctimas adolescentes en el contexto de la minería ilegal de oro en Madre de Dios*, Centro de Promoción y la Defensa de los Derechos Sexuales y Reproductivos PROMSEX, Lima, 2014. Available from <http://promsex.org/images/docs/Publicaciones/investigacionmadredediosJarism.pdf>.

production.⁸⁵ The majority of migrants working in artisanal and small-scale mining are thought to be poor young men from the Andean regions of Peru.⁸⁶ The environmental impact of these activities has recently received considerable media attention, in particular with regard to deforestation and destruction of Amazonian soil.⁸⁷ Deforestation is also the result of illegal logging activities in which indigenous populations (mostly men) are often exploited.⁸⁸ The biggest concern in this respect is the contamination of rivers, soil and air with toxic mercury. The amalgamation phase, through which gold is extracted from rock or sediment, also involves the use of mercury. During this process, residue mercury gets dispersed into rivers and vaporized into the atmosphere, contaminating riverbeds, fish and humans.⁸⁹

While environmental degradation is the most visible consequence of artisanal and small-scale mining, there has been little apparent concern about the effects of this activity on the health of miners. Moreover, the miners are usually regarded by the government as “criminals” rather than victims of exploitation. Small-scale traditional gold mining relies on rudimentary and labour-intensive tasks and workers are likely to be exposed to a range of occupational hazards. Coming into contact or inhaling mercury vapour is the most worrisome of these hazards. Mercury poisoning may have severe health consequences ranging from behavioural problems to neurologic damage.⁹⁰ What’s more, labour migrants in Madre de Dios reportedly work in camps with no safety measures or equipment, which increases their exposure to occupational hazards.⁹¹

In addition, the Interoceanic Highway that was inaugurated in 2010 and connects the Peruvian coast with the province of Acre in Brazil passes through Madre de Dios; the establishment of this highway has had a significant impact on mining activities and the flow of internal migrants towards the region. Several NGOs working in the region have reported that most of the victims of trafficking identified there since 2010 are from communities along the newly built highway.⁹²

The International Labour Organization also suggests that internal migration for work in the informal economy exposes people to an increased risk of exploitation. In this context, workers are not protected by occupational health and safety legislation, lack of access to health care or social security, and operate in unhealthy and unsafe working conditions.⁹³ These factors contribute to an increasing number of occupational injuries, illnesses and fatalities, and to a general state of poor health among workers in the informal economy.⁹⁴ After her visit to Peru in 2011, the UN Special Rapporteur on Contemporary Forms of Slavery, Gulnara Shahinian, declared that mining in Peru is a labour sector in which exploitative slave-like situations exist and include forced labour, debt bondage and other

⁸⁵ Ellen E. Yard et al., “Mercury exposure among artisanal gold miners in Madre de Dios, Peru: A cross-sectional study”, *Journal of Medical Toxicology* 8 no. 4 (2012), pp. 441–448, doi: [10.1007/s13181-012-0252-0](https://doi.org/10.1007/s13181-012-0252-0).

⁸⁶ Heather Pringle, “The lost story of Madre de Dios”, *The Last Word On Nothing*, 20 March 2012. Available from www.lastwordonnothing.com/2012/03/20/the-lost-story-of-madre-de-dios/. Accessed 2 November 2015.

⁸⁷ Elie Gardner, “Peru battles the golden curse of Madre de Dios”, *Nature News*, web article, *Nature* 486, no. 7403, Nature Publishing Group, 20 June 2012. Available from www.nature.com/news/peru-battles-the-golden-curse-of-madre-de-dios-1.10857. Accessed 2 November 2015.

⁸⁸ Fabián Novak and Sandra Namihas, *La trata de personas con fines de explotación laboral: El caso de la minería aurífera y la tala ilegal de madera en Madre de Dios*, International Organization for Migration and the Institute for International Studies of the Pontifical Catholic University of Peru, Lima, 2009.

⁸⁹ Fernando Osoreo Plenge, J. Antonio Grández Urbina and Jorge L. Fernández Luque, “Mercury and health in Madre de Dios, Peru”, *Acta Médica Peruana* 27, no. 4 (2010), pp. 310–414. Available from www.scielo.org.pe/pdf/amp/v27n4/a16v27n4.pdf.

⁹⁰ Jasmin Hurtado, Gustavo F. Gonzales and Kyle Steenland, “Mercury exposures in informal gold miners and relatives in southern Peru”, *International journal of occupational and environmental health*, 12, no. 4 (2006), pp. 340–345.

⁹¹ Peter Low, “Artisanal and small-scale mining in Peru: A blessing or a curse?”, *Update Extra*, Peru Support Group, London, September 2012.

⁹² Nelly Luna Amancio, “Un infierno de mercurio y explotación”, web article, *OjoPúblico*, 5 December 2014. Available from <http://ojo-publico.com/11/un-infierno-de-mercurio-y-explotacion>. Accessed 2 November 2015.

⁹³ International Labour Organization, “ILO Introductory Report: Global Trends and Challenges on Occupational Safety and Health”, prepared for the XIX World Congress on Safety and Health at Work, Istanbul, Turkey, 11–15 September 2011. Available from www.ilo.org/wcmsp5/groups/public/@ed_protect/@protrav/@safework/documents/publication/wcms_162662.pdf. Accessed 3 November 2015; Fabián Novak and Sandra Namihas, *La trata de personas con fines de explotación laboral: El caso de la minería aurífera y la tala ilegal de madera en Madre de Dios*, International Organization for Migration and the Institute for International Studies of the Pontifical Catholic University of Peru, Lima, 2009.

⁹⁴ Ibid.

forms of exploitation.⁹⁵ The Peruvian Ministry of Labour also confirmed that there are an estimated 48,000 forced labourers in Peru and that gold mining is one of the sectors with the highest number of cases.⁹⁶ Importantly, however, the vast majority of identified victims of trafficking are those who are subject to sexual exploitation.

Government efforts to fight illegal mining, trafficking, labour exploitation and forced labour associated with informal and illegal mining

Though the informal artisanal gold mining sector started expanding in the 1980s, efforts to regulate the activity only began in 2002 with the Law for the Formalization and Promotion of Small-Scale and Artisanal Mining.⁹⁷ This law was designed to assist miners in acquiring rights to land and provide them with legal and financial training.⁹⁸ However, when the responsibility of overseeing the formalization, regulation and monitoring passed from state to regional governments, the latter lacked the resources and expertise to effectively follow through.⁹⁹ A timeline of activities was laid out with deadlines for the informal miners to become formalized, after which those who had not done so would be considered illegal and face fines.¹⁰⁰ Due to the complicated and time-consuming process required for miners to go through the formalization process, the deadline was pushed back initially to October 2013¹⁰¹ (15) and later to April 2014. In 2013, law enforcement efforts focused on illegal mining. Throughout the mining zones in Madre de Dios, police raids were carried out to destroy dredges and mining equipment.¹⁰²

In January 2013 the national Ombudsman Office (Defensoría del Pueblo) published a report resulting from a review of the government's implementation of the laws regarding small-scale and artisanal mining.¹⁰³ The report identified a series of limitations, in particular around the fight against trafficking, and found that there was a lack of a designated budget to conduct rescue and assistance activities for victims of trafficking. There was also a lack of designated shelters to attend victims of trafficking and, due to high staff turnover rates, a dearth of trained personnel who could access remote areas. Most importantly, the Ombudsman Office found a lack of service provision protocols for adults (particularly men and women not trafficked for the purpose of sexual exploitation). Indeed, most of Peru's efforts to fight trafficking, including the National Action Plan against Trafficking in Persons in Peru 2011–2016 focus on children, adolescents and women.¹⁰⁴ The Ombudsman Office report ended in a series of recommendations about how to better implement the formalization process. Among the specific recommendations related to trafficking were the need for the Public Prosecutor's Office to enforce the obligatory reporting of cases of trafficking for forced labour identified during raids carried out by the relevant environmental prosecution units. They also recommended that the Ministry of Women and Vulnerable Populations formulate assistance protocols specific to adults. Peru's Permanent Multi-sectoral Working Group on Trafficking in Persons has developed an Intersectoral Protocol for the Assistance of Victims of Trafficking. The Intersectoral Protocol, which is pending approval by the

⁹⁵ United Nations, Report of the Special Rapporteur on contemporary forms of slavery, including its causes and consequences, Gulnara Shahinian: Addendum: Mission to Peru, New York, 15 August 2011.

⁹⁶ Verité, *Risk analysis of indicators of forced labor and human trafficking in illegal gold mining in Peru*, Verité, Amherst, Mass., 2013. Available from www.verite.org/sites/default/files/images/IndicatorsofForcedLaborinGoldMininginPeru.pdf.

⁹⁷ Peter Low, "Artisanal and small-scale mining in Peru: A blessing or a curse?", *Update Extra*, Peru Support Group, London, September 2012.

⁹⁸ Ibid.

⁹⁹ Ibid.

¹⁰⁰ Verité, *Risk analysis of indicators of forced labor and human trafficking in illegal gold mining in Peru*, Verité, Amherst, Mass., 2013. Available from www.verite.org/sites/default/files/images/IndicatorsofForcedLaborinGoldMininginPeru.pdf.

¹⁰¹ Ibid.

¹⁰² Peter Low, "Artisanal and small-scale mining in Peru: A blessing or a curse?", *Update Extra*, Peru Support Group, London, September 2012.

¹⁰³ Defensoría del Pueblo, "Gestión del Estado frente a la minería informal e ilegal en el Perú: Supervisión a la implementación de los decretos legislativos promulgados al amparo de la Ley N° 29.815", *Serie Informes Defensoriales*, Informe N° 160, Defensoría del Pueblo, Lima, January 2013. Available from www.gestionpublica.org.pe/plantilla/info_secpcu/dp_281013_0003.pdf. Accessed 2 November 2015.

¹⁰⁴ Government of the Republic of Peru, Ministry of the Interior, Plan Nacional de Acción Contra la Trata de Personas en el Perú 2011–2016, Lima, 2011. Available from <http://spij.minjus.gob.pe/Graficos/Peru/2011/octubre/19/DS-004-2011-IN.pdf>.

Executive Branch, details the responsibilities of each of the state entities, including local and regional governments, NGOs and international organizations involved in the prevention and prosecution of the crime and the protection of victims.

From the Government side and in an effort to counteract these limitations, in 2013 a multisectoral commission led by the prime minister's office and including representatives from several ministries was formed. This commission was in charge of formulating the Small-scale and Artisanal Mining Consolidation Strategy, which was approved by the prime minister's office in April 2014.¹⁰⁵ The strategy¹⁰⁶ includes a section on sexual exploitation and trafficking, but its focus is mainly on sexual rather than labour exploitation. Despite highlighting the role of health staff in supporting victims of trafficking, the strategy fails to include any further recommendations on health and safety issues related to mining. According to the timeline laid out in the consolidation strategy, the formalization process should end in 2016 and will only consider those miners who had presented a valid commitment statement by April 2014. In the midst of the shift in political agendas regarding informal mining, the expenses and complications of meeting government requirements place miners who want to formalize their operations in a difficult situation.

Peru also has a National Plan to Fight Forced Labour 2013–2017, developed by the Ministry of Labour and Employment.¹⁰⁷ The plan recognizes that many trafficking situations are for the purpose of in forced labour. However, as previously noted, victims of trafficking for labour purposes are almost never identified. The plan also recognizes that people are trapped in forced labour systems through debt bondage and deception that occurs over time. There seems to be a lack of coordination between the various national plans, despite the fact that human trafficking occurs for purposes of both sexual and labour exploitation.

Against this backdrop of national plans and strategies, Madre de Dios also has its own plan, the Madre de Dios Regional Plan against Human Trafficking 2011–2016. This plan lays out a matrix of actions to tackle trafficking, including a specific goal regarding health that deals with training health staff in the protection of victims of trafficking.¹⁰⁸ However, the regional plan offers limited guidance on the role that health staff can play not only in responding to identified victims of trafficking but also in identifying possible trafficked persons.

4.3 SUMMARY OF THE HEALTH LITERATURE REVIEW¹⁰⁸

Published primary research on occupational health risks of artisanal and small-scale mining appears limited, both in the context of Madre de Dios and generally. Because the hazards related to this type of work are likely to be similar across countries, where literature on Madre de Dios was scarce evidence was drawn from similar contexts of this type of mining.

¹⁰⁵ Presidencia del Consejo de Ministros, "Aprueba Estrategia de Saneamiento de la Pequeña Minería y de la Minería Artesanal", *Normas Legales El Peruano*, Government of Peru, Lima, 19 April 2014. Available from <http://mddconsortium.org/wp-content/uploads/2014/05/DS-029-2014-PCM-Estrategia-de-Saneamiento.pdf>. Accessed 3 November 2015.

¹⁰⁶ The strategy is structured around four strategic axes: i) consolidation of the formalization process; ii) control and enforcement; iii) affected areas remediation; and iv) social attention and quality of life.

¹⁰⁷ Ministry of Labour and Employment, Plan Nacional Para la Lucha contra el Trabajo Forzoso 2013–2017, Government of the Republic of Peru, Ministry of Labour and Employment, Lima, 2013. Available from www.ilo.org/wcmsp5/groups/public/---americas/---ro-lima/---sro-lima/documents/genericdocument/wcms_240910.pdf.

¹⁰⁸ Gobierno Regional de Madre de Dios, Plan Regional de Acción Contra la Trata en Madre de Personas, Madre de Dios 2011–2016, Lima, 2012. Available from www.oimperu.org/docs/PRATP_MADRE_DE_DIOS_BAJA.pdf.

¹⁰⁹ Parts of this section are based on Arianna Serino's MSc thesis, which was commissioned as part of the EXTRMHE study and supervised both by Dr Cathy Zimmerman and Dr Ana Maria Buller.

Gold mining is reportedly one of the most dangerous occupations in the world.¹¹⁰ The risk of accidents and injuries is higher in small-scale mining compared to larger operations.¹¹¹ Occupational hazards frequently mentioned in the context of artisanal and small-scale mining are exposure to noise, mechanical vibration, dust, excessive solar radiation and extreme temperatures.¹¹²

Two studies were found that present an evidence base for occupational hazards faced by miners in the artisanal and small-scale mining sector in Peru. The first is a study conducted by Verité in 2012–2013, which reports some of the health and safety concerns of miners in the artisanal and small-scale mining sector in Madre de Dios.¹¹³ Another study, this one by the International Labour Organization, presents findings from analysis of qualitative data on the health hazards and harms of small-scale mining for girls in four countries, including Peru.¹¹⁴

Exposure to harmful chemicals usually occurs in the amalgamation stage of gold processing. The health hazards and possible harms arising from these exposures are summarized in Table 1. Perhaps the most alarming occupational hazard – and one that distinguishes gold mining from other forms of mining – is exposure to mercury, a highly toxic substance. Elemental mercury is used in the processing stage of gold mining. It is mixed with gold ore to form an amalgam, which is then placed over a furnace to separate the gold from the mercury. There are three pathways of exposure to mercury. Miners come into dermal contact with it when mixing the amalgam with bare feet and hands.¹¹⁵ When the amalgam is heated, the mercury vaporizes and can be inhaled both by miners and people in the vicinity, such as shopkeepers.¹¹⁶ According to the Fairtrade Foundation, “The greatest harm caused by mercury occurs as a result of ‘whole ore amalgamation’, where mercury is added without reducing the ore to a concentrate first; and when the amalgam is burnt in the open air without using a device to recover the mercury (for example a retort).”¹¹⁷ Finally, mercury that is discarded into the water during amalgamation turns into methylmercury. This organic compound accumulates in water and fish; it enters the bodies of miners and others in the surrounding population through consumption of the water but in particular by consuming contaminated fish.¹¹⁸ Literature suggests that environmental and human exposure to mercury is the most recognized concern relating to artisanal and small-scale

¹¹⁰ http://nodirtygold.earthworksaction.org/impacts/worker_rights_and_safety#VkITW7fhBpg.

¹¹¹ Carolyn Stephens and Mike Ahern, “Worker and community health impacts related to mining internationally: A rapid review of the literature”, Mining, Minerals and Sustainable Development Project of the International Institute for Environment and Development, no. 25, IIED and World Business Council for Sustainable Development, London and Geneva, November 2001. Available from <http://pubs.iied.org/pdfs/G01051.pdf>.

¹¹² Verité, *Risk analysis of indicators of forced labor and human trafficking in illegal gold mining in Peru*, Verité, Amherst, Mass., 2013. Available from www.verite.org/sites/default/files/images/IndicatorsofForcedLaborinGoldMininginPeru.pdf; International Labour Organization, *Peligros, riesgos y daños a la salud de los niños y niñas que trabajan en la minería artesanal*, ILO, Lima, 2005; Fernando Osoreo Plenge, J. Antonio Grández Urbina and Jorge L. Fernández Luque, “Mercury and health in Madre de Dios, Peru”, *Acta Médica Peruana* 27, no. 4 (2010), pp. 310–414. Available from www.scielo.org.pe/pdf/amp/v27n4/a16v27n4.pdf; Oyuntogos Lkhasuren, Ken Takahashi and Lkhasuren Dash-Onolt, “Occupational lung diseases and the mining industry in Mongolia”, *International Journal of Occupational and Environmental Health* 13, no. 2 (2007), pp. 195–201, doi: [10.1179/oeh.2007.13.2.195](https://doi.org/10.1179/oeh.2007.13.2.195); P. Cocco, *The long and winding road from silica exposure to silicosis and other health effects*. *Occupational and environmental medicine* 60, no. 3 (2003), pp. 157–158, doi: [http://dx.doi.org/10.1136/oem.60.3.157](https://doi.org/10.1136/oem.60.3.157).

¹¹³ Verité, *Risk analysis of indicators of forced labor and human trafficking in illegal gold mining in Peru*, Verité, Amherst, Mass., 2013. Available from www.verite.org/sites/default/files/images/IndicatorsofForcedLaborinGoldMininginPeru.pdf.

¹¹⁴ International Labour Organization, *Girls in mining: Research findings from Ghana, Niger, Peru and United Republic of Tanzania*, working paper, ILO, Geneva, 2007.

¹¹⁵ Katy Ashe, “Elevated mercury concentrations in humans of Madre de Dios, Peru”, *PLoS ONE* (2012) 7(3): e33305, doi: [http://dx.doi.org/10.1371/journal.pone.0033305](https://doi.org/10.1371/journal.pone.0033305); Fernando Osoreo Plenge, J. Antonio Grández Urbina and Jorge L. Fernández Luque, “Mercury and health in Madre de Dios, Peru”, *Acta Médica Peruana* 27, no. 4 (2010), pp. 310–414. Available from www.scielo.org.pe/pdf/amp/v27n4/a16v27n4.pdf.

¹¹⁶ Katy Ashe, “Elevated mercury concentrations in humans of Madre de Dios, Peru”, *PLoS ONE* (2012) 7(3): e33305, doi: [http://dx.doi.org/10.1371/journal.pone.0033305](https://doi.org/10.1371/journal.pone.0033305); Ellen E. Yard, et al., “Mercury exposure among artisanal gold miners in Madre de Dios, Peru: A cross-sectional study”, *Journal of Medical Toxicology* 8 no. 4 (2012), pp. 441–448, doi: [http://dx.doi.org/10.1007/s13181-012-0252-0](https://doi.org/10.1007/s13181-012-0252-0).

¹¹⁷ Fairtrade Foundation and Alliance for Responsible Mining, *Fairtrade and Fairmined Gold: Empowering responsible artisanal and small-scale miners*, Fairtrade Foundation, London, January 2011.

¹¹⁸ Katy Ashe, “Elevated mercury concentrations in humans of Madre de Dios, Peru”, *PLoS ONE* (2012) 7(3): e33305, doi: [http://dx.doi.org/10.1371/journal.pone.0033305](https://doi.org/10.1371/journal.pone.0033305); Ellen E. Yard, et al., “Mercury exposure among artisanal gold miners in Madre de Dios, Peru: A cross-sectional study”, *Journal of Medical Toxicology* 8 no. 4 (2012), pp. 441–448, doi: [10.1007/s13181-012-0252-0](https://doi.org/10.1007/s13181-012-0252-0).

mining in Madre de Dios.¹¹⁹ However, only two published primary studies to date have attempted to quantify the extent of mercury exposure levels in the region's mining populations.¹²⁰

One found that the total levels of mercury in hair samples of residents of mining zones in Madre de Dios were significantly higher than in samples from residents of the city of Puerto Maldonado, the department's capital.¹²¹ Men in mining zones had the highest level of mercury of all participants, suggesting that their occupation may be an indicator of mercury contamination, as most miners are male. The second study analysed mercury concentrations in blood and urine samples of residents in the town of Huaypetue, in Madre de Dios.¹²² In this town centred on artisanal and small-scale mining, all sampled participants – including miners, non-miners, and children – showed detectable levels of mercury. Miners involved in amalgamation had higher concentrations than those who were not. Similarly, an earlier study in the Departments of Ica and Arequipa, Peru, found high levels of mercury exposure in people working and living around smelters.¹²³

The second study noted above reports no statistically significant differences in mercury levels by gender. The findings may be inconsistent due to the use of different exposure biomarkers in the two studies (hair vs. blood and urine) or due to bias arising from small sample sizes. The effects of exposure to mercury on human health can range from pneumonia from inhalation of vapours to severe neurological damage, depending on the level, duration and pathway of exposure.¹²⁴ Symptoms of chronic exposure, primarily through inhalation, can be tremors, kidney malfunctions, and neurocognitive disturbances.¹²⁵ In the worst cases, it can result in Minamata disease, which manifests itself through sensory disturbance, reduced vision and hearing, impaired coordination, dysarthria (difficult or unclear articulation of otherwise linguistically normal speech) and tremors.¹²⁶ Fetal contamination from methylmercury ingested by mothers can cause a variety of impairments in children, including mental retardation, compromised coordination and reflexes, dysarthria, limb deformity, growth disorder, athetoid (slow or uncontrolled) movements and hyper-salivation.¹²⁷ Damage caused by exposure to mercury is irreversible and more severe in children than in adults.¹²⁸ Participants in Yard's 2012 study reported headaches, mood swings, muscle weakness, memory loss, kidney dysfunctions and nervous system impairments.¹²⁹ Although these symptoms are in line with what is known about conditions resulting from mercury exposure, the data was self-reported by participants and must therefore be interpreted with caution.

¹¹⁹ Fernando Osoreo Plenge, J. Antonio Grández Urbina and Jorge L. Fernández Luque, "Mercury and health in Madre de Dios, Peru", *Acta Médica Peruana* 27, no. 4 (2010), pp. 310–414. Available from www.scielo.org.pe/pdf/amp/v27n4/a16v27n4.pdf. Barbara Fraser and Environmental Health News, "Peruvian Gold Comes with Mercury Health Risks", web article, *Scientific American*, 11 April 2011. Available from www.scientificamerican.com/article/peruvian-gold-health-risks/. Accessed 3 November 2015.

¹²⁰ Katy Ashe, "Elevated mercury concentrations in humans of Madre de Dios, Peru", *PLoS ONE* (2012) 7(3): e33305, doi: <http://dx.doi.org/10.1371/journal.pone.0033305>; Ellen E. Yard, et al., "Mercury exposure among artisanal gold miners in Madre de Dios, Peru: A cross-sectional study", *Journal of Medical Toxicology* 8 no. 4 (2012), pp. 441–448, doi: <http://dx.doi.org/10.1007/s13181-012-0252-0>.

¹²¹ Katy Ashe, "Elevated mercury concentrations in humans of Madre de Dios, Peru", *PLoS ONE* (2012) 7(3): e33305, doi: <http://dx.doi.org/10.1371/journal.pone.0033305>.

¹²² Ellen E. Yard, et al., "Mercury exposure among artisanal gold miners in Madre de Dios, Peru: A cross-sectional study", *Journal of Medical Toxicology* 8 no. 4 (2012), pp. 441–448, doi: <http://dx.doi.org/10.1007/s13181-012-0252-0>.

¹²³ Jasmin Hurtado, Gustavo F. Gonzales and Kyle Steenland, "Mercury exposures in informal gold miners and relatives in southern Peru", *International journal of occupational and environmental health*, 12, no. 4 (2006), pp. 340–345.

¹²⁴ Jasmin Hurtado, Gustavo F. Gonzales and Kyle Steenland, "Mercury exposures in informal gold miners and relatives in southern Peru", *International journal of occupational and environmental health*, 12, no. 4 (2006), pp. 340–345; Nelia Cortes-Maramba et al., "Health and environmental assessment of mercury exposure in a gold mining community in Western Mindanao, Philippines", *Journal of Environmental Management* 81, no. 2 (2006), pp. 126–134, doi: <http://dx.doi.org/10.1016/j.jenvman.2006.01.019>.

¹²⁵ Katy Ashe, "Elevated mercury concentrations in humans of Madre de Dios, Peru", *PLoS ONE* (2012) 7(3): e33305, doi: <http://dx.doi.org/10.1371/journal.pone.0033305>; World Health Organization, "Exposure to mercury: A major public health concern", *Preventing Disease Through Healthy Environments*, Geneva, 2007.

¹²⁶ Fernando Osoreo Plenge, J. Antonio Grández Urbina and Jorge L. Fernández Luque, "Mercury and health in Madre de Dios, Peru", *Acta Médica Peruana* 27, no. 4 (2010), pp. 310–414. Available from www.scielo.org.pe/pdf/amp/v27n4/a16v27n4.pdf.

¹²⁷ Fernando Osoreo Plenge, J. Antonio Grández Urbina and Jorge L. Fernández Luque, "Mercury and health in Madre de Dios, Peru", *Acta Médica Peruana* 27, no. 4 (2010), pp. 310–414. Available from www.scielo.org.pe/pdf/amp/v27n4/a16v27n4.pdf; Juan Alberto Yáñez González, *Problemática asociada al uso del mercurio para la recuperación de oro en la minería artesanal de Cháparra, sur de Perú*, master's thesis, Universitat Politècnica de Catalunya, 2013. Available from <http://upcommons.upc.edu/handle/2099.1/17878>. Accessed 3 November 2015; Stephan Bose-O'Reilly et al., "Mercury in breast milk – a health hazard for infants in gold mining areas?" *International Journal of Hygiene and Environmental Health* 211, no. 5-6 (2008), pp. 615–623, doi: <http://dx.doi.org/10.1016/j.ijheh.2007.09.015>.

¹²⁸ International Labour Organization, *Peligros, riesgos y daños a la salud de los niños y niñas que trabajan en la minería artesanal*, ILO, Lima, 2005.

¹²⁹ Ellen E. Yard et al., "Mercury exposure among artisanal gold miners in Madre de Dios, Peru: A cross-sectional study", *Journal of Medical Toxicology* 8 no. 4 (2012), pp. 441–448, doi: <http://dx.doi.org/10.1007/s13181-012-0252-0>.

Both studies are important contributions to the evidence base on the extent of human mercury contamination in Madre de Dios. However, mercury levels in the majority of participants in both analyses fell under the level considered toxicologically symptomatic by the World Health Organization.¹³⁰ At this level of contamination, there is not enough epidemiological evidence to establish the exact effects of mercury on health.¹³¹ Local misconceptions about the safety of mercury, such as the belief that it can be safely used as a laxative,¹³² may further contribute to the contamination of people involved in artisanal and small-scale mining in the region.

Although less widely reported, exposure to other chemicals such as cyanide, arsenic and lead presents additional hazards to communities connected to artisanal and small-scale mining, however the health consequences of the exposures to these chemicals is not known.¹³³ These chemicals are present in soil and rocks or used in the extraction or treatment phases of gold mining. Occupational exposure can occur through direct contact and inappropriate manipulation of the substances.¹³⁴ Although there is a lack of evidence on the effect of these chemicals on human health in Madre de Dios, literature suggests that the consequences of exposure can range from chronic to acute.¹³⁵ Effects can include alterations of the nervous system (including tremors, coordination problems, convulsions, loss of consciousness, coma); headaches; nausea; vomiting; gastrointestinal problems; respiratory and skin inflammations; and lesions. In severe cases, intoxication can cause heart failure and death.¹³⁶

The hazards and possible health harms linked to artisanal and small-scale mining in the three studies considered are summarized in Table 7.

Table 7: Artisanal and small-scale gold mining: Health risk exposures and outcomes*

Hazard category	Occupational exposure	Health outcome	Reference(s)
Safety hazards (unsafe conditions that can cause injury, illness and death)	Working without proper personal protective equipment or safety measures such as: hard hats; eye protection; masks; and gear covering arms and legs to protect from insect and snakebites. Lack of awareness about hazards, or inadequate training in mechanical operation of extraction machines, driving trucks For instance, divers (buzos) operate hoses and pumps underwater to create holes and extract gold-laced sand without proper equipment or training	<ul style="list-style-type: none"> • Sunburns and skin cancer resulting from overexposure to sun • Intoxication resulting from exposure to poisonous animal bites such as insects and snakes • Injury (particularly head injury) and death from falling trees and rocks, landslides and heavy machinery • Accidents with cars – driving off mountains • Accidents when operating heavy machinery • Diving accidents leading to death by drowning and injuries with pressure hoses and pumps 	ILO, 2007; Kuramoto, 2001; Verité, 2014

¹³⁰ World Health Organization, *Environmental Health Criteria 1: Mercury*, WHO, Geneva, 1976. Available from www.inchem.org/documents/ehc/ehc/ehc001.htm.

¹³¹ World Health Organization, "Exposure to Mercury: A Major Public Health Concern", *Preventing Disease Through Healthy Environments*, WHO, Geneva, 2007.

¹³² Barbara Fraser, "Peruvian Gold Rush Threatens Health and the Environment", *Environmental Science and Technology* 43, no. 19 (2009), pp. 7162–7164, doi: <http://dx.doi.org/10.1021/es902347z>.

¹³³ Niladri Basu et al., "Multiple metals exposure in a small-scale artisanal gold mining community", *Environmental Research* 111, no. 3 (2011), pp. 463–467.

¹³⁴ International Labour Organization, *Peligros, riesgos y daños a la salud de los niños y niñas que trabajan en la minería artesanal*, ILO, Lima, 2005; Alexander van Geen et al., "Lead exposure from soil in Peruvian mining towns: A national assessment supported by two contrasting examples", *Bulletin of the World Health Organization* 90, no. 12 (2012), pp. 878–886; Ministry of Energy and Mines, *Actividad Minera en el Perú: Definiciones*, Ministry of Energy and Mines, Government of Peru. Available from www.unep.org/chemicalsandwaste/Portals/9/Mercury/GF2/PERU - PNUMA_ONUDI_FORO_PPA_PMA.pdf. Accessed 3 November 2015.

¹³⁵ International Labour Organization, *Peligros, riesgos y daños a la salud de los niños y niñas que trabajan en la minería artesanal*, ILO, Lima, 2005.

¹³⁶ International Labour Organization, *Peligros, riesgos y daños a la salud de los niños y niñas que trabajan en la minería artesanal*, ILO, Lima, 2005; Alexander van Geen et al., "Lead exposure from soil in Peruvian mining towns: A national assessment supported by two contrasting examples", *Bulletin of the World Health Organization* 90, no. 12 (2012), pp. 878–886; Ministry of Energy and Mines, *Actividad Minera en el Perú: Definiciones*, Ministry of Energy and Mines, Government of Peru. Available from www.unep.org/chemicalsandwaste/Portals/9/Mercury/GF2/PERU - PNUMA_ONUDI_FORO_PPA_PMA.pdf.

Biological hazards (exposure to bacteria or viruses)	Exposure to endemic disease by being submerged in contaminated water or working in open air without adequate protection Tuberculosis and HIV Lack of sanitary conditions in camps	<ul style="list-style-type: none"> • Malaria, leishmaniasis and dengue or waterborne infections • 40 per cent of the TBC identified cases in Madre de Dios are based in the districts along the mining route • Diarrhoea and urinary infections 	Verité, 2014; Osores et al., 2012; ILO, 2007
Environmental hazards (factors that can harm the body without necessary touching it)	Overexposure to sun and water	<ul style="list-style-type: none"> • Sunburns and skin cancer • Exhaustion and dehydration 	ILO, 2007; Verité, 2014
Ergonomic hazards (working positions that put strain on the body)	Handling heavy loads Repetitive movements when sifting through residue left behind by miners	<ul style="list-style-type: none"> • Lifelong damage to posture • Spinal problems • Sprained muscles 	ILO, 2007
Chemical hazards (exposure to a chemical in any form in the work place)	Extended exposure and contact with mercury-contaminated water, inhalation of mercury fumes during gold amalgamation, ingestion of liquid mercury or direct contact with the skin, also through consumption of mercury-contaminated fish	<ul style="list-style-type: none"> • Chemical burns, irritations and lesions on the skin • Life-threatening damage to internal organs such as kidneys and urethra; gastroenteritis; inflammation and bleeding of the tongue, gums and colon; loss of teeth; irritation of the lungs and respiratory diseases • Neurobehavioural problems and severe neurological damage such as speech difficulties, lack of concentration, seizures (cognitive, sensory, personality and motor functions) • Renal, respiratory, cardiovascular, gastrointestinal and immunologic effects 	ILO, 2007; Ashe, 2012; Hurtado et al., 2006; Osores et al., 2012; Kuramoto, 2001; Verité, 2014
Psychosocial hazards (related to the way work is designed, organized and managed as well as the economic and social context of working and living conditions)	Social and work violence Long working hours (24-hour shifts) Human trafficking for sexual and labour purposes Threats of physical violence	<ul style="list-style-type: none"> • Isolation from their families and physical confinement leading to depression, anxiety and overall psychological distress • Rape and sexual assault • Lack of concentration and accidents • Lack of access to transport and medical facilities 	Osores et al., 2012; Verité, 2014

* Please see bibliography located at the end of this chapter for complete reference information.

4.4 MAIN FINDINGS

This section discusses the main findings of the 21 interviews with migrant workers in the small-scale and artisanal mining sector in Madre de Dios, Peru. Of those interviewed, eight were men and 13 were women, between the ages of 18 and 54, with most interviewees in their 20s and 30s. As discussed in the methodology section, no victims of trafficking were able to be interviewed, because at the time of the study identified victims of trafficking in Peru were exclusively trafficked for sexual exploitation. While the stories of some respondents contained elements of the exploitation that is commonly seen in trafficking, they will all be referred to as “migrant workers” in this study, because none of them was formally identified as a victim of trafficking. The topics explored are pre-departure

background; recruitment; occupational risk exposures and outcomes; violence, abuses, threats and related reported health outcomes; living conditions; health beliefs and medical care and service access.

Pre-departure

Migration motivations

Migrant workers' motivations for travelling to Madre de Dios can be organized into four main categories: structural factors related to endemic poverty and lack of education and opportunity; those related to the immediate or extended family; personal motivation related to relationships (marital problems or separations) or to following a partner who was migrating; and those related to migrants' aspirations, for example saving money to start a business, buy a home or to further their education.

First, we found structural factors such as endemic poverty, lack of opportunities for work and low wages in their places of origin,¹³⁷ as well as lack of education and specialized skills. Only 9 out of our 21 interviewees (37%) had finished secondary education, which is below the national average of 45 per cent for 25 to 34 years old.¹³⁸ As Gustavo, 26, put it: *"There was no way to survive there [place of origin]; there is work but it is difficult to get that kind of job. Since I come from the countryside and have hardly studied, I have not been able... it has not been easy for them to offer me any job"*. Sandra, also 26, explained: *"We only worked on the farm, my kids were smaller, we did not have enough money and worked to pay for food and could not buy anything else, we couldn't afford it; I had heard so much about Madre de Dios, that we decided to come, and here we work."*

Interestingly, many interviewees mentioned that even when salaries were higher in Madre de Dios the money they now earned was not always enough given the high cost of living, which was artificially driven by the false economy generated by the amount of money available as a result of the mining activity in the region. Cindy, age 24, noted: *"We come from Cuzco, miss, we cannot make ends meet there, we do not have enough to live on so we came here to work, to have more money although sometimes it is not enough either (...) no fixed job, no home either; so far I have only one child, so we rent a place, back there we also rented."*

Second, factors related to the extended or immediate family, such as having numerous family members and lack of support of one parent because of abandonment or death, pushed interviewees to migrate in order to make money to provide the necessary goods and services for their families (for example, to feed siblings or help them continue with their studies). Having their own children also motivated migrants to earn more money. Doris, age 26, explained: *"I like working because I started working when I was small, and studied at the same time. Because I was brought up without a father, life has been complicated for me (...) I sometimes feel a little sad and would like to go on working to earn a bit of money so my daughter is never in need."*

In some cases our interviewees explained that having few social ties at home pushed them to migrate, for example, not having close relations with their family or not having a family anymore.

Carlos, 27, put it this way: *"A friend brought me from my home town and I came because my parents had died, that is more or less why I came (...) when they died I went to live with my aunt (...) but since I had no one there either, only that aunt, I told her I was leaving and she said 'run', that is exactly what she said (...) I did not see my brothers again until last year, a long time went by, they live in Lima now."*

¹³⁷ Places of origin were usually impoverished rural areas in the Peruvian highlands or jungle with interviewees coming mainly from the Cuzco region, but also from Puno, Cajamarca, Arequipa, Lambayeque, Ucayali and Amazonas. One female interviewee came from Pando, Bolivia, and migrated because her partner was Peruvian.

¹³⁸ Ministry of Education, Estadística de la Calidad Educativa, Indicadores 2011–2015, Ministry of Education, Government of Peru, available from <http://escale.minedu.gob.pe/indicadores2014>. Accessed 3 November 2015.

Third, personal motivations such as marital problems, separations and following a partner who had already migrated were also mentioned as push factors for migration. Olga (age unknown) said: *“My previous partner left me with my small little boy and I had no way to provide for him, my parents complained.”*

Finally, aspirations seemed to play an important role in the motivation to migrate. A few interviewees reported they aimed to achieve certain personal goals such as saving money to start their own business (usually in mining or other sectors); buying a home in the city for the children or siblings to be able to leave the farm; or being able to afford further education or finish studies they had already started but had interrupted due to poverty. One of the interviewees mentioned that Madre de Dios was an interesting place to visit and was attracted to it because of its biodiversity; this also perhaps reflected some kind of adventure seeking desire and curiosity about migrating as this person had never left his place of origin prior to migrating to Madre de Dios.

Among the pull factors identified we found that all interviewees thought that in Madre de Dios they were going to be able to earn much more than in their places of origin. This information was mainly provided by family and friends who had already migrated. The job offer and the perception that it was easy to find a job once in Madre de Dios were also attractive to them. As Ernesto, age 30, said:

“The labour market was better than back there [place of origin] and I thought things could change for me (...) sometimes you can make two or three times more than back there”. Edson, 38, spoke of the pay of those migrant workers directly involved in the mining: “At night they get around 80, 90 grams [gold] per shift. And they all make one thousand [soles, or USD 335]. They also work 15 days a month, and rest 15 days, but they close the month with 14 thousand [soles, approximately USD 4,690] (...) It depends, some make a little less, 10 thousand. Here there are many professionals (...) who no longer practice their profession and work in the mining sector because they earn more.”

Furthermore, the appalling farming conditions where many migrants had come from served to underscore the attraction of work in Madre de Dios, which offered better salaries and some additional benefits such as food and a place to live. Said Sergio, 37: *“I was an orphan, my mother and father had died; I have always worked in mines and I came because I had relatives working there in Huaypetue, and they brought me here (...) my cousins told me you could make money in the area, they convinced me and I came (...) Not like where we use to live where daily wages were extremely low, different from here where you can always make a little more (...) here they are paid in percentages [of the gold extracted during a day], (...) it’s unfair ‘cause here you can earn more than there. Up there they make 30 soles [USD 10] working all day long, sometimes getting no meals, and here they make at least 100 or 50 soles [USD 33 or 17].”*

Decision-making and social norms related to migration

When deciding if and when to migrate, most single migrants did not discuss their migration plans with their families but rather informed them about their decision to migrate. For those who had a partner at the time, the decision was shared or endorsed by the partner. From the interviews it was clear that migrating to Madre de Dios seemed not too unusual and even normal, both because it was perceived as something that “everybody did” and also because it was not considered a “proper” migration act, such as moving to a different country or even to Lima, places perceived as far away and completely different. Furthermore, the decision to migrate very often seemed to be encouraged by the migration experiences of relatives, friends or acquaintances. Moreover, knowing someone from the family or having a friend who had already migrated was the usual way in which the interviewees found out about specific work in Madre de Dios. Doris, 26, said: *“My husband’s sister called us because he had come to Puerto ahead of us and said: here there’s work, come and work because here they pay more, she said; and thus we decided to come and work here.”* Gustavo, also 26, migrated because of a friend: *“I had a friend who had come here (...) and my friend had an acquaintance from my home town who had come before, so we decided to come and work here.”*

Recruitment

Migration contacts and networks

We did not find much evidence of formal recruitment practices. All migrant workers interviewed had arranged their own travel, using their own funds or borrowing from someone to be able to afford the cost of the ticket. Interviewees' migration was also voluntary.¹³⁹ As mentioned before, the migrants interviewed indicated they had learned about job opportunities via word of mouth from people who had already migrated. In some cases these individuals would offer to put them in contact with people they worked for or tell them that they had already asked and been told there were places available, but this did not constitute a formal offer. Said Carlos, 27: *"I was told you made money working in mining, and after talking to some new friends I had made, I came to work at the mine (...) I also worked as a motorcycle taxi but the motorbike wasn't mine, it belonged to another man, but I worked with it and sometimes the passengers I drove would contact me."* Sometimes they migrated and found that the owner of the mine they were told about did not need more people and it took them a while to find work. Another way to find work in Madre de Dios was to migrate first and then start looking and getting contacts with other people in the area. Women usually got jobs as cooks in the mining camps either through their husbands or acquaintances who worked in mining. Sandra, 26, said: *"I worked as a cook, I got a job quickly (...) My brother looked for a job for me."*

We found one account of someone who was potentially a victim of trafficking, based on some elements of his interview, though he was never formally identified as such. Cesar, a 54-year-old from Junin, told us that his wife's relative went to Junin to recruit him, offering him a 90-day job in his mine, paying for his flight and flying with him to Madre de Dios: *"My wife's relatives had a mining business here, in the Madre de Dios river, and they brought us here for 90 days (...) we were hired as workers (...) her cousin from Puerto Maldonado went there and told us to go and work in Puerto Maldonado and I accepted with pleasure because I would make more money 'cause they pay better wages in Puerto Maldonado."*

Travel conditions

When asked about the journey from their places of origin to Madre de Dios, most interviewees mentioned that conditions had improved since their own migrations due to the government building new highways and the consequent availability of transport companies. They felt that this had turned the trip into a safer journey compared to the past (when many of them had actually migrated), when most travel was done via overcrowded tank or goods trucks or in precarious boats (called *peque-peques*). Carlos, 27, talked about the journey: *"Almost three days, from Chiclayo to Lima, Lima to Cuzco and from Cuzco here (...) on those dates there were no buses, only trucks transporting goods came."* Cecilia, 31, said: *"Before it took us a week when it wasn't yet paved, a week in a tank truck (...) we travelled on top, sort of laying down (...) 20, 21 persons (...) It took us a week, sometimes with the rain, there was no room (...) there was no paved road, not so many trucks could travel along it."* Lisa, 32, spoke of the journey as being unsafe: *"It was not safe at all to travel in those water trucks (...) there used to be a lot of accidents."*

The cost of the ticket was usually borne by the interviewees, although in some cases they had received a loan from a family member. Migrants usually travelled alone or accompanied by their partner, children, a friend or relative (for example, a cousin). Cindy, 24, said: *"We travel in these companies, we came in these vehicles (...) Buses (...) it's quick, if you leave at night you are here by five in the morning (...) The ticket costs 40 soles [USD 13], 40 soles per person."*

¹³⁹ As explained in the methods section, we were not able to access formally identified victims of trafficking for the Peruvian sample, which is reflected in the lack of recruitment and less coercive migration experiences in our sample. This does not mean that there are not cases of trafficking in Madre de Dios. According to the Madre de Dios Regional Plan against Human Trafficking 2011–2016, there are many cases of labour trafficking there; however there is lack of reliable information indicating the real dimension of the problem, and most of the few identified and assisted victims are trafficked for sexual exploitation.

Contracts, agreements and promises

When exploring hiring and contract practices, we found that none of the interviewees had signed a formal labour contract. Job offers were exclusively verbal, which is not surprising given the informal and illegal nature of the work. The conversations between future workers and employers seemed to be quite vague, and were limited in most cases to information around pay and, in some cases, working hours, how long the migrant would continue to work at the job, and whether lodging and meals would be offered. In most cases, meals and lodging were included in the agreement. Meals were only provided to the worker and not to family members if they were also living in the mining camp. Cesar, 54, spoke of not knowing ahead of time about the job or the working hours: *“Practically nobody informed us about the working hours or how we would work.”* Edson said: *“The owner paid. He gave us everything: breakfast, lunch, dinner and a bed to sleep in.”*

Some of the interviewees stated that they were unaware of how “heavy”, or burdensome the job was in reference to the work they ended up doing, and that they did not know how the job was actually done or organized, or that it was “risky”. Most interviewees however, saw it as a matter of getting used to the job and saw it as a necessary risk in order to earn some money. Ernesto, 30, spoke of how the reality of his job was different from what he had expected: *“No contract, just a verbal agreement, I went and said I needed to work and, well, he said you can clear the land (...) and then it depends on each one’s ability (...) you get more and more involved [in mining activities] (...) and then you will start to work in mining (...) you help with anything that is needed to move logs, stones, whatever and in this way you gain their trust [the owner’s], it is a little risky, you take the risk for more [money] and then you start mining gold (maraquear) (...) I had been told what the job was all about but I never thought it would be so extreme, when they tell you about it you imagine yourself working in a mining company and that you’ll be given social security, they will give you everything, but that was not the case, the idea I had was different from reality.”* Doris, 26, said: *“They did not tell me it was heavy work; but once you are doing the job, you adjust to it, with the prospects of collecting your salary although it’s heavy you just do it.”*

Interviewees reported that the positions available within a mining camp were as follows:¹⁴⁰

Cook: Usually women were hired for this position. The cook provided meals for the entire mining camp, in small camps and in big ones of 100 people. Owners of the camps provided the ingredients for cooking. Some interviewees told us that camp owners would monitor the amount of food served. In addition to cooking and washing up, cooks were also in charge of cleaning the camp facilities.

Machete handler: This was the starting position for most workers with little or no previous experience in mining. They were usually considered “helpers” and not mining workers strictly speaking, because they did not partake directly in gold mining. Their main activity was to remove trees and weeds to clear and prepare the land for extraction. *Macheteros*, as they were usually called, got a fixed salary and if they gained enough experience were promoted to more mining-related activities until eventually reaching *maraquero* (gold mining equipment operator) status, which also meant start earning a percentage of the gold extracted per day rather than a fixed salary. For some of our interviewees this seemed to be a surprise because before migrating they thought that they were going to be able to earn high salaries straight away, only to find out when they got there that usually workers worked clearing the land first and only accessed the better-paying jobs once they gained some experience. Gustavo, 26, described the *machetero* job: *“[we work] removing pieces of wood spread out on the ground. We clean using axes, machetes, mechanical saws (...) which the owner provides.”*

Gold mining equipment operator (*maraqueros*): These were the men directly in charge of extracting gold. They worked with rustic hydraulic jets (called *chupaderas*) to extract the gold. Among them were the motor operators or *guichuleros*, who operated the extraction machinery, and the divers

¹⁴⁰ Although none of the interviewees mentioned it, we know of the existence of truck drivers and backhoe operators who work in certain camps and who are also exposed to many occupational hazards. For information, see the following report: Verité, *Risk analysis of indicators of forced labor and human trafficking in illegal gold mining in Peru*, Verité, Amherst, Mass., 2013. Available from www.verite.org/sites/default/files/images/IndicatorsofForcedLaborinGoldMininginPeru.pdf.

who went into the water to extract the gold. *Maraqueros* had the highest status in the mining workers' hierarchy and generally got the highest pay, which was usually a percentage of what they extracted in a day. *Maraqueros* often worked in the mining "pits" and carried out the most skilled and dangerous job, since the scaffolding and posts holding up the structure where they worked risked collapsing; they also usually worked 24-hour shifts or had to be submerged in water for long periods. Cesar, 54, said: "(...) *There is a big engine with a huge hose pouring water and extracting material (...), the motor is started up, accelerated and the water comes in with material, goes through the motor, the pump and goes up into the carpet (...)* divers with rubber suits get into the water with a hose, and compressed air coming thru the hose, they usually carry 12 kg of lead on their waists to be able to sink and not float in the water (...) there I worked 10 hours per shift, our job was to get into the water." Edson, 38, spoke of his responsibilities: "*I work as a 'guaichulero' that is to say, I control the equipment (...) I make sure the material falls on the carpet, from there others produce it [the gold]... by clarifying it...you obtain gold... we are on the go for 24 hours, get no rest ...*"

The wages earned by mining workers, along with the method and frequency of their pay, were related to the kind of task they performed. While gold miners and machete handlers were paid in gold, the former collected a percentage of whatever was mined during a day, while the latter was paid an established amount for the work done. Said Eduardo, 18: "*One gram a day, for helping only (...)* for a machete handler (...) one thing is to help, and another it to work, when you work you have to work well, they could make four, five grams." Edson, 38, noted: "*It's not like earning a monthly salary, we get a percentage (...) if you mine 40 grams, you get 25 per cent, that is, 10 grams for us and 30 for them (...) only by shift. Four per shift and the other four wait until the next day for the following shift and two remain stand-by just in case someone falls ill and must be replaced.*"

Cooks earned a fixed salary that was generally paid on a monthly basis and in the local currency (soles). Only one cook said she collected her salary in grams of gold and then exchanged it for money in the town.

Some interviewees explained that earning a percentage rather than a fixed wage meant that camp owners had less control over workers, giving workers more freedom of movement. In their accounts they seemed to be talking about a shift in practices from more coercive controlled forms of exploitation to a more independent way of working. Sergio, 37, said: "*People are independent, it's not like before because most people make a percentage, no longer a wage, if they earned a daily wage suddenly they might not be able to leave or go out and the owner must authorize that; but now, since they make a percentage, they can take their backpack and leave at any time.*"

However, this kind of payment also meant that the miners would push themselves to the maximum in order to obtain as much gold as they could per shift. Ernesto, 30, said he sometimes even forgot to eat in order to continue working: "*There is no fixed timetable [for meals], it maybe from 7 to 10 in the morning, lunch as from one in the afternoon, and dinner at eight at night, no fixed time for meals, it's probably because of the kind of work, you want to go ahead with your work and forget about meals (...) one will eat once things go back to normal.*"

We did not find many accounts of open deception, except for Cesar, 54, who said he was paid less than promised and was owed money: "*Our payments weren't exactly as was promised (...) after a month he could not pay us, and after 90 days he still owed me money (...) Without money I could not go back to the highlands [place of origin], and had to find another way to make a living, (...) and little by little I found myself another place in Puerto Maldonado (...) if you don't complete 90 days, they discount your full ticket [take ticket price out of salary].*"

An important issue raised by the interviewees was the impact of the formalization process, and consequent raids, on the mining activities in the region and on the miners' ability to work. When referring to this process, the interviewees talked about the formalization process as "laws against the miners" and many mentioned that, as a result of it, salaries had dropped or the workers had been left bankrupted. Many had abandoned mining. Sergio, 37, said: "*After 2005 I took a chance becoming*

self-employed from time to time, and from 2008 I have been self-employed, I have no longer worked as an employee, and I did well all this time but with the problems in mining I also failed, all on my own; I had even asked for a bank loan, but now with all these problems I have been left with nothing, I failed and that is how I am now (...) I have tried to continue working but [the money] is no longer enough (...) When there were no problems I could more or less make ends meet.” Elsa, 30, put it this way: “Well in the kitchen, as a cook I make 800 soles [USD 268] for those working for one equipment owner, 10 people, 800 a week is what we got paid when we started working in mining, now they are earning 300 soles [USD 100], mining has dropped, it’s not like before, mining is at a very low level and they don’t let you work ‘cause there are problems in mining.”

Occupational risk exposures and outcomes

Working schedule

Working schedules were usually long and started very early in the morning. Except for meals, workdays did not include many breaks. Hours worked were determined by the type of work done. *Maraqueros* worked for 24 hours straight, usually from 6 a.m. until 6 a.m. the following day. Then they took one day off. The work described was intense and required high levels of concentration. In order not to fall asleep, the workers reported strategies such as chewing coca leaves, taking a shower or drinking a litre of milk a day. Edson, 38, said: “*The machine I have to control is about 50 meters away (...) We take it in turns every six hours (...). The other [colleague] might have to control his machine for seven hours, the other refuels it, for the next six hours the other has to check for risks, the next six hours the other checks if everything is ok with the chute, and that’s about it.*” Diana, 34, spoke of the toll mining could take:

“Mining kills you (...) you work almost 24 hours (...). You can’t feel sleepy, you have to stay awake.”

Macheteros worked 10–14 hours a day and cooks worked 15–17 hours a day. Cooks started work at four, five or six in the morning until it got dark since they did not have electricity. Some cooks reported not having days off because they had to cook every day, including weekends. The cooks prepared all the miners’ meals, so their timetables were marked by the miners’ pace of work. Olga (age unknown) spoke of her schedule: “*[start work] As from 4 in the morning, so they can have breakfast at 6 in the morning; then we need to have lunch ready by 1, and at 5 or 6 start with dinner (...) I worked all the time, and when I finished serving dinner, I washed the plates at 8, and at 9 was resting (...) I had no rest, work was from Sunday to Sunday, we rested for a while when they finished lunch, a short while, and at 3 or 4 [p.m.] were back cooking, that was the only rest we got.*”

Training and use of personal protective equipment

None of the interviewees reported being formally trained. The migrant workers learned how to perform their work by observing other co-workers, unless they had some previous experience. Novice workers learned from their more senior co-workers and then reproduced what they had observed. From the interviews it was clear that the learning experience depended on the good will of colleagues who might be happy to share their knowledge. Gustavo, 26, said: “*I learnt here, there was a man cutting with a mechanical saw, I learnt from him, he taught me (...) the owner did not teach me (...) I knew nothing when I arrived and learnt here; had I known what I’ve learnt here I would have started working straight away, I’ve learnt everything here.*” As Carlos, 27 years old, said: “*During the last month I started learning how to mine gold (...) My friends working there (...) my workmates of the different shifts taught me.*”

Use of protective gear was very limited among the migrant workers interviewed. It was clear they perceived health and safety issues as being the workers’ responsibility, rather than the employers. Ernesto, 30, spoke of the lack of safety measures: “*Here there is no safety, no safety measures, each one sees to his own safety, when you work as a machete handler you have to see how you do it, take care of yourself (...) when you are cutting down the underbush you risk coming across snakes.*”

Furthermore, the mining workers themselves justified the lack of safety equipment because they were working in the informal mining sector. Gustavo, 26, spoke about this: *“Right now I’m an informal worker, when I worked more formally they gave us everything, protective helmets, boots, those things were given to us, but when you are an informal worker they give you nothing, no benefits either.”*

Machete handlers and *maraqueros* used protective boots that they bought with their own money and they mentioned the occasional use of caps to protect themselves from sun exposure. Aside from these precautions, they used normal summer clothes like shorts and a T-shirts. Cooks did not have any special outfits either and wore their regular clothes. Eduardo, 18, worked in just boots and shorts: *“We don’t wear gloves, we just handle the machete like that (...) Boots (...) I bought myself a pair (...) I can wear hats, caps for the heat (...) I work in the water, with the jet stream hose (...) Yes, just with boots and shorts, just like that.”* Cesar, 54, spoke of dressing as if for a walk on the beach: *“Well, the clothes we wore were pants and sandals, those you wear to walk along the beach [flip-flops] (...) Yes, and a dilapidated polo shirt, filthy like all workers (...) No, we had none [protection equipment].”*

Work-related health risks and outcomes

The main work-related health risks brought up by the interviewees can be organized into three main areas: i) health problems related to the actual mining activity or work in the camps itself; ii) those related to the exposed nature of mining work in the extreme jungle weather, including exposure to extreme temperatures, sun, heavy rain, insects and snake bites; and iii) those deriving from the harsh and often unhygienic living conditions in the mining camps.¹⁴¹

Health problems related to the exposed nature of mining work in the extreme jungle

Health problems related to weather conditions and environmental exposures were very common in the interviewees’ reports. In particular the hot and humid weather was associated with respiratory problems. However the main complaint among the migrant workers interviewed was the risk of acquiring dengue or malaria resulting from mosquito bites and leishmaniasis resulting from sandfly bites. Gustavo, 26, said: *“When I got here it was very hot, difficult to get used to, very hot, the aegypti mosquitoes [which can transmit the virus that causes dengue fever], all these things are difficult, difficult to get used to, I suffered the change in climate for a whole month, the mosquitoes bit me.”* Doris, 26, spoke about malaria: *“We had taken everything from here; we were furnished with mosquito nets (...) because there were quite a few anopheles mosquitoes [which transmit the malaria parasite].”*

Health issues deriving from the harsh conditions of living in the mining camps

The main issues reported under this category were related to the lack of access to fresh water and the precarious living standards in the camps. Interviewees reported that they were worried about contracting infectious diseases and parasites due to exposure to contaminated waters and dirty toilets. None of them mentioned the risk of consuming mercury-contaminated fish. Eduardo, 18, said: *“In mining (...) you have one source of water only, from there you drink, you bathe (...) wash the clothes, with that same water (...) and you have to drink from there too (...) you do not have a choice there’s nothing else to drink.”* Carlos, 27, mentioned feeling tired: *“Since I started working in mining I feel tired like this (...) sometimes I get sleepy, when I rest a bit I get sleepy (...) sometimes I have breakfast and get sleepy, I’m tired, my friends tell me I might have parasites (...) I don’t know, maybe, I bought some pills in Mazuco but have felt no effects (...) I feel a bit tired, that’s how I feel, don’t feel like doing anything (...) I think I might have parasites.”*

One woman interviewed, 24-year-old Cindy, thought that she could catch AIDS by using toilets: *“It is a small bathroom, all miners go there (...) We all share it (...) Yes, Miss, since everyone goes there, those who camp, I sometimes don’t go. I wonder since they always say there are diseases in here, AIDS, which is contagious, so I am afraid of that, Miss.”*

¹⁴¹ We provide more detail about the living conditions elsewhere in this chapter. In this section we highlight the health issues associated with these conditions.

In terms of mental health issues, some interviewees reported being constantly worried about living in such a hostile place that included the presence of dangerous animals in the vicinity of where they lived and worked and that also lacked electricity. This generated a feeling of insecurity and anxiety in many of them. Teresa, 33, put it this way: *“I am always fearful, in the jungle I’m always afraid, it’s dark.”* Carlos also mentioned the animals: *“The camps and on both sides, jungles, forests (...) it is not safe, animals start roaming around as from 5 or 6 in the evening, snakes, and that kind of thing.”* Doris, 26, said: *“We were afraid because they said there were those animals here, the tiger.¹⁴² One would hear comments among the miners saying there were huge tigers and we knew tigers gobble up people, right? We had never seen one live, and were afraid, we did not move apart from the rest of the staff, sometimes we went to bathe in the river in groups when it had already got late.”*

These fears were compounded by the fear of being robbed because the camps were open and lacked adequate lighting, and there were thieves operating in the area. Said Cindy: *“Yes Miss, we are scared especially at night when thieves come, there are many of them where we live, lots of thieves, criminals (...) Sometimes thieves get in.”*

For migrant workers living in the camps, the added stress of living in isolation away from their families seemed to be a common trigger of depression symptoms. Edson, 38, spoke of missing his wife: *“Sometimes you are worried about not being next to them, at times there is tension (...) Sometimes I think I may fall ill (inaudible) this also counts a lot (...) Yes, I speak to her (his wife), we fix up and she comes here with my daughter. She is not here, next to me every day, only now because she is on holiday (...) then she leaves with my little daughter and I remain alone. We communicate constantly (...) As I said, when the family comes to your mind, you may get distracted while you are operating the machines, those are the risks. You have to concentrate and work normally.”* For Lisa, 32, it was her children:

“As I said I have problems sometimes, I can’t sleep, I think of my children, but I think I will keep on going, working, for my children.”

Health issues related to the nature of mining work

Within this category we also found perceived impacts on both physical and mental health. Being submerged in water for hours was usually associated with joint problems (such as arthritis and rheumatism) as well as kidney problems.¹⁴³ Rodney, 43, spoke of rheumatism: *“Most of the people in mining have the disease called rheumatism (...) day and night you stand in water.”* An alarming finding was that we did not find many interviewees who were aware of problems caused by the inhalation of toxic fumes resulting from the mining activity, except for a couple of interviewees who mentioned that they had heard comments about it, which we analyse in section 4.6.

Another health issue associated with being submerged in water was related to skin conditions such as nail and skin fungi. This was particularly the case for *maraqueros* who worked long shifts submerged in water within the mining pits. Ernesto, 30, recounted having fungi: *“I had fungi, because of the weather, the water (...) in the genitals, bottom, all that part (...) even my feet swelled up (...) There was a doctor here before who helped me a lot but because of our job we get into the water, get wet so it’s a bit difficult to get rid of the problem (...) [Do you still have that disease?] Yes, but I no longer work in mining and although I work in a dryer place, my problem is still there.”*

Also commonly reported were musculoskeletal problems caused by carrying the heavy mining equipment and being in the bending position used to clear the land. Gustavo, 26, spoke of the bending and shaking associated with clearing the land: *“You always bend, you always bend when*

¹⁴² There are no tigers in the Amazon jungle; however, there are jaguars.

¹⁴³ It was difficult to establish whether the symptoms corresponded to kidney problems or urinary infections, because they only mentioned problems in passing urine and did not have a formal diagnosis. It is also not clear whether these potential kidney problems were caused by constant immersion in water or by mercury consumption. As mentioned in the literature review, high levels of mercury in the urine are associated with kidney problems.

using a machete, and when you work with the mechanical saw it shakes you; it's always the same." Also, cooks had to carry the water they used for cooking long distances. Women whose husbands worked with them in the camp helped them to do this job but single women had to do everything on their own. Josefina, 36, said: *"Back aches when they put away the equipment, the motor, they have to move it from one place to another (...) they need 10 people to move it (...) it's big, big."*

Women working as cooks in the camps also complained of sexual and reproductive health ailments such as urinary infections, which sometimes became chronic, and of pregnancy-related health issues. Said 26-year-old Sandra: *"At the time of cooking, since we use firewood, I got a urinary infection, and since then I've had it."*

Heavy work during pregnancy caused medical problems such as pelvic pain, whereas poor nutrition was responsible for maternal anaemia. Doris, 26, describes what it was like to work while pregnant: *"I started working as a cook at the mine, cooking for more or less 100 people, I worked for around four months, and then started feeling ill, my tummy hurt [she was pregnant] (...) I think we had to carry too much weight there, there were too many people, too much staff (...) yes, cause you have to do a bit of everything there (...) I cooked, helped with the cooking, cleaned the floor, swept, minced meat, prepared salad dressings, seasoned the food, deboned, everything."* She also described changes she made in her work due to her pregnancy: *"A urinary infection (...) Since then I stopped working in mining because the obstetrician explained the stove was too high and its heat affected my belly, they prescribed medication and thank God currently, according to the test I had, I'm okay."*

Cecilia, 31, noted: *"When I was pregnant with my daughter (...) since I didn't eat as I should have (...) I became anaemic."* Teresa, 33, described the need to continue working after childbirth: *"When you give birth you are very fragile, and after giving birth I did not take care of myself, I had to cook, wash the clothes, although I felt cold, but I washed the clothes (...) I did not look after myself and that is how my body remained [weak]."*

In terms of mental health, the migrant workers interviewed noted many stress-related complaints, such as chronic pain, constant worry and lack of sleep. Sergio, 37, talked about his worries and their impact on him: *"My neck always hurts because of my worries, and when I have flu it only gets worse, I feel like doing nothing, I feel like sleeping and that is why I feel bad, and I worry when I'm like that (...) I don't know why that is, I wonder what it can be, I realize it's because of my worries, because I'm not doing well at work, all that makes me feel worse, a bit depressed (...) I don't know what to do 'cause life is a bit difficult for me (...) Yes, more nervous, sometimes I argue with my family."*

The main source of worry for workers was related to not being able to provide for the family, uncertainty about the job and about the future, and unsafe work conditions that could result in them falling ill or injured and leaving their families unprotected. Gustavo, 26, put it this way: *"Of course, there is a great risk, it [the load] can fall and squash you, you can easily die, that's the risk, an accident, and the disadvantage for me is that there is no insurance, nothing so if you die your family would be left without any benefits."* Thirty-year-old Ernesto described this worry in terms of caring for his family, including his four boys:

"There is great concern, having a family is a great responsibility (...) you have to work day by day, then you go to rest and (...) worries about family expenses are strong, keeping four boys, my home, the school... the school is very expensive (...) But God will provide, but for daily life it's important to be healthy, my kids are healthy, they go to school; the good part is that I can send them to school, it is for my children that I go to work, what I buy for the house is for them, and it's a relief when I see them studying, hopefully they will do better in life than me."

Accidents and injuries

When asking interviewees about actual accidents they had been involved with or witnessed they mentioned accidents related to snake bites when clearing the land (presence of deadly snakes); heavy objects falling on them (from unstable scaffoldings); load (mud, rocks, and water extracted from the pit); and burns from the heated engines and accidents with the pressure hose. Elsa, 30, spoke of her partner, who had to spend extensive time in a health post: *“My life was very sad then, Miss, he [partner who worked in mining] was a whole... three months there, at the rural health post (...) one of his co-workers went into the jungle and brought him in arms, a three-hour walk, he almost died because he was bitten by a poisonous snake (...) he could not drink water ‘cause the venom would go to his heart, a month without drinking water (...) it was horrible.”* Cindy, 24, lost a brother: *“My little brother died while they were working (...) the post came on top of him, killed him, we saw the accident (...) he died right then and there (...)”* Edson, 38, described the conditions of his accident: *“A post fell on me, so I went to the hospital in Juliaca (...) On the head (...) I saw it coming but just when the log was falling I turned my head and the helmet dropped (...) In the mining area there is a big shaft and I was inside (...) I had also thought at one point...when it was raining, and the wind was blowing hard, and one of the co-workers said, careful, I moved to one side and did not realize something was falling on the other side.”*

Violence and abuses, threats and reported related health outcomes

Overall, interviewees reported having good relationships with their co-workers, pointing out that they usually practiced sports during their leisure time. There was a clear hierarchy according to which newcomers needed to obey those who had been working at the camp longer, or else there would be conflicts. Given the high turnover of staff, it was also clear that sometimes it was difficult to establish deeper bonds with the other workers. Ernesto, 30, talked at length about this: *“We did not understand one another [on problems with a co-worker], I suppose because he had been there longer he had more experience than me, he ‘knew it all’, and one is a newcomer, so supposedly he gives an order and one must obey, and when one does not do so, one’s co-worker is disturbed and undertakes, how can I put it, other attitudes (...) And that is how the row starts (...) because of the problem I had with him, I had trouble with my job (...) since as a newcomer I did not know the job, I went next to the motor, I took the top off the hose without knowing it was hot, he did not warn me either (...) of course, communication was not good, if he would have been more communicative with me, or shown more solidarity towards me saying, don’t do that ‘cause you’ll get hurt (...) no, you can’t tell anyone, no one will stand up for you, you have to see how to solve the problem yourself.”* He also shed light on how the transient nature of the mining work had an impact on relationships: *“The relationship with him was a friendly, good one but the bad part is that there is a high level of migration [from camp to camp], for one week or one month you are with that owner, the next, with the neighbour, there is no stable job there (...) you have to try and get on as best as possible for the job to get properly done.”*

On the other hand, the presence of people who had worked elsewhere could be beneficial. One interviewee, 54-year-old Cesar, reported that someone coming from outside opened their eyes to the fact that they were being exploited, working all day long with no rest, and they joined forces to change that: *“The owner, he insisted we should work all day long, but another guy came who had worked elsewhere, in places further up, he came to work and asked: ‘how are you people working here?’ ‘You know we work all day long’ I said, ‘now we are going to work until reaching a total of 100 wheelbarrows’ [he said] (...) when the person in charge came, since we no longer worked endlessly, problems started, the others also started resting the following day and started working till they reach 100 wheelbarrows.”*

Conflict reports were primarily related to issues arising during the workday, for instance, fights between gold mining equipment operators if someone made a mistake, because that affected the earning of the whole team. Violence was also reported between workers of different camps over

spots of land where they could find more gold. Carlos, 27, said: *“Sometimes an argument at work (...) at work there were always discussions, this one didn’t do things right, this one did (...) We argued like that for a while but that was it, everything then went back to normal.”* There was a lot of competition, as Ernesto, 30, pointed out: *“Let’s suppose that something happened at work, it was paralyzed and the other equipment would take over its route, get into your site, your working route, and that day you didn’t work, your co-worker, the competition next to you will leave you without a job because he will take over your piece of land, so they fight over the plots, yes, in one hole there are around 5, 10 motors, and each one goes where gold production is better (...) that is how a fight starts (...) they started punching one another (...) with the motors whoever breaks up more earth, wins.”*

Additionally, there were also reports of men having to defend their partners from other men harassing them. Edson, 38, talked of defending his wife: *“They started harassing my wife; I had a word with him (...) Why is he going to be disrespectful to my wife if he supposedly has a wife, a commitment? And he said ‘no’. My wife said he had been disrespectful.”*

Single women working as cooks highlighted being worried about the risk of potential sexual harassment from miners living in the camp, as noted by 33-year-old Teresa: *“What I was afraid of when I joined, since I was there all alone, I thought workers would harass me, I had that fear, but at night they did not stay, they went back, and I had voiced that fear to the man I worked for, but he told me not to worry, I know them.”*

Alcohol was also mentioned as a source of problems. Alcohol was consumed during social gatherings and there were reports of heavy drinking because there was not much else to do or to keep them warm when it got cold. The workers ended up spending a lot of money on the alcohol and working next day hung over. As Edson said: *“Some get very drunk (giggles) (...) That is why there are two keeping an eye at a checkpoint and don’t let them in drunk (...) Because they run risks... there have been accidents, so that is why there are always two checkpoints because there have been accidents, people have died, so now no ...”*

Living conditions

Housing

In general, interviewees reported living on the campsites, just a few meters away from the gold extraction areas. Some interviewees mentioned living outside the camps in a nearby town with their families and only going to the camps the days they worked. However, for most of the workers the job offer included a space for themselves and their families on site. Some migrant workers decided to leave their children with relatives off-site. The children only visited over the weekends. Migrant workers who did this considered camps to be very unsafe places, and they could also afford to leave their children somewhere else. In this way they also made sure that their children could attend school.

Living conditions in the camps were very basic, mostly because owners did not invest much in them but also because they needed to be mobile and easy to relocate whenever required (for example, in the case of police raids, or when a pit ran out of gold). The materials used to build the camps were straw, plastic, metal sheets and pieces of wood.

Weak construction meant that migrant workers lived exposed to the elements and in constant fear of the wind and rain damaging their belongings. Said Ernesto, 30: *“It is a camp made of plastic and straw (...) we get together in groups of two or three, and set up a small camp, each one has a small bed (...) each worker provides his own bed.”* According to 54-year-old Cesar, *“Because many people arrive and things have been taken away [by the wind], like their beds, since it is made of plastic [the room, the ceiling], when the wind blows hard, it blows things away although they are well covered up, but holes appear in the plastic and lately I no longer sleep in my bed because every time it rains I get wet, had to throw away the mattress so can no longer sleep.”* Gustavo, 26, said: *“When it’s very cold, we have no protection from the cold, you are exposed to the cold air.”*

Since camps were located deep in the jungle, they did not usually have electricity. Camp owners often used electric generators only to light up the pit while during overnight work, or for other basic electronic goods. This was particularly problematic for workers who needed to go to the toilet in the middle of the night when it was very dark. Eduardo, 18, spoke about this: “[Bathroom] It is far away, you have to go with a torch, it’s dangerous (...) a three or five-minute walk (...) There are two, one for ladies and another for gents.”

Camps also lacked appropriate toilet facilities. Holes were dug in the ground, or latrines were built that were then shared by all camp inhabitants. Migrant workers complained about the lack of cleanliness of the toilets. Doris, 26, said: “The bathroom was used by all staff, but there were too many, and it was, as I said, filthy, they didn’t clean it (...) around 200 people used it (...) it was, as I said, too dirty indeed, you went to the toilet longing to pee and found everything filthy.”

A few migrant workers mentioned that more and more people did not live in camps anymore and chose to live by the highway in improvised towns set up along the road. These towns, however, were also very basic and did not provide adequate services. Living away from the camp also meant having to access the camp every day by motorbike, which was expensive for some workers. Sergio, 37, saw it this way: “Lately people have got used to living farther away, practically no one lives at the working site, we are the only ones left, but with this problem [raids] hardly anyone has camps in there, next to where I am; they come here to the highway, now there are lodgings where they stay and come here in the mornings (...) It’s a half-hour drive on a motorbike (...) there are motorbike lines how (...) before we used to walk.”

Nutrition

Food in the camps was very poor, lacking variety and nutritional value. Most migrant workers complained about the quality and the quantity of the food. Interviewees reported that they were provided with insufficient and unbalanced meals that were inadequate for the kinds of activities they conducted and the amount of energy they normally used when working. Cesar, 54, said: “The food itself was not pleasant, the things they cooked, for instance, in the morning, to leave nice and early, at 5.a.m, you have to put something in your stomach (...) yes, because it’s hard labour, you can’t go just like that, because you will always get tired and for that I got packs of crackers to take with me, so we had to spend money on food.” Sergio, 37, said: “Also a poor diet, I also fell ill at one time with a pleural haemorrhage, the food is horrible too (...) we ate red pepper soup for lunch, mixed with banana, as if it were for pigs, with [unintelligible] That was one of our lunches, and for dinner sometimes spaghetti (...) then I don’t know why, I caught a disease, had a pleural haemorrhage, that must have been in 2000, 2007, it must have been in 2007 that I fell ill (...) those cramps, all those things like gastritis I’ve got I think were due to the pleural haemorrhage, they gave me tablets, tons of them, I think I took three or four a day, and that is why I think I have gastritis.”

Furthermore, as noted earlier, there was no access to drinking water for camp dwellers and they were forced to use the same water they use to filter gold for bathing or washing clothes. Some interviewees said they tried to avoid drinking water and collected rainwater instead to be able to cook. Again, from Sergio: “Because we here as usual, in all this area, as you can see, we all lived like this, like in those areas (...) there is no hygiene, they all live as best they can, we don’t even drink water knowing it comes from what we filter, or rainwater, with that water we cook (...) there is an area, for instance where we lived, it was filthy how they had the people, and the pigs roamed around and stank, garbage was just chucked out, not even burned.” Cindy, 24, spoke of the water, or lack thereof:

“Yes at the beginning it upset us all, no water, no food, above all the water, the water is murky, no water, not even to bathe, little by little we have got used to that.”

Freedom of movement

Most interviewees mentioned that everyone could come and go as they pleased. Restrictions on movement had more to do with camps being located in remote areas and expensive travel costs. The workers who received monthly payments were in a way more controlled by the camp owners, because these workers needed to work the whole month if they wanted to get paid, whereas miners receiving a percentage per shift were more like independent workers who could decide when to work and when not. Said Cindy, 24: *“Yes, Miss, we are free [Regarding freedom to enter and exit the camp].”* According to 37-year-old Sergio, *“People are now independent, it isn’t as it was before because most people earn percentages, no longer a daily wage, if they earned a daily wage maybe they wouldn’t be able to leave and the owner would have to authorize them, but now since they make a percentage at any time they wish they can pick up their backpacks and leave.”*

Only one migrant worker, 54-year-old Cesar, described a situation that he had experienced in the past where there was restriction of movement and extreme violence (murder) towards some workers: *“Some make workers work in cases in which the owner has his own land, builds the houses and then brings workers from the hills, and locks them up in a room like animals for them to sleep and then in the early morning open the door for them to go out and work; and after 90 days, everyone wanted to leave the job and go back to our families but we were never able to do so (...) they would take them to where they make the holes and then shot the workers, a group of three, four wanting to leave, they buried them all in the same pit and that was it.”*

Health beliefs

Among the interviewees for this study there seemed to be a rather low awareness of the harm generated by exposure to mercury fumes and the consumption of mercury-contaminated water and fish. The main concerns of migrant workers seemed to be related to the constant exposure to water and dampness and mosquitoes, or to snake bites and stress. The few migrant workers who mentioned mercury as potentially hazardous phrased it in terms of others saying that it causes harm. These interviewees used such phrases as “many say” or “they say” and showed a level of disbelief in these ideas. Sergio, 37, said: *“Many say that mercury in the fumes you breathe in can go to your lungs.”* And 30-year-old Elsa spoke of “quicksilver”: *“Quicksilver (...) that harms you (...) to obtain gold (...) some call it mercury we call it quicksilver (...) They say it can make you blind (...) when burning it, the fumes it lets off can blind you; that’s all I have heard, nothing else.”*

The interviewees’ overall lack of awareness of the dangers of mercury exposure might be related to the idea that the government had “demonized” the use of mercury in order to deter illegal miners from the mining activity. It also could be related to the fact that mercury-associated health impacts emerge over the long term and are less immediately observable than other health problems. One migrant worker, Sergio, mentioned that contamination could be avoided by using a retort, a device for capturing harmful mercury vapours as they are burned off the amalgam, but he also mentioned that only “big companies” used them in their extraction process: *“Only big companies use the retort, some small miners sometimes can’t buy the retort (...) a mercury recovery device (...) Sometimes we burn it in a small tin and put a wet rag on top, and mercury remains in the rag.”*

Medical care and service access

Access to medical care

We found many barriers to health access among migrant workers. It is important to highlight, however, that these barriers exist for most of the rural population of Madre de Dios and are a direct consequence of an overall deficient national health system and the total absence of government presence – health or otherwise – in the area.¹⁴⁴ One of the main barriers to getting health care was the

¹⁴⁴ For an overview of the situation of the national health system in the area see: Jaris Mujica, *Elementos comparados del impacto de la trata de personas en la salud de víctimas adolescentes en el contexto de la minería ilegal de oro en Madre de Dios*, Centro de Promoción y la Defensa de los Derechos Sexuales y Reproductivos PROMSEX, Lima, 2014. Available from <http://promsex.org/images/docs/Publicaciones/investigacionmadredediosJarism.pdf>.

distance that migrant workers had to travel to access health centres. According to the interviewees, where they do exist rural health posts are far from the mines, so access is limited to those who can get there by boat or motorbike. Carlos, 27, spoke of taking another individual to a health post by boat: *“He did not die, he only cut his head open (...) the skin came off (...) we brought him here to Colorado (...) it took us about half an hour by boat (...) they cleaned and stitched him, gave him some pills, and administered a syringe [injection].”* Ernesto, 30, talked about the nearest health centre being two hours away: *“No, because work was far away and there was nowhere to get health care (...) There was a technician two hours away (...) a two-hour walk to a rural health post.”*

Once they accessed the health-care centres, migrant workers found that these were poorly equipped and lacked proper staffing, so they had to travel even farther away; many were not able to do this given financial and time constraints. Migrant workers mentioned that even when they reached bigger health centres, the resources onsite were very limited and that there was a lack of basic treatment options such as antidote serum for snake bites. Health facilities in main cities such as Arequipa, Cuzco or Puno were the only option. Sandra, 26, said: *“Sometimes when you come here to the emergency unit, but there is no doctor, so you have to go to Puerto, farther north.”* Edson, 38, had to go to one of the main cities, Puno, for a CT scan; he also spoke of the lack of appropriate treatment nearby for snakebite: *“We are doing quite well as far as your job is concerned but as regards our health.... sometimes the medication is not here. For instance, if you get bitten by a snake, the medication cannot be found at the health centre, snake antivenin [inaudible], there is none (...) And sometimes people die or have to be evacuated, taken far away. At Puerto there is a hospital. But elsewhere, there are no health centres (...) Once a boy died; his mother thought they would make it to Cuzco, but that wasn’t the case. A person can only live a few hours with the venom (...) his family decided to take him to Cuzco but he died halfway there.”*

Financial barriers also made access to care difficult for migrant workers. In extreme situations camp owners brought workers to the doctor, but it was the migrant workers who had to pay for the care they received. Furthermore, the fact that miners did not get paid if they did not work a day also deterred them from seeking formal health care, because they wanted to avoid spending days at the health centre. Interviewees reported they were worried not only about losing pay but about losing their position altogether, because the camp owner could choose to hire someone else in their absence and keep that person on. Ernesto, 30, was out of work for several weeks with an injury: *“After three months in mining since I did not know the job, I had an accident (...) They brought me here to Santa Rosa, the owner of where I worked (...) He brought me here but did not bear the expenses, I had to pay for it [the treatment], that is the bad part I saw (...) well I spent three weeks without doing anything (...) and of course I had to pay for all the [health care-related] expenses.”* He also spoke about how a replacement would step in if a worker was ill: *“Well, whoever fell ill did not work that day, you rested, they came here to be treated (...) people who fell ill came here for treatment (...) and you informed your co-worker you would not be able to work that day and that a replacement would be going that day.”*

Finally, some migrant workers told us how being internal migrants meant their access to health services was compromised because, although they were entitled to health care under the national health service, they could not access it in Madre de Dios because they were registered in their region of origin. Doris, the 26-year-old who had been pregnant while working at a mine, said that her health insurance would not cover her full pregnancy period because her official address was elsewhere. *“When I came here to carry out my three-month pregnancy check-up, I was told my medical insurance would not cover the whole of my pregnancy because I come from elsewhere, from San Martín; for the health insurance to fully cover my expenses I should register my change of address, so my husband said we should go back to San Martín, to change our address again but we would spend a lot of money. So far I haven’t changed my address at the registry.”*

Alternative traditional medicine

When discussing health care, many interviewees mentioned that they used herbal and traditional medicine either as an alternative or as a complement to western medicine. In their accounts they mentioned the use of plants and herbs to cure some of their ailments. These were usually provided by the camp cook or someone who had some knowledge of alternative medicine. Cesar, 54, said: *“In that place there was a rural health post, but I didn’t go there, I simply used homemade medicines, there was someone who knew how to rub your bones (...). He accommodated everything and pressed on some ground resins.”* And 27-year-old Carlos was one of those interviewees who relied on medicines from the cook: *“Once I fell ill (...) I got flu, I felt cold, all my body ached, I had no strength, I wasn’t hungry (...) I went to the doctor and told him I felt ill, he told me it was just a cold and gave me some pills (...) Yes, I took the medication, and the woman that did the cooking knew how to cure with plants, so I bathed with that and got over the cold.”* Ernesto, 30, talked about how he had to cure himself: *“I got burnt and my leg remained sort of pinkish, here they did not want to cure me, they wanted to send me to Puerto Maldonado because of how serious it was (...) first aid was provided here (...) They said they had to refer me to a higher complexity health institution, either the Puerto Maldonado or Cuzco hospitals. I was alone here, well, I had part of my wife’s family but it’s not the same, my family was up in the north (...) here I cure myself (...) I cared for myself (...) since I know about medicine, as I said, I’m a technician (...) I bought all the necessary elements to cure a wound, and I also knew about wild herbs (...) I had to go out into the fields to collect herbs and prepare them (...) with that it healed rapidly (...) and, more so, a physician came from Lima, I asked her what I could put on the wounds, the scar (...) she gave me a prescription and I was able to buy what she indicated.”*

4.5 SUMMARY IMPLICATIONS

The group of interviewees was composed of men and women who were working or had worked in illegal or informal small-scale gold mining settlements. All of our interviewees were migrant workers and, although many of their accounts revealed serious levels of labour exploitation, none of them was an identified victim of trafficking. Women usually worked as cooks, whereas men could work in different activities within the extraction process, from clearing the land (*macheteros*) to operating the extraction engines and diving into the pit to help the extraction process (*maraqueros*). The latter earned a percentage of the gold extracted each day, whereas as cooks and *macheteros* tended to earn a fixed (lower) salary.

Among the push and pull factors for migration, it was clear that poverty, economic crisis, unemployment and lack of education had driven many people from neighbouring regions to leave their home and travel to Madre de Dios. Migrant workers interviewed revealed how they had faced harsh living conditions in their places of origin and had found it difficult to make ends meet while living there. Because it offered the possibility of earning a higher income in a short period of time and due to the boom in gold prices, Madre de Dios had become a very attractive hub for internal and even some international migration in the past decade. Furthermore, the normality of the migration journey to Madre de Dios for work had resulted in most people having a close relative or friend that had migrated, turning the migration process into a pathway that was taken for granted – and making it difficult for migrants to recognize the potential risks involved.

The lack of victims of trafficking in our sample meant that we did not have accounts of recruiting practices by traffickers. Our interviewees migrated on their own account, alone at first until they got established, and then they brought their families with them. In terms of the journey between the place of origin (usually Cuzco, Puno and Arequipa) and Madre de Dios, migrant workers reported that things had improved since their own migrations with the construction of highways and bus routes operating in the area. Most migration now occurs by bus, which means that bus terminals both at the point of origin and in Madre de Dios are potentially good intervention points.

From the interviewees' accounts, it became clear that most migrant workers were or had been in a situation of labour exploitation with no contract, a lack of benefits, long working hours and deplorable working and living conditions. Some interviewees recognized that the working conditions were not adequate and a few even recognized elements of exploitation. However, such exploitation had also come to seem normal. It had become a type of social norm where everybody was expecting to receive that kind of treatment at work, with the poor conditions justified by the illegal or informal nature of the activity. In addition, it is important to highlight that many of the migrant workers interviewed had lived in extremely poor conditions back home that limited their perception of the working and living conditions in Madre de Dios as exploitative. In fact, there was a perception that they were "better off" in Madre de Dios because before they used to work the same hours with considerably less pay and no accommodation and food. In this context the reality of mining work did not seem as bad and these workers were willing to endure it because of the higher pay. In addition to this, among most interviewees there was a limited or misguided understanding of concepts such as labour rights and labour exploitation. Those who understood these concepts mentioned that they were not applicable to them due to their informal/illegal status.

The main occupational exposures found were related to the hard nature of the mining work, which exposed migrants to long working days without proper breaks, adequate training or protection equipment. When burning the material in open air to separate the gold from the mud they were also exposed to chemicals fumes, in particular mercury. Operating heavy machinery, being submerged in water for long periods and clearing the jungle without any gear or protection also exposed them to health risks. In addition to this, workers were exposed to natural elements and harsh jungle climate conditions, including to mosquito bites and to snakes and other dangerous animals. Furthermore, living conditions in the camps were appalling, and included lack of access to fresh water for cooking and bathing, which exposed them to the consumption of mercury-contaminated water and fish; inadequate and filthy toilet facilities; lack of electricity and poor nutrition.

The health outcomes resulting from these exposures can be organized into physical, sexual and reproductive and mental health outcomes. The main reported physical outcomes were related to accidents due to precarious infrastructure falling or extracted material sliding; accidents with the pressure or suction hoses; and human errors associated with the lack of adequate training and equipment and the tiredness and lack of concentration generated by extremely long shifts without adequate breaks. It is important to note that in this regard, migrant workers blamed themselves when accidents happened, which echoed the same self-blaming discourse and their justification of the poor conditions in which they worked and lived. Other physical health outcomes often described by the interviewees were skin conditions and fungi resulting from being submerged in water for long periods, kidney problems, parasites, malaria, dengue and leishmaniasis.

In the area of sexual and reproductive health outcomes the main ailments reported were urinary infections and gynaecological problems for women, in particular those who became pregnant while working. Finally, the migrant workers often mentioned mental health symptoms signalling depression and anxiety problems generated by constant worry and by job and financial insecurity. In this regard there seemed to be an additional layer of vulnerability for single women in the camps, as the presence of partners protected could protect women from potential sexual harassment from other miners and from having to carry heavy items while cooking. Alcohol was reported to be a common trigger of violence within the camps and the towns along the highway.

In terms of health services and access to care, it was clear that camps typically did not have first aid kits and basic implements needed such as antivenin for venomous snake and insect bites. Furthermore, access to services was very patchy. Camps were usually located far from health centres and it could take hours or even days to reach proper medical care. Once they reached these centres, migrant workers found that the facilities lacked appropriate treatment materials and staffing. Workers were reluctant to access health care because they had to pay for it themselves and they did not want to lose days of work because they were paid by the day. Hence, they were willing to access health services only in extreme cases. When deemed not necessary or when they lacked the means to access health

centres, many opted for traditional medicine remedies (herbs and plants) often provided by the women living in the camps and working as cooks. It is important to highlight that, while interviewees had very inadequate access to health services, health services in general were inadequate in the area. Participants also mentioned barriers to accessing national health services due to their migrant status and the fact that they were officially registered elsewhere in the country, something they could only change through costly travel.

This study highlights how migrant workers tended to focus on those health outcomes they could see. Some of the main hazards, such as contamination by mercury and other chemicals involved in artisanal gold extraction, were not recognized as a problem because the workers could not observe their impact on health as directly as other health outcomes, for example skin problems. There was also some level of misinformation about health exposures and outcomes. For instance, many interviewees associated kidney problems with being immersed in water for long periods, but rarely talked about urinary infections or the relation between consuming mercury-contaminated water or fish and kidney problems.

This study has found that there is an absence of state entities (health, labour, law enforcement) in general in the Madre de Dios informal/illegal mining sector. As an important piece of contextual information, interviewees explained that the political conflict with the illegal mining sector had had a negative impact on their earnings and that the number of jobs had been reduced. This could push workers who are already in the region to seek other posts in more remote and dangerous areas of Madre de Dios, and to potentially suffer increased abuse. The combat against illegal mining also needs to take into account the future of the internal migrants who find themselves without jobs and who could turn to riskier solutions, and who should be considered people who have suffered labour exploitation and abuse, including trafficking in persons.

4.6 RECOMMENDATIONS PERU

General Recommendations

- Support and invest in achieving the Sustainable Development Goals (SDGs), particularly SDG 8 to “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” and “to eradicate forced labour, end modern slavery and human trafficking”. Specifically, protect labour rights and promote safe, secure, non-exploitative work environments for all, particularly migrants working in informal, under- or unregulated sectors.
- Formalize illegal mining activities, as per the recommendations of the Defensoría del Pueblo¹⁴⁵ and the Madre de Dios Regional Action Plan against Human Trafficking 2011–2016.¹⁴⁶

National and regional policymakers¹⁴⁷

- Develop a multisector health protection and response strategy, with specific actions to address the health risks and service needs of people working in and near the artisanal gold mining industries. This strategy can be enacted as additional guidance or an addendum to supplement the Madre de Dios Regional Action Plan against Human Trafficking 2011–2016.

¹⁴⁵ Defensoría del Pueblo, “Gestión del Estado frente a la minería informal e ilegal en el Perú: Supervisión a la implementación de los decretos legislativos promulgados al amparo de la Ley N° 29.815”, *Serie Informes Defensoriales*, Informe N° 160, Defensoría del Pueblo, Lima, January 2013. Available from www.gestionpublica.org.pe/plantilla/info_secpu/dp_281013_0003.pdf. Accessed 2 November 2015.

¹⁴⁶ Madre de Dios Regional Government, Plan Regional de Acción Contra la Trata en Madre de Personas, Madre de Dios 2011–2016, 2012. Available from www.oimperu.org/docs/PRATP_MADRE_DE_DIOS_BAJA.pdf.

¹⁴⁷ By regional, we mean the different regions that correspond to the political organization of Peru’s government.

- Designate a dedicated budget and sufficient resources within relevant ministries to ensure protection of workers' health and safety and support coordinated actions by the health and other ministries (labour, law enforcement, judiciary, social services, education, women and social development, commerce, and any others) responsible for implementing the Madre de Dios Regional Action Plan against Human Trafficking 2011–2016.
- Establish measurable indicators and benchmarks for the effective monitoring and evaluation of the implementation of the Madre de Dios Regional Action Plan against Human Trafficking 2011–2016, in particular for the Plan's goal number 15 in the protection axis related to health-staff training.
- Ensure that any oversight of the implementation of the Regional Action Plan recognizes the health needs of migrant workers in artisanal gold mining and seeks to overcome the main barriers and gaps to health and safety services.

Ministry of Health

- Recognize the health and safety needs of migrant workers and their families, and of people trafficked into artisanal gold mining, by developing an evidence-informed strategy to address their protection and service needs. Include plans for multisectoral coordination with relevant ministries (e.g., labour, trade and commerce, social services, child protective services), as an active member of Peru's Permanent Multi-sectoral Working Group against Trafficking in Persons.
- Review and disseminate findings from this study, other research-based evidence and local civil society knowledge and expertise about the health effects of the exploitative conditions in informal and illegal mining. Specifically, highlight the dangers of mercury to health and the implications of working without safety measures or protective equipment.
- Allocate specific and sufficient funding and human resources to support and extend the work of mobile health units such as the La Caravana de la Vida project¹⁴⁸ or similar programmes, to help support and implement mobile Integral Health Care for Excluded and Dispersed Populations (AISDPED) teams already envisioned in policy.
- Revise the Peruvian Social Security policy to ensure that people receive care even if they are not originally from the particular region where they are working and have not updated their address (for example, to Madre de Dios); work with the Registrar to create ways for internal migrants to easily update their information from wherever they are.
- Ensure medical schools and health education include training on occupational health and safety in particularly hazardous sectors such as mining, and approaches for addressing cases of extreme exploitation and human trafficking, including identification of possible victims of trafficking and their safe referral to counter-trafficking partners.
- Create a technical assistance branch or department to focus on the health interventions required to meet the health prevention and response needs by training sufficient experts in each region, who will in turn train people in the different relevant sectors about (among other areas) their roles in protecting the health and safety of migrant workers and identifying opportunities and barriers for health and safety protection and responses.

¹⁴⁸ *La Caravana de la Vida* was a joint IOM-Government of Peru mobile health outreach effort undertaken in Peru from 2012 through 2014 that brought much-needed mobile health services to remote areas in the Amazon, while at the same time providing targeted training to health providers on trafficking in persons, and raising awareness in the community. After two years of implementation, "The Caravan of Life" provided assistance to more than 15,000 patients in 80 towns and villages in the Madre de Dios region. A documentary and introductory video can be viewed at: The Life Caravan: Health on the Move <http://youtu.be/UifMp1kZtnI> and Using Theater to Raise Awareness of Human Trafficking (documentary) http://youtu.be/ry5_D8kUOF8.

Health services sector, related to various health service delivery and access and uses (interpreters, culture) (national/local)

These recommendations are intended to draw on lessons learned through the project La Caravana de la Vida as a good model for health care to populations like those working in or living near mining locations, usually located far from health-care centres.

- Diversify transport options for health outreach and mobile clinics (for example, speed boats) to access wider areas and populations and to ensure that planned stops include locations close to miners. Develop and maintain close collaboration between local health centres and mobile clinics or teams to foster programme alignment and productive working relationships.
- Create a patient registration data system for mobile clinics or teams so that health providers can collect information on, for example, patterns of mercury poisoning, communicable diseases, reported or suspected cases of labour exploitation or trafficking for labour exploitation (including, for example, location, type, assistance provided, approximate cost, medicines and resources spent assisting individuals, and monitoring of the cases).
- Develop simple information system to collect detailed reports on assisted individuals and the health problems (physical and mental) identified by mobile health staff. Reports should try to include actual or estimated costs of treatment and care in each case, which can be used for future budget projections.

For all health staff in the region:

- Provide training for mobile health clinic staff and other doctors and nurses in the region, focused specifically on the health hazards involved in mining due to the nature of the work, as well as work conditions. Training should include discussions about the effects of discrimination and negative attitudes towards miners and on the importance of humanizing perceptions of the miners). The aim of discussions is to shift perceptions of artisanal and small-scale miners away from the perception of them as criminals in order to see these individuals as potential victims of trafficking or labour exploitation.
- Develop a standardized checklist, informed by evidence and local stakeholders, to foster an understanding of common and serious symptoms among labour migrants and to facilitate medical history-taking and diagnoses by health practitioners.
- Provide easy-to-understand and targeted information to migrants and their families about possible long-term effects of mercury extraction, mercury in local water and other possible sources of mercury hazard, highlighting in particular the serious longer-term dangers for children. Information should be provided by trusted sources (for example, clinicians or peers) in language that is understandable and trustworthy and, to the extent possible, provided to mining team leaders, local leaders, and others of influence in the community of miners. Information should include the need to use a concentration process prior to amalgamation, and the use of retorts for burning, as specified by the Fairtrade Organization guidelines.¹⁴⁹
- Inform migrants about other common health risks (for example, common occupational hazards, communicable diseases) and simple personal protective equipment and other health protection options. Highlight the longer-term health effects, as well as the immediate and more evident illnesses or injuries for which individuals are more likely to seek health care. Information and awareness efforts should provide clear and feasible guidance about where to obtain and how to use appropriate protective gear. If possible, gear – or vouchers for free or subsidized gear – should be provided.

¹⁴⁹ According to the Fairtrade Standard, miners ought to use a concentration process prior to amalgamation; and use retorts or other mercury recovery devices during amalgam burning. Both requirements ensure that mercury emissions are drastically reduced, by up to 90 per cent. When possible, alternative methods not involving mercury should be used to extract gold; however, these methods tend to be expensive and their implementation might take a bit longer. See the following: Fairtrade Foundation, *Fairtrade Gold: An industry briefing*, Fairtrade Foundation, London, 2015. Available from www.fairtrade.org.uk/~media/fairtradeuk/media%20centre/documents/gold%20policy%20report%20-%20final%2013%2001%2015.ashx.

Ministry of Labour

- Strengthen the capacity of Ministry of Labour and labour inspectors to recognize health and safety violations in the mining sector, including in circumstances that might be irregular or illegal. Specifically, build staff capacity to recognize situations of extreme exploitation, including human trafficking.
- Strengthen capacity of and operational logistics for labour inspectors to detect hazardous work and security conditions in mining centres (for example, checking equipment, instruments, tools) in line with the National Plan to Fight Forced Labour 2013–2017.¹⁵⁰
- Design and provide specific guidelines to labour inspectors to be able to detect and safely refer individuals who are suspected of being in situations of extreme exploitation, forced labour or trafficking to appropriate support services. Draw on input from local non-governmental or international organizations.
- Support development of employment alternatives to help people avoid risks associated with informal gold mining.

Ministry of Interior, and Ministry of Justice and Human Rights

- Implement training for relevant law enforcement officers to detect, sensitively interview and safely refer individuals who are thought to be in situations of extreme exploitation, forced labour or trafficked. Emphasize non-criminalization of possible victims as a global minimum standard, regardless of irregular nature of certain situations of artisanal gold mining.
- Implement training for relevant law enforcement officers to refer trafficked persons and exploited migrant workers to appropriate support services, prioritizing their health and safety needs. Draw on input from local non-governmental or international organizations.
- Ensure the collection of evidence on injuries, illnesses and mental health, including through voluntary forensic examinations, to advocate for criminal sentences and potential compensation (past wages, health-care needs) commensurate with the harm that was caused by the crimes. Consider future lost earning capacity related to disabilities (physical, mental) caused by abuses.

Public Prosecutor's Office (Public Ministry)

- Ensure the Public Ministry's Public Health unit regularly monitors the quality of water in the region of Madre de Dios. This Ministry should coordinate with the Ministry of Health in order to conduct water inspections to verify the quality of the water.
- Further strengthen the newly created Special Prosecutor's Office for Trafficking in Persons with resources and training on trafficking in persons in mining contexts, particularly for labour exploitation.

Ministry of Women and Vulnerable Populations

- Develop and implement a specific protocol to recognize and respond to the needs of vulnerable male and female migrant workers and those who are victims of trafficking for labour exploitation, to supplement the measures that are already in place for children, adolescents and women trafficked for forced sexual exploitation.
- Participate in service strategies and services to address labour exploitation and human trafficking to ensure that health and safety responses are gender- and age-sensitive and recognize the challenges and barriers to services (for example, discrimination) among marginalized populations.

¹⁵⁰ Ministry of Labour and Employment, Plan Nacional Para la Lucha contra el Trabajo Forzoso 2013–2017, Government of the Republic of Peru, Ministry of Labour and Employment, Lima, 2013. Available from www.ilo.org/wcmsp5/groups/public/---americas/---ro-lima/---sro-lima/documents/genericdocument/wcms_240910.pdf.

Ministry of Education

- Conduct educational campaigns in schools in Cuzco and in other regions where migration originates about the potential health and psychosocial hazards – particularly mercury – associated with working in the artisanal and small-scale mining sector, and about human trafficking, especially for labour exploitation (including about the National Action Plan against Trafficking in Persons in Peru 2011–2016).
- Conduct educational campaigns in schools and in the wider community, if possible, to increase awareness and knowledge around labour rights to health, safety, compensation and redress for violations. Campaigns that target students should be expanded to include wives and children, who may influence the actions and decisions of male miners. Campaigns should explore implementation in bus terminals where many migrants start/finish their journey.

Donors and NGOs

- Fund awareness campaigns to address the risks associated with mercury among mining communities.
- Fund filtration systems and retorts for people working in locations where they are at risk of mercury poisoning.¹⁵¹
- Fund the extension of health outreach initiatives to hard-to-reach communities.
- Fund initiatives that focus on the real rehabilitation (mental and physical health) of victims of trafficking, including a range of health-care services. Consider a mentorship programme to help survivors identify new options (education or labour) to reintegrate into their communities. Consider drawing on the knowledge and experience of survivors to facilitate these programmes.

The private sector (business, employers, industry)

The Verité report on the indicators of forced labour and human trafficking in illegal gold mining in Peru concludes with a series of recommendations that include ideas for consumers and corporations.¹⁵² In addition, we recommend further attention to the health and safety of individuals in this sector. We therefore recommend the following:

- To engage companies producing the relevant protective gear, including those who produce retorts, to subsidize/provide discounted prices for small-scale and artisanal miners.
- Design and hold awareness campaigns for consumers in order to explain the real origin – illegal mining – of the gold they are buying and the consequences of mining practices on the health of people in Madre de Dios.

¹⁵¹ Some successful examples of low-cost technology have been tested by the United States Environmental Protection Agency. See the following: United States Environmental Protection Agency, “Reducing mercury pollution from artisanal and small-scale gold mining”, web article and links, EPA. Available from www2.epa.gov/international-cooperation/reducing-mercury-pollution-artisanal-and-small-scale-gold-mining.

¹⁵² Verité, *Risk analysis of indicators of forced labor and human trafficking in illegal gold mining in Peru*, Verité, Amherst, Mass., 2013. Available from www.verite.org/sites/default/files/images/IndicatorsofForcedLaborinGoldMininginPeru.pdf.

- Follow up this study with a longer-term quantitative survey to identify patterns of migration decision-making, migration experiences and health risks among migrant workers.
- Document patterns of illness, injury, death and toxin exposure in mining communities, including among women, children and miners, to identify potential risk and protective factors.
- Explore what types of protective gear are being used among miners who work legally, and their practices and attitudes towards protective gear, so this can inform an intervention for small-scale and artisanal miners.
- Develop and test an intervention focusing on reduction of mercury poisoning, work-related injuries, communicable diseases and use of protective gear in small-scale and artisanal mining.
- Explore with stakeholders in the region the barriers to the identification and referral of victims of trafficking for labour exploitation.

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5

KAZAKHSTAN:
STUDY RESULTS

5. KAZAKHSTAN: STUDY RESULTS

5.1 PARTICIPANT DESCRIPTION TABLE

Table 8: Participant characteristics (Kazakhstan)

N°	ID numbers converted to alias names	Sex	Age	Marital status	Children Y/N	Identified victim of trafficking (VoT) or migrant worker (MW)	Country of origin
1	ITKZ01/ Abay	M	25	Married	Unknown	VoT	China (ethnically Kazakh)
2	ITKZ02/ Abzal	M	20	Single	Unknown	VoT	China (ethnically Kazakh)
3	KJKZ01/ Aday	M	44	Married	Y (2)	VoT	Uzbekistan
4	KJKZ02/ Azat	M	33	Married	Y (2)	VoT	Uzbekistan
5	KJKZ03/ Altynbek	M	43	Married	Y (2)	VoT	Uzbekistan
6	KJKZ04/ Baibek	M	28	Married	Y (2)	VoT	Uzbekistan
7	KJKZ05/ Dilshod	M	36	Married	Y (3)	VoT	Uzbekistan
8	KJKZ06/ Beksultan	M	21	Single	N	VoT	Uzbekistan
9	RSKZ01/ Gaziz	M	43	Married	Y (3)	VoT	Kyrgyzstan
10	RSKZ02/ Oleg	M	47	Divorced	Y	VoT	Uzbekistan (Russian ethnicity)
11	RSKZ03/ Boris	M	26	Single (lives with 1 woman)	N	VoT	Kazakhstan (Russian ethnicity)
12	RSKZ04/ Vlad	M	45	Divorced	Y (2)	VoT	Kazakhstan (Russian ethnicity)
13	KJKZ07/ Edil	M	42	Divorced	Y (3)	MW	Kyrgyzstan
14	KJKZ08/ Yerlan	M	55	Married	Y (5)	MW	Kyrgyzstan
15	KJKZ09/ Yernur	M	25	Married	N	MW	Kyrgyzstan
16	KJKZ10/ Jahan	M	47	Married	N	MW	Kyrgyzstan
17	KJKZ11/ Zhambul	M	23	Single	N	MW	Kyrgyzstan
18	KJKZ12/ Idris	M	25	Married	Y (1)	MW	Kyrgyzstan
19	KJKZ13/ Qadir*	M	41	Married	Y (3)	MW	Kyrgyzstan
20	KJKZ14/ Mambet*	M	31	Single	N	MW	Kyrgyzstan
21	KJKZ15/ Mansur*	M	55	Married	Y (3)	MW	Kyrgyzstan
22	KJKZ16/ Mahmut*	M	43	Married	Y (2)	MW	Kyrgyzstan
23	KJKZ17/ Mukhit*	M	28	Single	N	MW	Kyrgyzstan
24	RSKZ05/ Nazar	M	21	Single	N	MW	Kyrgyzstan

25	RSKZ06/ Nigmat*	M	48	Married	Y (1)	MW	Kyrgyzstan
26	RSKZ07/ Nurgazy	M	39	Married	N	MW	Kyrgyzstan
27	RSKZ08/ Omarbek*	M	21	Single	N	MW	Kyrgyzstan
28	RSKZ09/ Oraz	M	26	Married	N	MW	Kyrgyzstan
29	RSKZ10/ Fatima	F	48	Divorced	Y (3)	MW	Mongolia

* Recruited through Employment Centre, official employment agency.

5.2 CONTEXT

Kazakhstan is a popular migration destination and transit country because of its relative economic stability and its proximity to the Russian Federation. In fact, estimates suggest that between 250,000 and one million migrant workers arrive in Kazakhstan every year.¹⁵³ For migrants coming from within Central Asia, Kazakhstan offers the relative ease of a similar language and culture and a visa-free border crossing.¹⁵⁴ Most Central Asian migrants to Kazakhstan come from Uzbekistan.¹⁵⁵ Salaries are even higher in the Russian Federation, however, and for this reason many migrants continue on northward to the Russian Federation. Economic drivers, particularly unemployment and low wages, lead Central Asians to seek employment outside of their home country.¹⁵⁶ There are large wage differentials in the region. For example, the average monthly wage in Kazakhstan in April 2008 was 54,500 Kazakhstani tenge, or approximately USD 450, while the respective figure in Uzbekistan was half that amount, at USD 210.¹⁵⁷ In contrast, skilled workers in Kyrgyzstan can be offered average salaries in the range of USD 100–200.¹⁵⁸ These employment and wage differentials are further illustrated in the table below. The pull factor of higher wages is joined by the push factor of climate change-induced desertification, which renders farming less sustainable in some places, thus driving some of the rural-to-urban migration seen in the region.

Table 9: Indicators of living standards in some CIS countries¹⁵⁹

Country	Unemployment, according to workforce survey data for 2009, % of economically active population	Average monthly salary in 2010, USD
Kazakhstan	6.6	525.7
Kyrgyzstan	8.4	155.4
Russian Federation	8.4	689.4
Tajikistan	11.5	81.0
Uzbekistan	–	522.2 (2004)

¹⁵³ Gul'zhan Toktamysovna Alimbekova and Aizhan Shabdenova, *Employment of migrant workers in the informal economy in Kazakhstan: A study of Southern Kazakhstan*, International Labour Organization, Almaty, 2009.

¹⁵⁴ Kazakhstan - International Organization for Migration. (2012). Retrieved 13 November 2012, from www.iom.int/cms/en/sites/iom/home/where-we-work/europa/south-eastern-europe-eastern-eur/kazakhstan.default.html?displayTab=facts-and-figures. Anar Musabaeva and Sergey Kuklin, *Labour migration and productive use of human resources: Kyrgyz republic*, International Labour Organization, Bishkek, 2009.

¹⁵⁵ Gul'zhan Toktamysovna Alimbekova and Aizhan Shabdenova, *Employment of migrant workers in the informal economy in Kazakhstan: A study of Southern Kazakhstan*, International Labour Organization, Almaty, 2009.

¹⁵⁶ Mapping on Irregular Migration in Central Asia 2014 (2015). Astana, Kazakhstan: IOM. Retrieved 10 November 2015: <http://iom.kg/wp-content/uploads/2015/01/IDFPublicationeng.pdf>.

¹⁵⁷ Gul'zhan Toktamysovna Alimbekova and Aizhan Shabdenova, *Employment of migrant workers in the informal economy in Kazakhstan: A study of Southern Kazakhstan*, International Labour Organization, Almaty, 2009.

¹⁵⁸ Anar Musabaeva and Sergey Kuklin, *Labour migration and productive use of human resources: Kyrgyz republic*, International Labour Organization, Bishkek, 2009.

¹⁵⁹ *Regional migration report: Russia and Central Asia*, Anna Di Bartolomeo, Shushanik Makaryan and Agnieszka Weinar, editors, European University Institute, San Domenico di Fiesole, Italy, 2014.

Within Kazakhstan, migrant workers gravitate to the developed cities of Almaty and Astana, to the oil-rich western regions, and to southern areas bordering Uzbekistan and Kyrgyzstan. Migrant workers are employed primarily in the agriculture, oil and gas, service and construction sectors.¹⁶⁰ While migrants may enter the country legally due to visa-free regional agreements, a significant proportion of labour migrants in Kazakhstan from Central Asia work illegally – they have no official registration and no work permit.¹⁶¹ Migration is often seasonal and occurs typically during the warmer months; however, some individuals permanently move to Kazakhstan. The construction sector in Kazakhstan is booming due to a variety of factors, including increased foreign investment, the change in 1997 of the country's capital city from Almaty to Astana, and by the Expo 2017 World Fair. Migrant labourers have filled the human resource gap required to meet the resulting construction-sector market demands.¹⁶²

In general, labour migrants in Kazakhstan experience adverse working and living conditions. In Kazakhstan, about 20 per cent of workplaces have no amenities such as drinking water, a place to eat or toilets.¹⁶³ In particular, the workplaces of migrants from Kyrgyzstan and Uzbekistan are the most poorly equipped. In addition, in the accommodation provided or found by employers and recruiters, 5.6 people on average (the range is 1–40) live in a room.¹⁶⁴

As many as one third of migrant workers in Kazakhstan do not hold their own passports. Approximately 2 per cent of them have no passports at all. The employer gathers up the workers' passports in the case of 19 per cent of migrants; the recruiter does this for 12 per cent.¹⁶⁵

One Kazakhstan-based study found that about 20 per cent of migrant workers have no lunch or rest break during the workday. The workweek lasts, on average, 75.4 working hours (varying between 37 and 126 hours a week), which easily exceeds the norm permitted by Kazakh legislation.¹⁶⁶ Most Kyrgyz migrants (74.6%) are exposed to such respiratory irritants as dust or fumes, 35.7 per cent to extreme heat or cold, and 15 per cent to gas or open flames.¹⁶⁷ Increased desertification contributes to increased dust storms, particularly in the springtime.¹⁶⁸

Approximately one third of migrant workers (29%) assert that safety measures are not observed at their work places. There are first-aid kits, fire extinguishers and special means of protection (helmets, masks, safety ropes etc) in only 13 per cent of enterprises in which migrants work.¹⁶⁹ Access to drinking water, toilets, places to have meals and rest, and first aid equipment is limited¹⁷⁰ and migrants lacked basic occupational health and safety protections.¹⁷¹

¹⁶⁰ *Regional migration report: Russia and Central Asia*, Anna Di Bartolomeo, Shushanik Makaryan and Agnieszka Weinar, editors, European University Institute, San Domenico di Fiesole, Italy, 2014.

¹⁶¹ *Regional migration report: Russia and Central Asia*, Anna Di Bartolomeo, Shushanik Makaryan and Agnieszka Weinar, editors, European University Institute, San Domenico di Fiesole, Italy, 2014. Mapping on Irregular Migration in Central Asia 2014 (2015). Astana, Kazakhstan: IOM.

¹⁶² Mapping on Irregular Migration in Central Asia 2014 (2015). Astana, Kazakhstan: IOM. Retrieved November 10, 2015: <http://iom.kg/wp-content/uploads/2015/01/IDFPublicationeng.pdf>.

¹⁶³ Gul'zhan Toktamysovna Alimbekova and Aizhan Shabdenova, *Employment of migrant workers in the informal economy in Kazakhstan: A study of Southern Kazakhstan*, International Labour Organization, Almaty, 2009.

¹⁶⁴ Ibid.

¹⁶⁵ Ibid.

¹⁶⁶ Ibid.

¹⁶⁷ International Labour Organization, *Activities for the elimination of child labour in Kyrgyzstan 2005-2010*, factsheet, ILO, Bishkek and Geneva, 2011.

¹⁶⁸ Gulnura Issanova et al., "Dust storms in Kazakhstan: Frequency and division", *Journal of Geological Society of India* 85, no. 3 (2015), pp. 348–358.

¹⁶⁹ Gul'zhan Toktamysovna Alimbekova and Aizhan Shabdenova, *Employment of migrant workers in the informal economy in Kazakhstan: A study of Southern Kazakhstan*, International Labour Organization, Almaty, 2009.

¹⁷⁰ International Labour Organization, *Activities for the elimination of child labour in Kyrgyzstan 2005-2010*, factsheet, ILO, Bishkek and Geneva, 2011.

¹⁷¹ Human Rights Watch, "Hellish work": *Exploitation of migrant tobacco workers in Kazakhstan*, Human Rights Watch, New York, 2010.

Eighty per cent of migrants in Central Asia lack access to health care. In Kazakhstan, health care is fee-for-service, with the exception of emergency medical care and care for acute illnesses that pose a risk to the public, which is supposed to be administered regardless of ability to pay.^{172,173} Vulnerability to tuberculosis (TB) and subsequent access to treatment for TB is particularly problematic for the region's migrants.¹⁷⁴

Human trafficking occurs in Kazakhstan in the form of labour and sexual exploitation as well as other forms of exploitations, such as forced begging. While the exact number of victims remains unknown, and prosecuted cases are minimal, of 390 vulnerable migrants surveyed in one Kazakh city over a three-month period in 2014, 29 adults and 7 children were victims of trafficking.¹⁷⁵ According to the United States Trafficking in Persons report, 161 trafficking victims were assisted in 2014. Of these victims, the demographic breakdown was as follows: 59 Kazakhs and 102 foreigners; 46 victims of sexual exploitation and 115 victims of forced labour; 54 female and 107 male.¹⁷⁶

Kazakh law prohibits all forms of human trafficking and calls for penalties of up to 15 years imprisonment.¹⁷⁷ Moreover Resolution No. 1347 of the Government of Kazakhstan of 24 October 2012 instituted the Action Plan on Combating and Preventing Crimes Related to Trafficking in Human Beings, for 2012–2014. It codifies coordinated work on combating and preventing crimes related to trafficking in persons and calls for state bodies to eliminate such violations. This anti-trafficking legislation was recently bolstered by a new Action Plan on Human Trafficking for 2015–2017, which was introduced by resolution No. 23 on 28 January 2015. In Kazakhstan, non-governmental organizations are integral to the identification of and assistance to trafficking victims.

5.3 SUMMARY OF THE HEALTH LITERATURE REVIEW

The table below is a summary of a literature review of construction work health hazards, occupational exposures, and health outcomes among migrant labourers. Worldwide, construction work is widely known as one of the most dangerous sectors.¹⁷⁸ There are numerous life-threatening safety hazards, and wearing proper personal protective equipment – or PPE – is crucial; workers also need proper training, includes on awareness of construction workplace hazards.

Among migrant construction workers, high numbers of disabling and musculoskeletal injuries, including fractures, spinal cord injuries, arthritis, eye injuries, accidents – and even death – have been reported. For example, among a German construction cohort, foreign workers had an increased risk of getting killed by falling objects compared to non-foreign workers.¹⁷⁹ Furthermore, in the United States foreign-born Hispanic construction workers were more likely to have a fatal fall than US-born Hispanic construction workers. One of the reasons cited for the difference in injury rates between migrants and non-migrants is their lack of access to training and education in their naive native languages. Biological hazards, including exposure to bacteria or viruses, are due to overcrowded and unsanitary living and working conditions, exposure to endemic diseases. This results in such diseases as tuberculosis, malaria, waterborne illnesses and skin infections.

¹⁷² Article 88.5 of the Code on People's Health and the Health-Care System.

¹⁷³ Erica Marat, "Labor migration in Central Asia: Implications of the global economic crisis", *Silk Road Paper*, Central Asia-Caucasus Institute & Silk Road Studies Program, Washington, 2009.

¹⁷⁴ Samantha A. Huffman et al., "Exploitation, vulnerability to tuberculosis and access to treatment among Uzbek labour migrants in Kazakhstan", *Social Science & Medicine* 74, no. 6 (2012), pp. 864–872.

¹⁷⁵ Mapping on Irregular Migration in Central Asia 2014 (2015). Astana, Kazakhstan: IOM. Retrieved 10 November 2015: <http://iom.kg/wp-content/uploads/2015/01/IDFPublicationeng.pdf>.

¹⁷⁶ United States Department of State Office to Monitor and Combat Trafficking in Persons, *Trafficking in Persons Report 2015*, United States Department of State, Washington, D.C., July 2015.

¹⁷⁷ Kazakhstan Penal Code, Articles 116, 125 (3b), 126 (3B), 128, 132, 133, 134, 135, 308, 309, 312.

¹⁷⁸ International Labor Organization, Construction: A hazardous work. Retrieved 10 November 2015: www.ilo.org/safework/areasofwork/hazardous-work/WCMS_356576/lang-en/index.htm.

¹⁷⁹ Volker, Arndt et al., "All-cause and cause specific mortality in a cohort of 20,000 construction workers; Results from a 10 year follow up" *Occupational and Environmental Medicine* 61, no. 5 (2004), pp. 419–425.

Migrant construction workers also experience environmental hazards. These can be related to working at high altitude, which causes mountain sickness; working in extreme heat, leading to dehydration and heat exhaustion; or inhaling airborne particles, leading to respiratory illness including lung cancer, silicosis and chronic obstructive pulmonary disorder. Dust on construction sites is ubiquitous because it is aerosolized from many different processes including grinding objects, cutting or the handling of concrete dust. Migrant construction workers report arthritis and back injuries from the ergonomic hazards of such repetitive movements as hammering, heavy lifting and constant bending.

Chemical hazards refer to exposures to chemicals at the workplace. In the construction sector, typical chemical hazards are asbestos and lead. Among migrants, these have been shown to cause deadly lung cancer (for example, mesothelioma), brain disorders (for example, leukoencephalopathy), skin inflammation (for example, contact dermatitis) and elevated lead levels.

Psychosocial hazards are related to the way work is designed, organized and managed, as well as to the economic and social context of work and living conditions. For migrant construction workers, the prominent exposures in this category include acculturative stress (psychological trauma from adjustment to a new culture, new co-workers); pressure to perform; as well as poor nutrition and low awareness of HIV and STI transmission. These exposures have been shown to lead to negative health outcomes such as suicidal ideation, depression, psychological distress, post-traumatic stress disorder, alcohol abuse, smoking, malnutrition, anaemia and HIV and sexually transmitted infections.

Overall, the literature shows that migrants experience these construction-related occupational health risks in greater magnitude or with greater severity than their non-migrant counterparts.¹⁸⁰

¹⁸⁰ Fitzgerald, S., Chen, X., Qu, H., & Sheff, M. G. (2013). Occupational injury among migrant workers in China: a systematic review. *Injury Prevention*, 19(5), 348–354. Wu, T. N., Liou, S. H., Hsu, C. C., Chao, S. L., Liou, S. F., Ko, K. N., . . . Chang, P. Y. (1997). Epidemiologic study of occupational injuries among foreign and native workers in Taiwan. *American Journal of Industrial Medicine*, 31(5), 623–630. Zhang, X., Yu, S., Wheeler, K., Kelleher, K., Stallones, L., & Xiang, H. (2009). Work-related non-fatal injuries among foreign-born and US-born workers: Findings from the U.S. National Health Interview Survey, 1997–2005. *American Journal of Industrial Medicine*, 52(1), 25–36. Reid, A., Lenguerrand, E., Santos, I., Read, U., LaMontagne, A. D., Fritschi, L., & Harding, S. (2014). Taking risks and survival jobs: Foreign-born workers and work-related injuries in Australia. *Safety Science*, 70, 378–386. Tuma, M. A., Acerra, J. R., El-Menyar, A., Al-Thani, H., Al-Hassani, A., Recicar, J. F., . . . Maull, K. I. (2013). Epidemiology of workplace-related fall from height and cost of trauma care in Qatar. *International Journal of Critical Illness and Injury Science*, 3(1), 3–7.

Table 10 : Construction sector: Health risk exposures and outcomes*

Hazard category	Occupational exposure	Health outcome	Reference(s)
Safety hazards (unsafe conditions that can cause injury, illness and death)	Working without proper personal protective equipment or safety measures such as proper masks, hard hats, eye protection; Lack of awareness about hazards, inadequate training or training not in native language	<ul style="list-style-type: none"> Disabling musculoskeletal injuries, such as fractures, spinal cord injuries, arthritis, eye injury, accidents Death 	Betancourt, T.S. et al., 2013; Huffman, S.A. et al., 2012; Guldenmund, F. et al., 2013; Xia, T., 2006; Xia, Q.H. et al., 2012; Sonmez, S. et al., 2011; Al-Arrayed, A. and A. Hamza, 1995; Arndt, V. et al., 2004; Cha, S. and Y. Cho, 2014; Cheng, C.W. and T. C. Wu, 2013; Choi, S.D. et al., 2014; Colao, A.M. et al., 2006; Corvalan, C.F. et al., 1994; Davidson, C.C. and D.J. Orr, 2009; Dong, X.S. et al., 2013; Dong, X.S. et al., 2009; Elders, L.A.M. et al., 2004; Forst, L. et al., 2010; Frickmann, F. et al., 2012; Garg, R. et al., 2012; Huang, F. et al., 2008; Huang, Z.H. et al., 2007; Jia, X. et al., 2011; Laddeca, E.N. et al., 2004; Menendez, C.K.C. and S.A. Havea, 2011; Mosconi, G. and M.M. Riva, 2011; Panikkar, B., 2012; Panikkar, B. et al., 2013; Panikkar, B. et al., 2014; Reid, A. et al., 2014; Salvatore, M.A. et al., 2013; Seixas, N.S. et al., 2008; Weinstein-M, N.-B.A.-A., 2008; Wu, T.N. et al., 1997; Yanai, O. et al., 1999; Zhang, X. et al., 2009; Connell, P.P. et al., 2007; Ong, V.Y.K. et al., 2006
	Confined spaces (overcrowding, especially in living conditions)	<ul style="list-style-type: none"> Upper respiratory infection Tuberculosis 	Dainty, A.R. et al., 2007; Huffman, S.A. et al., 2012; Strand, M. et al., 2006; Adsul, B.B. et al., 2011
	Lack of sanitary conditions at both worksite and living site	<ul style="list-style-type: none"> Water-borne illness, skin infections, other infectious disease 	Adsul, B.B. et al., 2011 Betancourt, T.S. et al., 2013; Kuruvila, M. et al., 2006

Environmental hazards (factors that can harm the body without necessarily touching it)	Altitude (working at high altitudes)	<ul style="list-style-type: none"> • Mountain sickness 	Pei, T. et al., 2012
	Extreme temperature either because the external environment or worksite environment is too hot or too cold	<ul style="list-style-type: none"> • Heat exhaustion, dehydration 	Betancourt, T.S. et al., 2013
	Airborne particles (inhaling particles aerosolized from construction objects, for example through grinding or cutting, or given off from concrete dust)	<ul style="list-style-type: none"> • Respiratory illness 	Panikkar, B., 2012; Rabito, F.A. et al., 2011
Ergonomic hazards (working positions that put strain on the body)	Repetitive movements such as hammering, lifting, bending Strenuous activities such as heavy lifting	<ul style="list-style-type: none"> • Arthralgia • Musculoskeletal problems 	Dainty, A.R. et al., 2007; Gurav, R.B. et al., 2005
Chemical hazards (exposure to a chemical in any form in the work place)	Exposure to construction-site chemicals, such as lead and asbestos	<ul style="list-style-type: none"> • Leukoencephalopathy • Contact dermatitis • Elevated lead levels • Mesothelioma 	Mi, T. et al., 2013; Kuruvila, M. et al., 2006; Panikkar, B., 2012; Perez-Carceles, M.D. et al., 2014; Tan, H.H. et al., 2014; Schneider, J. et al., 1995
Psychosocial hazards (related to the way work is designed, organized and managed as well as the economic and social context of working and living conditions)	Acculturative stress, psychological trauma from relationship with new culture, co-workers, pressure to perform	<ul style="list-style-type: none"> • Suicidal ideation, depression, psychological distress • Post-traumatic stress disorder • Alcohol abuse • Smoking 	Kronfol, Z. et al., 2014; Zhong, B.-L. et al., 2013; Al-Maskari, F. et al., 2011; Jia, X. et al., 2011; Lee, H. et al., 2012; Lee, S.H. et al., 2009; Su, L., W.B. and X. Ling, 2009; Weine, S. et al., 2012; Perez-Carceles, M.D. et al., 2014; Yang, T. et al., 2009
	Low awareness of HIV transmission, multiple sexual partners	<ul style="list-style-type: none"> • HIV, sexually transmitted infections 	Strand, M. et al., 2006; He, N. et al., 2005; Weine, S. et al., 2013
	Poor nutrition	<ul style="list-style-type: none"> • Malnutrition and anaemia 	Betancourt, T.S. et al., 2013; Huffman, S.A. et al., 2012; Kleiner-Baumgarten, A. et al., 2003

* Please see bibliography located at the end of this chapter for complete reference information.

5.4 MAIN FINDINGS

This section presents the main findings of the 29 interviews with migrant workers and victims of trafficking in Kazakhstan. Interviewees had experiences in the construction sector. As outlined in the participant description table, victims of trafficking originated from China, Kazakhstan, Kyrgyzstan and Uzbekistan. The migrant workers were from Kyrgyzstan and Mongolia. Eighty per cent of all interviewees were from Kyrgyzstan and Uzbekistan. All but one interviewee was male. Their ages ranged from 20 to 55, and the majority were married with children. The following topics will be explored: pre-departure; recruitment; occupational risk exposures and outcomes; violence and abuse; living conditions; freedom of movement; health beliefs; medical care and service access; and law enforcement and migration officials.

Pre-departure

Migration motivations

Economic need was a major push factor for migration among interviewees. Economic problems ranged from existing debts or unemployment, to future needs for funds to pay for education, an upcoming wedding or a large purchase.

Among all interviewees, an unstable employment situation at home was the most common reason for migrating to work in another country. This employment instability included unemployment, seasonal employment or low-wage jobs in the country of origin. Interviewees had past experience in the construction, agriculture, transportation and food-service sectors.

There was a spectrum of economic need among the victims of trafficking. Overall, however, their reasons for migration seemed to be driven by more dire financial situations compared to their migrant counterparts. Some victims of trafficking also mentioned food insecurity. As Vlad, a 45-year-old victim of trafficking who was an ethnic Russian from Kazakhstan, put it, *“We couldn’t earn money to buy good food, mainly we had problems with food.”* Dilshod, a 36-year-old Uzbek victim of trafficking, migrated based on the need for money to buy food and clothes: *“Need for money. Children need food and clothing. I had a job there but it was very hard and low-paid. I could earn there 2-3 thousand tenge per day at the current exchange rate of tenge to the Uzbekistani Som.”* Boris, 26, another victim of trafficking who was an ethnic Russian but from Kazakhstan, described having no alternatives to migration: *“I simply didn’t have any other options, I needed money, so I went.”* Gaziz, a 43-year-old victim of trafficking from Kyrgyzstan, described regular seasonal migration as a result of unemployment in his home country: *“I go there every time from May until November (...) we have no job at home.”*

The respondents originating from rural areas tended to be farmers, growing vegetables and raising livestock, which was not a sustainable source of income to cover expenses throughout the calendar year. Migrants working in agriculture in their countries of origin expressed difficulties generating a profit due to over-cropped soil, shortage of irrigation water and small plots of land. Climate change leading to desertification in the Central Asian region may be a driving force behind this type of rural to urban migration. Dilshod, the 36-year-old victim of trafficking from Uzbekistan, described the role of climate change in driving him to find work elsewhere: *“We only grow grapes, potatoes. Nothing else can grow. For irrigation we bring water from other places. We don’t have enough water. That’s why we, aul (village) people want to migrate.”* Jahan, a 47-year-old migrant worker, shared his struggle to rely on agricultural income in his home country of Kyrgyzstan to support his family, including food insecurity: *“I have a family, and I have to feed it. There is no job in Kyrgyzstan. And, even if there is the salary is low (...) I came from the countryside. I tilled the land. We have a land share (...) It was good at the beginning. Now the land is poor, the yield decreased. Diesel fuel is expensive; employment and tractor are also expensive. Basically, no efforts were justified anymore. Costs increased with the*

growth of children.” Yerlan, a 55-year-old migrant worker and the father of five children, also noted the non-sustainability of agricultural work as a way to meet family expenses: “There was no job in Kyrgyzstan. We had to feed our children (...) In Kyrgyzstan, the work was mostly agricultural. We grew products to sell. We worked until autumn, and we have a lot of expenses in autumn, like for holidays, funerals. In autumn, we spent everything that we earned. We had no money after that.”

Prior to migration, some respondents were working odd jobs in a variety of sectors, including construction work, retail, transportation and food service. Baibek, a 28-year-old victim of trafficking from Uzbekistan, described working in a food stand while also driving a taxi, before migrating to Kazakhstan: *“There was a retail outlet in the market, private place. I roasted meat and made shashlik there. I also worked as a taxi driver.”*

A few interviewees had had a good job with a salary that was high by local standards, but decided to work abroad because they were promised more money there.

Many interviewees described labour migration as a strategy to quickly pay off accumulated debts. These debts were the result of basic living expenses, such as food and shelter, or educational expenses. One migrant with three children, 55-year-old Mansur, had a wife who worked as a nurse in a children’s tuberculosis hospital; however, the family needed to supplement their income because of debts the migrant had taken on during his periods of unemployment. Mansur stated: *“There is no point hiding that sometimes we live on that salary. Then, there is nothing left to do but take debts. Then we come here as migrants.”* Another migrant, 42-year-old Kyrgyz Edil, described the social shame associated with being bankrupt as the impetus that drove him to migrate. Edil talked about it this way: *“Then I was ashamed of what people said that I became bankrupt and so on. That’s why I left, through pride (...) All because of this bankruptcy. You try to avoid been noticed in the village, you have to borrow from your friends who live there (...) Now, in order to return them money I left. Only from despair.”* Some migrants’ debts were related to the costs of building homes in their countries of origin. Mansur, a 55-year-old Kyrgyz migrant worker, described taking on a large debt building a house for his family, and migrating as a result of these debts: *“Yes, it’s a big one-story house, We live hand-to-mouth, build the house with great difficulty – we take debts and loans. I’ve been building it for more than 10 years, and yet it is not finished (...) Yes, there are debts. So I came to return them. These debts also go with building.”*

Earning money to pay for the education of family members was the impetus for migration among some of the more financially secure migrants. Migrants whose children were teenagers chose to go abroad in order to pay for the education of their children in universities and colleges. The respondents also paid for the education of their brothers and sisters. There were cases when the migration money was intended for overseas university tuition payments for children. One such migrant, Yerlan, 55, migrated from Kyrgyzstan in order to pay for his children to study abroad in Asia and Europe: *“We have a house. We lived in Talas, regional center. We had no debts. The children were growing up and we had to provide them an education. Our first daughter studied at Malaysia. The son studied in Turkey. Our second daughter is studying in Germany.”* Mahmut, a 43-year-old Kyrgyz migrant worker, was compelled to migrate to pay for his children’s tuition: *“Two of my children are students (...) Therefore, there was no choice, I had to go where I could earn more money. So, we turned to the migration service, in order to find a job.”*

For some migrants, such as 55-year-old Mansur, educating their children in Kazakhstan contributed to their decision to migrate. Migrant children are provided education through high school according to law.¹⁸¹ As Mansur put it: *“I was not able to provide education for my eldest son after school. He became a builder. The same story with my daughter, she also doesn’t have one [education]. Now I want to make an effort to provide education for the youngest son.”*

¹⁸¹ Verité, “From the field – Kazakhstan: Migrant kids can go to school”, Verité. Available from www.verite.org/vision/december2012/from_the_field.

One young unmarried Uzbek victim of trafficking migrated in order to save up for his own anticipated future university tuition. Beksultan, 21, said: *“They [his parents] also said that I have to enter the university this year (...) And I said that if I had worked for two months it would also help me. I have to study. I wanted to make it easier for my parents.”*

Interviewees’ expenses related to meeting cultural expectations played an important role in the decision to migrate. These cultural obligations, which come into play when one is living in one’s home country, include attending and hosting traditional parties, holidays, weddings, funerals; visiting parents in aul (village) – all of which are costly and could prevent people from saving money. According to traditional local culture, when you live in such an environment, you cannot ignore invitations. Therefore, in order to save money the migrant makes a decision to go to work in another country. Staying away from home, the migrant worker is no longer responsible for the above-mentioned types of expenses. In addition, in the process of labour migration, the interviewees could save money because his only expenses were the basic ones.

Two Uzbek victims of trafficking migrated because of large expenses related to one particular cultural obligation, the wedding. Aday, 44 and a victim of trafficking from Uzbekistan, described large expenses related to his son’s wedding. *“My son wanted to marry. I have to buy metrazhka for all my guests (...) It’s a linen shirt (...) We need 10,000 [US] dollars, it is very expensive to get married here (...) That’s the reason why wife respects him [husband] then. You have to open your soul at the wedding. You have to hold the wedding as good as possible (...) From 500 to 1,000 guests.”* Dilshod, 36 and another Uzbek victim of trafficking, talked about saving for his daughter’s wedding: *“My elder daughter is 11 years old. She will marry in six to seven years. I have to get ready for that. She can’t get married just like that. I have to prepare her clothes, TV, wardrobe. That’s why I go away to find work.”*

Decision-making and social norms related to migration

Most respondents had a prior experience of labour migration within their own country and often abroad. Abay, a 25-year-old victim of trafficking who was an ethnic Kazakh from China, commented about his prior migrations: *“Few times I went to work in Urumqi (city in northwest China), also in other nearby towns of our area.”* Zhambul, a 23-year-old Kyrgyz migrant worker, described his experience: *“I’ve worked in Bishkek for two years. Then my brother asked me to come here. So I came and started to work (...) In Bishkek I also worked in a construction company.”*

More than a half of the respondents had travelled to work in the Russian Federation before, mainly in Moscow. Among the victims of trafficking interviewed, six had migrated previously to the Russian Federation. Most of them worked on construction sites where they gained skills. Some migrants were “blacklisted” in the Russian Federation for violating migration laws, presenting false information about themselves, not paying fines, and for other reasons, so they chose Kazakhstan as their next migration destination. Edil, a 42-year-old migrant worker from Kyrgyzstan, described this pattern: *“Then my wife’s brother asked me to come to Astana. I thought that Astana is likely much the same as Moscow.”* Also, due to international human rights outcries after the Sochi Olympics, the Russian Federation appeared to be decreasing the number of migrant workers permitted, as Mahmut, a 43-year-old Kyrgyz migrant worker, explained as his reason for migrating to Kazakhstan rather than the Russian Federation: *“We had been in Moscow since 2007, and when due to 2014 Olympics in Sochi the number of migrants was reduced, we were also among them and couldn’t come back to Moscow.”*

Moreover, migration was a common phenomenon in the interviewees’ communities of origin. Edil, a 42-year-old Kyrgyz migrant worker, spoke of the normalcy of migration: *“We have many people from our village who went to work abroad (...) Most of them went to Moscow. There were also those who went to Astana.”* Yernur, a 25-year-old migrant worker also from Kyrgyzstan, described migrating against his parents’ advice, because it was a norm in his peer group:

“They (my parents) worried about what was waiting for me here. They told me to stay at home saying that we lived almost well. They were also right, but I was young and it was interesting to me. If my friends went there I wanted to go too; it was a present-day practice.”

As a result of migration trends, there were known community networks in Kazakhstan, as Yerlan, a 55-year-old Kyrgyz migrant worker, shared: *“We chose Astana because we already had friends and acquaintances there.”* Qadir, a 41-year-old Kyrgyz migrant worker, expressed how migration was perceived in the community as a path to a better life, including material goods: *“Looking at others, you see that many people go to work abroad, in Russia, Kazakhstan, and when they come back they buy houses, cars, improve their financial situation. And you stay here trying to earn money... you can earn money here too, but this money go for daily expenses. Your kid needs something, you have to buy something to your home, here and there...and that’s it, you have no more money.”*

Migration was also perceived as related to the male’s role in providing for the family, as 43-year-old Kyrgyz migrant worker Mahmut explained: *“Children have grown up, they have to get married, build a house (...) There is no one else to help them but me.”* Idris, a migrant worker from Kyrgyzstan who was a 25-year-old father of one, described the role of the Muslim man as the breadwinner through migration: *“It is harder for women (...) I wouldn’t want to send my wife to work abroad. For example, even when we are together and she says she wants to go I say no. A man must create conditions for his wife and children. A woman’s work is at home. Today women work and earn because of difficulties. According to sharia women’s responsibilities are to stay at home, raise children, meet their husbands from work, cook and wash the clothes.”*

Recruitment

Among migrant workers and victims of trafficking, there were those who were recruited through employer invitation and those recruited more informally, through migrant networks.

Formal recruitment

Seven of the sixteen migrant workers interviewed were recruited through the Employment Centre of the Kyrgyz Republic, an official employment agency in Bishkek, Kyrgyzstan, with the active assistance of two offices of the International Organization for Migration. These Kyrgyz respondents, each at different times, had their CV in the Bishkek Employment Centre of the Kyrgyz Republic; employment service workers called the interviewees to offer them a job in Kazakhstan with a large construction company. They signed contracts and went through pre-employment medical examinations in Bishkek; were provided with photographs, documentation, work-related clothing and company housing. They also worked with an official work permit issued by state bodies in Kazakhstan as part of quotas.

Of the twelve victims of trafficking, six (two citizens of Kazakhstan, two ethnic Kazakh citizens of China and two citizens of Uzbekistan) were recruited via employer invitation, always through an intermediary or agent. A man from a neighbouring village who had previously worked in Kazakhstan became an agent for migrants from Uzbekistan. The two Kazakhs from China and the two citizens of Kazakhstan considered their agents friends. Abay, 25, an ethnic Kazakh victim of trafficking from China, explained how he was recruited by his friend in a time of financial need: *“I needed money and when I was trying to get it I told my friend about my problem. I asked him if he could loan me some money...he said “I don’t have it but I can introduce you to someone who does; the question is – would you work with him?” He explained me that, first, I would be given money, so he asked me if I could go to work to Kazakhstan.”* According to the interviewees, at the time of recruitment the friend had no idea about the likelihood of fraud from the agent; the friend described here, who recruited Abay, also became a victim of trafficking through the same scheme. Before departure, the two migrants from China signed contracts that included information that they received a cash advance; however they were not able to review the contract in detail before signing. For victims of trafficking, working

conditions, salaries and accommodation were always discussed in oral form. Abay described the dissonance between their oral contract and reality:

“Our job was different from what the boss of the company promised us, he didn’t keep his word. He told me that after the arrival we would make a separate contract according to the type of work. But we didn’t make such contract. After our arrival, we immediately started to work, and it wasn’t that easy as he told us. The place where we lived, food wasn’t what he described.”

Beksultan, a 21-year-old victim of trafficking from Uzbekistan, explained how the agent lied about the type of construction work he would be doing: *“He said I would be doing finishing works. Interior finishing. But when we came all the work we had to do was outside. The intermediary deceived us (...) The Kazakhs said to the intermediary to bring people. And the intermediary gave us false information.”*

For all of the victims of trafficking, the employers lent money, helped with transportation and met them on their arrival. Abay described the cash advance and bemoaned being duped by the trafficker: *“About 30 per cent of total remuneration. It was a way of attracting people to this work. They intentionally looked for people being in their right minds and in need who can work abroad. We were among such people. Basically, we were happy with everything, if only they had carried out their responsibilities none of this would have happened.”* Dilshod, a 36-year-old victim of trafficking from Uzbekistan, explained how the moment of paying for his bus ride quickly turned into confiscation of his passport: *“The employer paid for the trip from the border to Almaty (...) The employer met us at a bus station ‘Altyn Orda’. He paid the driver. Then he took our passports for registration procedure. He didn’t give them back.”* It is notable that Dilshod, before migrating and being trafficked himself, recounted hearing of trafficking on TV: *“I saw on TV. Then I heard about it from a guy in town. I didn’t know him personally, I just heard his story about a house in Kazakhstan desert when I was sitting in the café. There were four people with chained legs in that house; they were forced to make bricks from clay.”*

Migration contacts and networks

For migrant workers for whom employment was arranged through the Employment Centre of the Kyrgyz Republic, there was trust in the International Organization for Migration that provided reassurance. Mukhit, 28 and from Kyrgyzstan, explained: *“Before leaving I told them [his family] that I wanted to come here, of course they asked me if it was safe, and if those people could be trusted. They told me to thoroughly find out everything before I leave (...) I told them that the job was good, that people were taken through the Employment service; that we were protected and IOM controlled everything. So we trusted and came.”*

For most of the migrant workers interviewed, leads on paid employment outside the country came through relationships and were not employer-based. For example, these individuals would learn of work through local residents in their villages, their friends and relatives. Idris, a 25-year-old Kyrgyz migrant worker, explained his decision to migrate based on a family contact: *“My cousin...invited me, he said that there was a good job. He also worked at a construction site. He’s been setting travertine and granite since he came there.”* Several men described how friends would meet them at the destination location. Yernur, another migrant worker (age 25) said, *“Two of my friends were here [in Astana]. We asked them if it was worth working there, we also asked them if they worked there too. Yes. They said we could come if we wanted to work, they said that there was work. So. That’s how we came.”* Other migrant workers, such as Jahan, a 47-year-old migrant from Kyrgyzstan, said that they would travel to the destination with their friends or work colleagues. Jahan described it like this: *“I came here with my former classmate. He’s been here before. We came by bus. He did my registration.”* In some cases, a relative or friend would travel to the destination first, and then invite the interviewee to meet up with him at the work location. Migrant worker Edil, age 42 and from Kyrgyzstan, shared this stepwise process of migration as a family: *“My wife’s brother invited us. First, he invited my wife. He works with*

fruits (he sells them) (...) When he said 'Don't worry, brother-in-law, come here' I sent his sister there first [interviewee's wife]. I came there myself in three months." Zhambul, a 23-year-old Kyrgyz migrant worker, described a similar process among a network of migrant friends: "First, I worked in town. In Bishkek (...) We saw off two of our friends (...) They were invited by one of their brothers-in-law. They invited us in a month." Zhambul invited his schoolmate to migrate and join him after arrival, because they had worked together in Kyrgyzstan: "We are like friends. We worked together in Kyrgyzstan. We work here together as well, respecting each other (...) Two came earlier. Then called me. And I called my schoolmate." A number of men who had had a previously successful work experience with certain workmates tended to repeat the same migration cycle, relying on trusted migrant networks or construction groups. For instance, Nazar, a 21-year-old migrant worker from Kyrgyzstan, explained: "The foreman asked me to come; he said that there was work. He was a Kazakh guy (...) He's a brother-in-law of my friend, my friend introduced me to him." When men had a friend to meet them at the location, this appeared to ensure that potential migrants would have safer passage and served as way to make certain they would end up in the promised work.

Travel conditions and registration on arrival

Most of the interviewees reached cities within Kazakhstan via international transit buses. None of them noted any serious problems on the way to their cities. However, there were interesting differences between victims of trafficking and migrants in terms of payment for transportation. Whether or not registration occurred upon arrival in Kazakhstan also differed among interviewees.

Victims of trafficking from Uzbekistan hired taxis to reach the border of Kazakhstan through stepwise travel from their homes to Tashkent, the capital, and from Tashkent to the border of Kazakhstan. They took taxis because there were no international passenger buses going from Tashkent to Kazakhstan's cities. After passing the border control point, they took a bus to Almaty. Most borrowed money to get to Almaty. The Kazakh victims of trafficking from Kokshetau, Kazakhstan also borrowed money to get to Balkhash, Kazakhstan by bus. For both of these groups of victims of trafficking, the employer met them on arrival and paid the bus driver for their trip.

Only the group of migrant workers hired through the the Employment Centre of the Kyrgyz Republic in Bishkek, Kyrgyzstan, travelled by train. Labour migration organizers paid for their trip and the representative of the construction company met them upon arrival. Unlike other migrants, these migrants brought their certificates and diplomas with them, certifying their skills in the construction trade.

The remainder of the labour migrants, whose employment was arranged informally via migrant networks, typically arrived in commercial buses that travel from the vast Dordoy bazaar in Bishkek, Kyrgyzstan to the Shanghai open market in Astana. Merchants use these commercial buses to transport their wares and they are not designed for passenger transportation. Many migrant workers interviewed borrowed money from their relatives, friends and other acquaintances to pay for this international transportation. However, in contrast to the victims of trafficking, employers never paid for the journeys of the migrant workers. Idris, a 25-year-old migrant worker from Kyrgyzstan, explained: "My brother met me and paid for the trip when I came here."

All of the interviewees had their passports with them when travelling to Kazakhstan. When they entered the country, they filled out migration cards with their demographic and passport details. Interestingly, some victims of trafficking interviewed asked other people to fill in their migration cards; sometimes for a fee, sometimes for free. Migrants also noted there were such people on the Kazakhstan and Uzbekistan borders providing this migration-card-completion service. Possible reasons for the demand for such a service may be illiteracy, or the complexity of completing the migration card.

On the bus to Almaty from the Kazakhstan border victims of trafficking from Uzbekistan gave their passports to the driver. They felt comfortable with this arrangement, because when the bus was stopped by police officers the driver could immediately show all of the passengers' passports and migration cards, saving time and reducing the chance of direct contact between the police and

migrants. Drivers appeared to keep migrant passports as collateral for future payment; after payment was received at the destination, the documents were relinquished.

After arrival at their final destination, according to law, migrants needed to register their place of residence with the migration police. Migrants can register the purpose of their visit as “private” (that is, not work) for up to 30 or 90 days, depending on their country of origin. Foreigners cannot register themselves, and could only be registered by a citizen of Kazakhstan in his or her owned or rented accommodation. Therefore, to officially register, migrants needed to pay Kazakh citizens who agreed to register migrant workers in their own homes. Because the Kazakh citizen needed to present the migrant’s passport, the migrant had to temporarily hand over his or her passport to this citizen.

There were cases when interviewees did not complete the obligatory registration either intentionally or because of ignorance of the rules. As Yernur, a 25-year-old Kyrgyz migrant worker, explained: *“We had documents with us. We didn’t register when we came (...) But we ourselves did not know what was the residence permit, I myself didn’t know that (...) How to make the documents, where and to whom you should go, I didn’t know that.”* Some of the interviewees knew that a violation of this registration rule would result in a fine. The Uzbek victims of trafficking noted that the fine was part of the fraud experienced at the hands of their traffickers. Beksultan, a 21-year-old victim of trafficking from Uzbekistan, explained: *“We were told we would get a 100-dollar fine for crossing the border, 18-odd thousand tenge. This was due to the delay of registration. And he [the employer] said, ‘I’ll give these 100 dollars for you.’”*

Delay or absence of registration was often detected at border control when leaving Kazakhstan, as Jahan, a 47-year-old migrant worker from Kyrgyzstan, noted: *“Yes, I had my passport. On the border I had my migration card filled in. After arrival I registered for a month, you could get your registration only for a month at that time. But we didn’t leave in a month, we stayed. We had difficulties when we were leaving then.”* To avoid paying these fines, Kyrgyz migrant workers had informal ways to leave the country with the help of drivers of international buses or through intermediaries on the border. Lack of registration among Kyrgyz migrants was rarely detected when they were still in Kazakhstan, because they closely resembled Kazakhs. Migrants noted that staying without residence registration caused varying problems during their stay in Kazakhstan, including fines or needing to bribe to law enforcement while in country, or upon departure from Kazakhstan.

Contracts, agreements and promises

The migrant workers who came to Kazakhstan in an organized manner, through the employment agency, signed contracts in Bishkek, Kyrgyzstan that included information about wages, guarantees of accommodation and facilitation of all legal documentation for work in Kazakhstan. Of the victims of trafficking, only the two men from China signed contracts. These contracts, however, did not include information about working conditions, salaries and accommodation, topics only discussed orally. They did include the employee’s responsibilities and outlined that the employee had received a cash advance; the portion of the contract that these two men remembered was their debt to the employer. Gaziz, 43 and the sole Kyrgyz victim of trafficking among the interviewees, recalled: *“No, he didn’t bring a contract. He said that after we had finished our work he would give 1 million tenge [approximately USD 5,483] for four of us.”* Boris, 26 and an ethnic Russian from Kazakhstan, recounted the following: *“He said ‘I will pay you good money’. So I went there.”*

When they were asked about information they might have received about their future work situation (pay and other aspects), both migrant workers and victims of trafficking reported that they learned cursory facts, such as how to get to the job location and the approximate amount of money they might earn. Few people seemed to be aware of other details. Information such as the need for registration at the place of arrival, whether it was necessary to obtain permits to work or not and information on housing rental fees and working conditions usually were only understood after their arrival. The only exception to this lack of awareness was the Kyrgyz migrants who had their employment arranged through the official employment institution in Bishkek.

Wages

Migrant workers were either paid per job or were salaried. The cohort working through official contracts from the Bishkek employment agency was salaried. The salaried migrant workers enjoyed the predictability of income and were less worried about fraud. Their monthly salary was about USD 800, but they were able to stay in the company dormitory for a nominal fee (USD 40 per month), and were provided free bus transportation to and from work, along with special work clothing.

The rest of the migrant workers were paid per job, or per square meter. Migrants who worked in teams would either divide their earnings equally or on the basis of worker specialization. An independent team of migrant workers working with private customers received on average about USD 1,000 per month per person. However, there was seasonal variation. During warmer months, because the conditions were more comfortable and there were more daylight hours and more customers, the workers performed more work and some interviewees earned up to USD 2,000 a month. Most migrant workers were satisfied with such income and were able to save and send remittances home. Yerlan, a 55-year-old Kyrgyz migrant worker and father of five, noted the benefit of working with a Kyrgyz team, being paid per job, and his relative financial prosperity: *“The team and I don’t work for a fixed salary. We get the money for the amount of work that we did. The payment depends on how fast and good your work will be (...) It covers everything. Now I’m earning 200–250,000 tenge [USD 1,096–1,370] per month.”* Those workers who had a family with them in Kazakhstan and needed to rent separate accommodation found this income was not always sufficient to meet their needs. Interestingly, migrant workers noted that their pay did not depend on whether they were a migrant or local worker, and some explained that knew that they were paid the same as a Kazakh completing the same job.

In contrast, all victims of trafficking reported being promised a fixed monthly salary. When they were recruited, they were promised an average of about USD 500 a month. However, they were deceived and given much less than this amount or no wage at all. Azat, a 33-year-old victim of trafficking from Uzbekistan, explained how he was purchased from migration police, and then was given the false promise of a monthly salary: *“He said that now we had to work there, they would pay us 50 thousand tenge [USD 274] per month. He said that we got no choice. He said that we could go the easy way agreeing to work like that. Or the hard way. He said let’s keep the easy way (...) I got nothing.”* Another victim of trafficking from Uzbekistan, 21-year-old Beksultan, noted how he was cheated: *“Basically, I’d worked for four months and got 500 dollars in total. He didn’t give the rest of the money.”* They reported how employers had deducted from their wages for the costs of food, cigarettes, mobile phones and transportation. Beksultan spoke about these marked-up charges: *“He said that cigarettes and naswar [a form of chewing tobacco] he would withhold from our salary. I didn’t smoke or consume naswar. He withheld equal amount from everybody without asking whether you smoked or not. I should have smoked once he had done this.”* As a result, most participants who were trafficked returned to their countries of origin with very little money. Beksultan further explained how another group of victims of trafficking returned home with just USD 100 for three months of work: *“He [the trafficker] gave each of them 300 dollars, he said that they themselves would have to pay the 100 dollar fine on the border control and for the bus. It turned out they had been working for three months and then brought only 300 dollars (...) Each of them had to pay for the bus, and the price was 100 dollars.”* Boris, a 26-year-old victim of trafficking who was an ethnic Russian from Kazakhstan, returned home with *“maybe about 20–30 thousand tenge [USD 110–165] in cash.”* In a number of cases, traffickers initially gave workers a small amount of money (USD 100–200) in the first few months, promising to give more in the upcoming months, as a means of extracting months of free labour. Beksultan earned 500 dollars in the first four months, and then was strung along with the hope of more payment: *“Basically, I’d worked for four months and got 500 dollars in total. He didn’t give the rest of the money (...) He said that he couldn’t get the money yet. However, they could afford to buy a car. Three months passed.”* Oleg, a 47-year-old victim of trafficking who was an ethnic Russian from Uzbekistan, recounted: *“So I started to make hints: ‘What about the money?’ ‘Salary?’ ‘Yes, salary, a month passed’. So he [trafficker] said ‘Let’s finish these buildings first, here, take an advance payment, how much do you need?’ I said, ‘Well, enough to buy clothes’. I came there even without my working clothes.”*

Occupational risk exposures and outcomes

This section first describes the types of construction work tasks, payment dynamics, training, and use of personal protective equipment among migrant labourers in Kazakhstan. Occupational hazards, including injuries and accidents, are then discussed.

Interviewees participated in a large variety of different types of construction work. To some extent, the type of work varied with the season. During the warmer months, they worked mostly outside, for example, laying bricks or building sheds. In winter, they worked indoors – for example doing building renovation. There were workers who were commissioned for the construction of one project (shop, cottage, resort) and performed construction tasks from the very beginning (poured concrete for the foundation) to the end (roofing).

Most interviewees served in a wide gamut of construction related roles, including electric wiring, plastering, tiling, welding and floor screeding. Exceptions to this were those migrants who came through the official employment agency and were trained and certified in specific types of work. In this group, an individual migrant only performed one type of job; for example, the welder only welded. Migrants did not limit themselves to construction work during their migration, and would sometimes work in other sectors while in Kazakhstan. For example, at different points one interviewee was engaged in interior decoration, sold fruit, performed bricklaying, waxed floors, worked as an electrician and assembled and installed railroad ties. Another migrant worked as a security guard in a parking lot, sold fruit, worked as a driver of a passenger van, drove a truck and worked in a warehouse, and was also engaged in yard landscaping for residential houses. Edil, a 42-year-old Kyrgyz migrant worker, described his occupational versatility like this: *“I have been working on his place for four months, then on the construction site, then I went on to sell fruits (...) Worked as an operator, washed the floor with a machine (...) I built this wall (...) I work with the insulated floor, laminated flooring, plasterboard. I create something like yurts of plasterboard (...) We were repairing a two-storied kindergarten, I was responsible for electrical installation work.”*

Victims of trafficking did the most unskilled and most strenuous work, despite prior training in more skilled forms of construction. They were required to do whatever work their employer asked for, which included farming for one group of victims of trafficking.

Migrant workers who came through the Employment Centre of the Kyrgyz Republic worked with a large construction company and tended to work on bigger construction projects, such as building a large skyscraper. Those migrants who travelled through migrant networks more often worked with smaller, known teams of other migrants. These migrant teams found it helpful to have a trusted, local Kazakh intermediary who would connect them with construction jobs, negotiate on their behalf, and provide the customer with receipts for tax purposes. Migrants could not provide such documents. In exchange, a typical intermediary's margin was 5 to 10 per cent of the total amount received for the completed construction project. One Kyrgyz migrant worker, Yernur, 25, described the role of the intermediary: *“He establishes the right price for both sides, and then we start to work. For example, at our present job, when we work with marble, the payment is made after the completion of every 100 m².”*

Work schedule

A typical working schedule for migrants workers followed this pattern: at 8 a.m. the work began; lunchtime was from 1 p.m. until 2 p.m. The workday ended at 7 p.m. Once a week a migrant had a day-off. However there were factors that caused significant deviation from this schedule, including hours of daylight, weather, building material supply and the structure of remuneration. For independent construction teams, which were paid by job, a workday lasted for about 12 hours during the summer months to maximize daylight. Workday length was also determined according to project progress. Jahan, a 47-year-old migrant worker from Kyrgyzstan, explained: *“Generally, as we came to work, we were informed like this: as you finish the work you are free. So the earlier we finish our work, the earlier we go home. Sometimes we are finished by the lunchtime, sometimes we have to work till*

night.” Migrants employed through the official agency had more structured work schedules. Both in winter and summer they would wake up at 5.30 or 6 a.m. in the morning, commute to their worksite and work for 10 hours, which included one hour for lunch.

Victims of trafficking had the most strictly enforced and gruelling workday. Breaks were minimal, for example barely 5 minutes. Azat, a 33-year-old victim of trafficking from Uzbekistan, described the lack of sufficient breaks and the tightly controlled movements of the victims of trafficking: *“Well, I told you that he drove us from place to place all day. People get tired, you know. We had two-three minutes to smoke and have rest, then he [supervisor] would take a car and move from one place to another.”* During summer months, they had longer workdays. Abay, a 25-year-old victim of trafficking who was an ethnic Kazakh from China, described long days of intense work: *“We began our work early in the morning at 4–5 a.m. We worked for 14–15 hours per day. About 8 p.m. we finished, at the sunset. Of course we had lunch breaks and small coffee breaks. Generally after such working day. You know what I mean? Their goal is to use us to maximum, to grab cash on us.”* Abzal, age 20 and a victim of trafficking from Uzbekistan, also spoke about the long and difficult workday:

“We continued working till 9 p.m. they treated us as if we weren’t humans, we had been working for 14–15 hours per day.”

Those victims of trafficking who were not given prepared food were the most exhausted, because they had to cook lunch and dinner within limited periods of time. Often victims of trafficking did not have a given day off within a week; they were occasionally allowed to have a shorter workday on holidays. Aday, a 44-year-old victim of trafficking from Uzbekistan, described missing meals and a lack of days off: *“Due to work we didn’t have time to make our meal (...) No break on Sunday, we worked non-stop.”* Traffickers required the victims of trafficking to use their precious time off to do cleaning and fix machinery. Abzal, the 20-year-old victim of trafficking, described how they were tasked with repairing machines in addition to their regular work, which would deprive them further of sleep: *“I do not know. I have suffered a lot at this job, it was very difficult for me. I worked 15–16 hours a day, we also had to do repairs. If a machine went out of order, we had to repair it ourselves. When other workers had some rest during the day, we did not. When others had a rest in the evening, we did not, we repaired the machines till 11 p.m. or midnight. So we could sleep only four or five hours a day.”*

Training and the use of personal protective equipment

The majority of the interviewees, 21 individuals out of 29, did not have vocational certification or formal training in construction or engineering. All of those who travelled through the official employment agency had such documents; this group included two men with engineering degrees from universities. The rest learned their construction skills on the job, often from prior experience in construction either in their homeland or in other migration cycles. Dilshod, a 36-year-old victim of trafficking from Uzbekistan, referred to construction skills acquired in the Russian Federation: *“No, I learned [to lay bricks] in Russia. I also worked in Uzbekistan but I never laid bricks there.”* Another victim of trafficking, 45-year old Vlad (an ethnic Russian from Kazakhstan) said he learned from his family member: *“My brother completed vocational technical training, he’s a finisher, I learned from him.”* Before arriving in Kazakhstan, most respondents had familiarity with basic construction tools including the angle grinder, hammer drill, spirit level, shovel, rake, hammer, pliers and screwdriver. They noted that construction materials often had different names in Kazakhstan compared to the Russian Federation or their home country. In Kazakhstan some of them gained more specialized skills, for example, joining metal-reinforced plastic pipe using pressing jaws and doing facade stone installation.

Among the majority of both migrants and victims of trafficking, skill acquisition was informal and often in a team-based apprenticeship environment. Twenty-eight-year-old Kyrgyz migrant worker Mukhit said: *“In fact, they didn’t need more workers, they needed more specialists. Once you came there you had to be ready immediately start your work. They didn’t teach you what and how you should do. First,*

you worked with the team, watched how and what everything was done, got the understanding of what they did and started working.” When asked how he learned to screed walls and floors, Dilshod, a 36-year-old Uzbek victim of trafficking, explained: “A man from a neighbouring aul. He also came to work here. I spent with him three days (...) Then, three days later I took an assistant and started to install screeds on the floor.” Edil, a 42-year-old migrant worker from Kyrgyzstan, talked about an informal certification process, which earned him the title of “craftsman”: “Then I took the solution, cleaned the damaged bricks. Each brick was 25 cm in length, there was no plaster on the outside, the gypsum was applied from the inside, that’s it (...) The joint had to be very straight, the solution should not bulge. So I made that wall; then the inspection came, they checked us all the time...so when they came they asked my name. They said that from now on I was a craftsman and he was my assistant.” There was a wage differential that incentivized specialization of construction skills, as explained by 25-year-old Kyrgyz migrant worker Idris: “I worked as an unskilled worker for two days. Then I laid the tile, I did that in Bishkek, and in between I did some other jobs. I watched and learned how other people worked. An unskilled worker got 350 tenge [USD 1.92] per hour, craftsman got 650 [USD 3.56]. Then I told my brother that I was going to put stones. Then I said that to a Turkish guy named Ali, he said ‘go ahead’. I put four bricks on one site, as soon as I did that, I was told that it would be my work. When I did those four bricks the craftsmen were very surprised, I didn’t know how I managed to do that. That’s how I became a craftsman.” One victim of trafficking from China, 20-year-old Abzal (an ethnic Kazakh), stated that he was never trained: “No, nobody taught us anything. They cussed us out in Russian and said that if we wanted to earn money we would have to learn ourselves.”

For personal protective equipment (PPE), special construction gear was provided for and worn by only those migrants who arrived via organized migration to work with large construction companies. Yerlan, a 55-year-old Kyrgyz migrant worker, explained the difference in PPE use on large versus small construction sites: “Work suits are personal. We wear gloves. No hard hats. We wear them only at large construction companies. A hard hat is provided by the company.” Yernur, a 25-year-old migrant worker from Kyrgyzstan, spoke about the conundrum of a requirement to wear hard hats, but having an inadequate supply: “As we are at the site, we need to wear hard hat too. It is prohibited to work without it (...) But there are only two here. We do not have required amount. But we shall work in hard hats according to the regulations.” The most commonly worn gear for all interviewees was hard hats, gloves and glasses. In general, migrants had to purchase PPE for themselves. Yernur noted: “For example we wear mask during welding, they are sold in the market now. Sometimes we have to tailor hats ourselves, because welding fume can burn face.” Migrant workers often reported not wearing PPE, such as during strong frosts and in high heat. They would take off masks but not don the ill-fitting hard hats. Yernur further described not wearing a poorly fitting hard hat: “Well, we were working at the public prosecution department. And there we worked in masks. It is very uncomfortable to get a hard hat on. It does not sit, falls down. That is why we often work without it.” Mansur, a 55-year-old migrant worker from Kyrgyzstan, also referenced how the extreme heat made it uncomfortable to wear masks: “We wear mask as we have it. But it is not a 100 per cent protection. It is very uncomfortable when it is hot and stuffy. So sometimes you work without mask.” Another Kyrgyz migrant worker, 25-year-old Idris, spoke about the need to wear a protective harness when working six or seven stories up, but not when working at lower heights, an arbitrary cut-off: “Yes. Sometimes you have to walk on a 30 cm diameter board, we’re used to this (...) No safety harness. We do not wear belt up to the third floor. On the six/seven floor we would put it on, a hard hat too. Full gear.”

All victims of trafficking worked in the clothes they brought with them and were inadequately supplied with PPE. Aday, a 44-year old from Uzbekistan, said: “We left our working clothes, which we brought from Uzbekistan, in the taxi when the police took us. We never saw those bags again. They only gave us gloves at the compound.” Altynbek, a 43-year-old Uzbek, described not even having work boots: “When they kidnapped us, my things were left in the taxi (...) I had no shoes.” Azat, a 33-year-old Uzbek, described how lack of PPE was linked to their subjugated role:

“Of course we were not given a mask, no protective items at all. (...) How can you ask for something if you’ve already been shown where your place is. Like I said we had been working in rain and our shoes got wet. So I took them off and said ‘all human beings have human feelings, look how many days we’ve been working in wet shoes!’”

Work-related health risks

Kazakhstan’s climate was an inhospitable place in which to work. Interviewees cited dust and extreme temperatures as contributing to the difficulties in working there. Jahan, a 47-year-old migrant worker from Kyrgyzstan, recounted his jarring adjustment to the frigid, wintry Kazakhstan climate: *“We came here in autumn, I guess in September – October. Strong wind was blowing when we got out of the bus (...) We didn’t like the weather (...) Chilling wind, vast expanses.”* Abzal, a 20-year-old victim of trafficking who was an ethnic Kazakh from China, noted: *“I didn’t like it at all, that place was out of town, actually, it was a desolate region, the dust was everywhere.”* Idris, the 25-year-old migrant worker from Kyrgyzstan, described working in the extreme cold like this: *“Yes, it was very cold there. Reaching about -43°C. When I arrived to work with the Turks in Ak-Bulak.”* Mansur, a 55-year-old Kyrgyz migrant worker, described the effects of frostbite:

“Except for fittings we carry hooks, hands are freezing. But this turns out you can be accustomed. Here they are [pointing at fingers], cracking from the cold under the nails. Though I have three days rest, still my fingers are slightly swollen. We put on gloves, by they do not help against frost. From morning till evening we twist and knit reinforcement metal [pointing with hand]. So you hold cold metal, though on in different ways - it is still cold metal. And in the evening you look... and wonder, fingertips become stiff and swollen. Of course then get cracked.”

The most commonly cited dangers for migrant workers and victims of trafficking were occupational hazards. Interviewees mentioned the following potential occupational exposures: electric shock, hearing loss, falling from a height, dust inhalation, falling objects (for example from a crane), face burns during welding, lacerations while cutting metal, scaffold falling apart or other unstable structures, being hit with concrete shards during drilling, working with harmful chemicals, working around high temperature (near furnaces, boilers), and using broken equipment and tools. Mansur, 55, explained how his spine problems came about: *“In the back, between the vertebrae (...) It’s an occupational disease. When finishing ceilings you are standing not directly, but bent. Then it begins. I worked in a narrow place, and after that the problem started. At one point I could not straighten up.”* He also noted hearing loss: *“It turns out my ear cannot hear.”* Edil, a 42-year-old Kyrgyz migrant worker, spoke of myriad risks on construction sites: *“There are sites with balconies, or electric currents, sometimes you do not notice a cord and then hit with a rock drill or start working with a hole puncher or disk grinder, and you are struck with electric shock (...) You can fall off during outside works. In general, construction activity is a simple for one, and for others, if to look closer, there are hard moments. And dangerous moments too (...) Harm is resulting usually from dust, when you are crushing something or cutting a brick.”* Mansur described the various ways in which he was constantly inhaling harmful dust: *“As I finish, together with pallet knife I use rock drill, screw driver, tile cutter, knives, hammer etc. so you hit, cut and so on. There is dust during finishing...mixing paste filler and cement. Especially when you use disk grinder while tile cutting. They are different light and heavy. Dust is all around when you cut (...) Of course it is harmful.”* Beksultan, a 21-year-old victim of trafficking from Uzbekistan, also noted the ubiquitous exposure to dust: *“There was much dust when we were unloading concrete (...) yes, in bags. There was much dust when you unloaded concrete. They threw it from KamAZ [Russian truck brand] onto ground and the dust flew everywhere. And you took it and carried it to the warehouse. There was lots of dust in the warehouse.”* One victim of trafficking, 20-year-old Abzal, an ethnic Kazakh from China, recalled his exposure to high heat and how it affected his health: *“I had stomachache, no nausea, just pain (...) First we had poor nutrition. And it was very hot where I worked*

+70°C. Possibly the illness was induced by heat (...) There was a large furnace at the plant. I worked next to it. It was round, about 40 X 50 m. It produces bricks.”

Among the interviewees, there was an awareness of the chronic toll that construction work took on their bodies. Mukhit, a 28-year-old Kyrgyz migrant worker, summed it up like this: “Here at the construction site you can work one or two years maximum, and then health will not allow it.” Fatima, a 48-year-old migrant worker from Mongolia and the one female interviewed, noted: “Gas welding was bad for eyes. I have poor sight now. I can’t sew (...) My knees sore a bit (...) Well, I’ve been working on construction sites for many years. Sometimes I had to take two/three cubic meters of solution in a wheelbarrow to the ninth floor. Now I also have varicose veins.” Mansur, the 55-year-old migrant worker from Kyrgyzstan, explained how he was worried about his lungs the most, but also the trauma on his joints from repetitive heavy lifting: “I’m concerned about my lungs the most. And my joints (...) Yes, both knees. They hurt. But I don’t tell anyone here about this, I work (...) It is because I am carrying too much weight. And as we work here, at the department, we carry large sacks – 25 kg each. We carried them as we were laying tiles.”

Migrants working with large companies reported following safety procedures more often than those that worked elsewhere, because there was more regulation and monitoring. Safety violations at large companies resulted in punitive sanctions for workers; for example one interviewee spoke of being fired for not wearing his hard hat. Despite these facts, however, there was a general perception among those interviewed that working at a smaller construction site was safer – because, unlike large construction sites, the workers were less likely to be working at high heights with large machinery. Yerlan, a 55-year-old migrant worker from Kyrgyzstan, described the risks of working on big construction projects and also talked about the dangers of dust inhalation: “Working with a crane is enough dangerous, there is a falling cargo risk. When working with construction firms in winter I often work with cranes. Large sites have larger danger. Loaded cargo can fall off and strike upon someone. The most hazardous health harm here is dust.”

Accidents and injuries

Among all interviewees, only eight – five migrant workers and three victims of trafficking – mentioned accidents or injuries that happened to them during their time working in Kazakhstan. These included hernias from lifting heavy objects, fractures from falling down stairs, back damage from falling, head injury due to a falling brick, fracture in an ankle bone, various lacerations, and eye injury from metal and concrete.

Many of the injuries occurred while not wearing proper PPE. One interviewee, Mukhit, a 28-year-old migrant worker from Kyrgyzstan, described an accident he had with a hook, which resulted in a severe back injury:

“A crane was rising and I was hanging metals off the hook. Suddenly the hook caught up something, I was sweaty, began detaching the hook, I pulled pulled, and then I felt a stinging pain in my spine, as if it was struck with an electric shock, and then my lower back got weak. I injured it and left the work.”

In another example of lack of PPE in the setting of the extreme environmental conditions of Kazakhstan, migrant worker Jahan, a 47-year-old also from Kyrgyzstan, described a puncture wound to his foot due to wearing flip-flops: “It was hot, I wore flip-flops and once I stepped on a wire (...) Yes, sticking out of ground. Hard one, 6 mm in diameter. I was walking and talking to someone, and I did not notice it. It penetrated here and came out here [showing the foot], pierced the foot.” Qadir, a 41-year-old Kyrgyz migrant worker, was not wearing eye protection, got close to the equipment, and sustained a puncture wound to his eye: “I was injured here. I asked foreman for glasses, he answered yes, the glasses were left in an Italian quarter, that he would bring it soon. Sometimes you have to look closely

to the spot of drilling to know much do you have to drill, cause it happens you drill too deep or vice versa. You do it according to the screw length. So I looked, and something cracked, it hit here [showing the eye].” Abzal, a 20-year-old victim of trafficking who was an ethnic Kazakh from China, described sustaining a head injury while not wearing a hard hat: *“That day we had a machine-tool broken. I was asked to bring a wrench. I hit my head as I was standing up (...) No, I was not wearing a hard hat. Then my head was bleeding. I still have a scar on the head.”* Baibek, 28 and a victim of trafficking from Uzbekistan, described a painful hernia that occurred during heavy lifting: *“We were cutting a tree, into large parts. Then we took them up from the pit, and there I got a swelling in my groin.”*

Interviewees also spoke about other accidents that had occurred during other migration cycles, and to other individuals.

Violence and abuse, threats and reported related health outcomes

Among both migrant workers and victims of trafficking, psychological violence was more common than physical violence. Psychological and physical violence against victims of trafficking was more frequent and extreme than that reported by migrant workers.

For migrant workers, violence was infrequent and happened when first arriving or was related to ethnic conflicts. Jahan, a 47-year-old migrant worker from Kyrgyzstan, described being yelled at when he first started working because he was unfamiliar with the tasks: *“Here is other problem. Dispatchers were shouting, were outraged against us. You feel bad in the beginning. You have no previous experience.”* Jahan recalled a co-worker being reprimanded for saying his Muslim prayers as well as being ridiculed for migrating:

“the director came and behaved rather humiliating towards Kyrgyz (...) For example, there was a guy, reading namaz (Muslim prayers). And director began saying to him he didn’t work. He also said to another one (...) if he was so smart, tough and all-knowing, why was he not staying in Kyrgyzstan? He was finding faults a lot, humiliating. I felt myself awkward.”

Migrant workers also experienced some ethnic conflicts. Edil, 42 and a migrant worker from Kyrgyzstan, said: *“There are negative people who do not understand, they say ‘forget him, he’s Kyrgyz’ and I ask them ‘if I am Kyrgyz and you are Kazakh, then where exactly you are better than me? You and I have two arms and two legs, one head, I’m a man and you’re a man.’”*

Idris, a 25-year-old Kyrgyz migrant worker, related an argument exacerbated by racism: *“We had a great conflict, they were from Chimkent [a city in southern Kazakhstan]. They got angry because I dared to yell at them, Kazakhs, in Kazakhstan.”* Another 25-year-old Kyrgyz migrant worker, Yernur, described a verbal altercation that nearly turned into a physical fight with Kazakh construction teams: *“The site we worked at had other construction teams, Kazakh guys. Sometimes we have misunderstanding (...) They come and say: ‘It is clear that you are Kyrgyz’. We are not afraid if we need to fight. Don’t feel ourselves as something of lower rank.”*

Physical violence was rarely mentioned among migrant workers. Edil, the 42-year-old migrant worker, described ethnically motivated physical conflicts between Kyrgyz and Tajik migrant workers: *“Every day Tajiks beat up one Kyrgyz as a soccer ball. They say they make me go, and I say that if I stay alive I will do it.”* The migrant workers interviewed spoke about ethnically driven street violence in the Russian Federation (witnessed during previous migration cycles), and fighting with other construction teams. Idris recounted head trauma he and a Kazakh migrant experienced in the Russian Federation at the hands of skinheads: *“Hit against asphalt, recovered, then was beaten. I was lucky to get out of it. One my Kazakh friend, I got to know as I arrived, could not manage to escape and he was beaten up. Then*

I fled, he fled too. Started to call partners, nothing helped. We had no energy even to raise a hand (...) I could not come around for three days (...) My face was disfigured.”

In contrast, victims of trafficking were constantly violated because the traffickers used violence as a behaviour control tool. From the perspective of the victims of trafficking who were interviewed, conflict between themselves and their supervisors arose in response to the resistance of the victims of trafficking to working nonstop, because they inquired about their passports, or because expressed a desire to leave a construction site because of lack of payment. In some cases, it was simply ascribed to the bad mood of a manager.

The victims of trafficking interviewed experiences rampant verbal abuse. Azat, a 33-year-old victim of trafficking from Uzbekistan, described it like this: *“The superior is some yokel...about 50 years old (...) Yes, Kazakh. Crazy one. Does not understand human language (...) Yeah, we were trying to get out of his sight (...) He is raging for all day long.”* Aday, a 44-year-old also from Uzbekistan, had a similar experience with his trafficker: *“The superior was rude. Spoiled our mood every day. Shouted, used foul language. But didn’t beat. One of our countryman said he could not speak to us humanly.”* Moreover, Aday described the threats that kept him in captivity: *“The security head said: If I find out you are hiding something from me, you will end up badly. Started threatening. Accepted it, I said ‘OK, I know nothing.’ I was asked to run, but I refused. If I wanted, I would run. But where will I go without documents? So I stay.”*

In addition, initial kindnesses and intermittent benevolence seemed to be a part of the manipulation process. Beksultan, a 21-year-old victim of trafficking from Uzbekistan, recalled the initial “honeymoon” period: *“We were in good relations with the employer at first. The foreman was good. He was Kazakh. If you worked well they wouldn’t say you anything. They would scold you if you didn’t work.”* Gaziz, a 43-year-old Kyrgyz victim of trafficking, recounted the trafficker’s erratic emotions: *“When he was in a good mood, he laughed, and when he wasn’t, he threw everything (...) He showed respect for two days, then it changed (...) He wore a uniform, he was a colonel, he retired. Ex ‘cop’, he worked in Central Internal Affairs Directorate he did whatever he wanted. Then I thought that staying here was a mistake; I thought where was I?”* Abay, a 25-year-old ethnic Kazakh victim of trafficking who was from China, remembered a day when they were promised their freedom, only to lose all hope when they discovered it was a lie:

“Then he said ‘you seem to have come here against your will, it is not right. We don’t need those who don’t want to work. The boss is coming tomorrow, he will give you your passports and you can go wherever you want, even to Tashkent.’ We believed him. The next morning we drank some tea, put on our nice clothes. We waited for the answer. Then came Iliya, the relative of our manager. He asked us why we were sitting. We told him that we were going to leave. He started to yell saying that we will not go anywhere, he spent much money and that I had to pay him, he said I had a debt of 1,000 dollars. He didn’t want to hear anything and couldn’t stop talking. And I thought to myself that there was no use in arguing.”

Even the way in which the victims of trafficking were awoken had an element of psychological violence. Abzal, age 20, and also an ethnic Kazakh from China, explained: *“They rushed into our rooms, shouted awakening us, cursed us out, methods they used to wake us. We continued working till 9 p.m. (...) they treated us as if we weren’t humans, we had been working for 14–15 hours per day. Traffickers also used confusion about who was in charge as a means of maintaining control, as recounted by Abay: “About 10 people. If one of them came, the others wouldn’t, they worked shifts. Some of them came from China, some were citizens of Kazakhstan, that is, locals. You no way could understand who was who. We were absolutely confused about who was the boss of the company.”*

Victims of trafficking also reported widespread physical violence. Abzal described being forced back to work after his traumatic head injury and his fear of being beaten: *“And the next day they urged me to work. They could beat, used foul language. They treated everyone like this. You can’t say anything against them directly. They were five–six people and there were a lot of us. But we were afraid to do or say anything to them. We thought they had some racket or gangs.”*

“We were in Kazakhstan, didn’t know the rules.”

Dilshod, a 36-year-old victim of trafficking from Uzbekistan, explained how they were beaten when someone tried to escape, and how those who were working were “left alone”: *“The employer threatened. Not me personally but all us. Frightened, saying: do not try to escape, we will find everyone. As we were working, 30 people escaped the construction site. He found 20 people and brought them back. They fled without passports. He beat them with his assistants. He said then: do not try to escape, we will find everyone, we have enough power in Almaty. But no one escaped, he gave no money (...) Once there was a guy beaten, I didn’t see, but it was told so. This guy refused to work and said he was going back home. He was beaten for this (...) If a man worked, he was not bothered usually. Those who were not working were bothered.”*

Fatima, the 48-year-old migrant worker from Mongolia, described her knowledge of a trafficking situation in which a group of Uzbeks was beaten once when leaving the compound, and again when trying to leave the country: *“So, that employer came to the bus station and beat them again.”* Abay, the 25-year-old ethnic Kazakh from China, described beatings of a fellow victim of trafficking as the final impetus for a group of them to escape: *“They beat one of our guys a couple of times. A couple of those foremen injured our colleague, they beat him. Then, after they did it the third and the fourth time we decided to quit and reported on them.”* Oleg, a 47-year-old victim of trafficking who was an ethnic Russian living in Uzbekistan, downplayed the facial trauma he endured at the hands of his traffickers: *“God spared me, a tooth knocked out. Nothing else bothered me.”*

In most cases, neither migrant workers nor victims of trafficking described the direct health consequences of the pernicious and persistent psychological and physical violence they experienced. We know from the literature, however, that in addition to the physical consequences of trauma, these kinds of violence results in post-traumatic stress disorder, depression and anxiety, as well as a myriad of somatic complaints.¹⁸²

Living conditions

Housing

Living at one’s worksite was popular among migrant workers because it eliminated commuting time, saved on rent, decreased the likelihood of detection by the police and allowed for greater construction team job mobility. Migrant worker Zhambul, a 23-year-old from Kyrgyzstan, described his decision to move to the worksite to eliminate a 1.5- to 2-hour commute: *“When we arrived to work at construction site, there was no place to live. For a week we were riding from our flat to the site. Then the commute was too long (...) About 1.5–2 hours. Then we came to live at the working site, in a room.”* He further explained that the conditions at the worksite were similar to what he would experience if he were renting a flat, and it allowed him to maximize the amount of work he could accomplish in a day: *“Here, it’s better than travelling to work everyday. Even if we would rent a flat, it would be the same – cold and no amenities. And renting a flat with amenities is expensive (...) It’s nice to live at a working site. From one point you don’t have to travel to work every day. You get up in the morning and start working. You lose time as you travel to work.”* Yerlan, a 55-year-old Kyrgyz migrant worker, also described eliminating his bus commute by living at the worksite: *“As I live in a flat I use a bus in the morning. It is the same in the evening. The road is safe. Usually I live at a*

¹⁸² Ligia Kiss et al., “Health of men, women, and children in post-trafficking services in Cambodia, Thailand, and Vietnam: An observational cross-sectional study”, *The Lancet Global Health* 3, no. 3 (2015), e154–161.

work site.“ In colder months, migrant workers used a tent in a house without a roof or walls, and in the winter stayed in conditions as cold as -30°C. They typically lived three or four people in a tent. In colder months, they used a construction blow heater to heat their room, but sometimes there was no electricity to do so. Those migrant workers washed themselves with water heated in a kettle, and also prepared their food on the electric stove.

Although many migrant workers claimed it was safer to live at the working place, other interviewees were of a different opinion. Sometimes police raided the construction sites to catch migrants. Yerlan, a 55-year-old migrant worker from Kyrgyzstan, described as prevalent police raids of construction sites and other worksites: *“Yes, they come to check. Last time I was checked when I was working at the private construction site in Ilinka last year. They asked about my documents. I showed them the registration and they left. Now the police are constantly carrying out raids. They even go to villages, check markets and construction sites. They did that last year, I saw them in Talapker. When they see a constructor, they come up to him to check.”* In one case, each migrant paid 5,000 tenge [USD 27] per month to a contractor in advance to bribe the police to not bother the migrants. Occasionally, migrant workers lived offsite, finding this accommodation through the migrant network. Reasons for living outside of the workplace included migrating with one’s family, having offsite housing that was provided by the employer, or because an employer forbade living at the work site. Migrants travelling with a spouse and children would try to find cheap accommodation including such places as basements, warehouses or old abandoned military barracks. Edil, a 42-year-old Kyrgyz migrant worker, described having to live separately from his wife and also spoke about his deprived living and dietary conditions: *“Yes, didn’t know where to go. The wife was there also (...) I’m not allowed to her flat (...) It was a private house with eight women living in. They said no men had been allowed (...) I was sleeping in such a rubbish box. (...) More than two weeks. I had no bread to eat.”* In one case two families of seven people total, including children, lived in a basement without windows. Sometimes even migrants with families had to live at a workplace due to long distance between the worksite and housing. Despite these meagre conditions, children of migrant workers usually attended school in Kazakhstan.

Victims of trafficking experienced very poor living conditions and lived at the workplace. They were housed in dilapidated trailers and shipping containers, in broken-down shacks and in incomplete buildings. If the building had a roof, it leaked. Abzal, a 20-year-old victim of trafficking who was an ethnic Kazakh from China, explained: *“It was leaking from above during rainfalls. We pulled a plastic film [smiling]. It was very dusty and dirty there.”*

Victims of trafficking slept in very close quarters with many individuals crowded together; interviewees reported getting sick from this type of accommodation. One described 50-60 people sleeping wherever there was a vacant place in a small space, and how each night they would have to find a spot to sleep. Aday, a 44-year-old victim of trafficking from Uzbekistan, described the trailers as worse than being homeless, saying:

“Well, we came here. There were three trailers. They told us to choose one of them. There was also the fourth one – warehouse. ‘Choose which you want you will arrange the conditions yourself.’ It was very dirty inside the trailer, there was a mess. When it rained, the roof was leaking (...) We said ‘even the homeless do not live like that.’ We asked them to give us something. They said that we had no choice.”

Abay, 25 and a Kazakh victim of trafficking who had come from China, described the cold, wet sleeping environment: *“It could be described as a hovel. This building was constructed from bricks but it was very old and unrestored (...) There were some leaking roofs and no heating. As the result it was cold there.”* Baibek, a 28-year-old Uzbek victim of trafficking, further corroborated the abject living conditions: *“A trailer with no conditions. I never saw a place like this, not to mention living there. [Laughing].”*

None of the victims of trafficking had access to running water. Toilet access was limited. Dilshod, a 36-year-old victim of trafficking from Uzbekistan, described carrying water from 25 meters away for their needs: *“I warmed water with an electric kettle and washed (...) We had restrooms and water only outside. We had two toilets outside. There was water 25 meters away, we used canisters to bring it. Later when the weather improved, they put a 500 litre barrel for us. We filled it with water. We took the water from it for all our needs.* Gaziz, a 43-year-old victim of trafficking from Kyrgyzstan, described the difficulties of not having regular access to water in maintaining even a modicum of hygiene: *“It was a mess. No bath, shower. You worked and stank all day. You couldn’t wash your hands even. No conditions.”* Vlad, a 45-year-old victim of trafficking who was an ethnic Russian from Kazakhstan, described similar conditions: *“We had nowhere to wash, no shower, nothing. We washed in basins, the heat, it was June, July, it was very hot, the shower was made only in August, in the end of August.”* In some cases interviewees cooked with the same stove used to warm the place. Azat, a 33-year-old victim of trafficking from Uzbekistan, also described a cold, leaking trailer with a cook stove for heating: *“In a trailer. A wooden trailer. It was like a booth. They built it. It was very damp. The water ran each time it was raining. The roof was leaking. We had this stove for the heating. We turned it on to heat ourselves”.* Some Victims of trafficking described how there was no lock to secure their sleeping facility and that the guards would come in at night to check that they had not run away. In some cases they were given laundry soap, disposable razors, sleeping pads, pillows and blankets, but no bedsheets. Baibek, a 28-year-old victim of trafficking from Uzbekistan, described sleeping on wooden slabs on the floor and feeling relentlessly monitored: *“The door didn’t close, anyone could come inside. The guard came at night to see if we were still there (...) Yes, yes, he entered while we were sleeping. We had no beds, only wooden slabs. They were watching us.”*

Nutrition

Usually migrant workers prepared their own meals, rather than purchasing them. Those working in teams made their meals collectively, purchasing ingredients from their employer, and sharing the cooking responsibility. Yerlan, a 55-year-old migrant worker from Kyrgyzstan, explained how this team approach to nutrition worked: *“We chip in money for food. We buy products for 15 days for 40,000 tenges [USD 219]. So we spend about 80,000 tenges [USD 439] for food monthly. We buy canned meat, meat, butter, halva (dense, sweet confection), vermicelli, potato, etc. We buy kimiz (horse milk) there, there kimiz is clean. One liter is 600 tenges [USD 3.29]. Once a week I bring home two liters kimiz. It is not watered down. The work is physically hard, so it is necessary to eat high-calorie food.”* Migrant workers who came through the employment agency had lunchrooms where they ate initially, but because of high cost and poor quality, most transitioned to making their meals on their own. One such migrant, 55-year-old Kyrgyz Mansur, described the poor quality of the food prepared by the construction company: *“We have dinner here, in the hostel. All the same. Frankly speaking, sometimes we cannot eat it. It sucks. Sometimes it’s more or less good. We say then ‘Better than nothing’ and eat it.”*

Some victims of trafficking made their own meals while other groups had food prepared for them by cooks who were also foreigners. Aday, a 44-year-old victim of trafficking from Uzbekistan, described shared cooking with poor access to nutrient-rich food: *“They bought us products. We cooked it ourselves. They asked what to buy and we answered (...) No, they bought it only once [meat]. Mostly macaroni.”*

The most common foods eaten by victims of trafficking were bread, tea, macaroni, rice, potato, chicken eggs, sunflower oil and chicken meat. Interviewees described meals with very few calories and rarely ate meat. Abzal, a 20-year-old victim of trafficking who was an ethnic Kazakh but who had come from China, described meagre meals with little protein: *“Every day we got noodles or macaroni, and this was for four months, no meat (...) At the second plant we got no milk, drank only tea....Macaroni were simply boiled, no tomatoes or tomato paste.”* Dilshod, a 36-year-old victim of trafficking from Uzbekistan, also reported poor nutrition: *“We bought bread and ate it with water. No tea, for as he mentions tea, we are scolded (...) The employer felled a ram for [the holiday] Naw-Ruz. But we were 120 people there, not much to eat. He brought also meat for Victory Day.”* Because the working schedules of victims of trafficking were strictly ordered, they had long working periods

without meals. For example, interviewees got lunch at 1 p.m. and did not eat again until 8 p.m. Some victims of trafficking interviewed worked the night shift and missed lunch because they were sleeping, and only three meals in a 24-hour period were provided. Abzal described one situation where he had electricity to work, but no food: *“We were four people together. If partner and I were working in daytime, other two partners were working at night. Work does not stop. It works day and night. So we changed every week (...) We had bulb light but no food. We worked at night non-stop.”* Other victims of trafficking described food perishing quickly in hot weather and having nowhere cool to store it. There were some cases, as Abzal shared, of migrants getting ill due to poor nutrition: *“Nutrition was poor (...) Thankfully I was not ill. But there were many guys who became ill.”*

Freedom of movement

Migrant workers experienced a high level of freedom outside of working hours, at work, and at their accommodations, despite the fact that many of them did not have all of the proper registration and permits for work. Zhambul, a 23-year-old migrant worker from Kyrgyzstan, described this high level of freedom: *“We have lunch when we want it. Someone of us who are less busy go cook. We are called as the lunch is ready. Usually the lunch last for an hour, from 14 to 15 h. As we want it (...) Smoke breaks... you smoke as you work. As you have no supervisor-foreman controlling you, you can work as long as you wish.”* Kyrgyz migrants felt more relaxed in public due to having anthropological features similar to those of Kazakhs. As a result of this resemblance, migrant worker Edil, 42, spoke about a relatively higher level of policing of Kyrgyz migrants in the Russian Federation in comparison to Kazakhstan: *“No cop stopped me or asked the documents during this year and a half (...) In Russia while you’re going from one place to another someone definitely stops you.”* Zhambul explained it like this: *“You’re not afraid to be on your way here. Kyrgyz and Kazakh nations are close. You can walk, drive, use public transport unnoticed. But you are afraid at your work.”* When 25-year-old migrant worker Yernur, also from Kyrgyzstan, was asked if he felt safe walking around he responded: *“No, we are not afraid of anything, we are fine taking a bus. We walk here just like in Kyrgyzstan.”* Yerlan, a 55-year-old Kyrgyz migrant worker, said: *“I’m free to go anywhere.”* Edil also commented that he felt safer because all of his documents were in order: *“I feel like I’m in my village here in Astana, the only difference is that I’m Kyrgyz. Sometimes the police officers stop me but I claim them to be wrong, no, I understand it when I am violating the rules, walking drunk or without the documents. But as everything is fine they don’t have the right to detain me.”*

Edil went on to describe how he spent his free time, in activities including prayers and outings with his child: *“Sometimes they invite me when there is a good event (...) When I have free time, on Fridays, after saying Friday prayers I take my son to Khan-Shatyr [a shopping and entertainment center], Duman [the aquarium], I take him to squares, parks (...) I go for Friday prayers; my son also reads Friday prayers. If he asks me to take him somewhere, I agree and take him there.”* Yerlan spoke about a rich migrant community life: *“Sometimes we meet with friends. Sometimes someone has a birthday. Usually this means celebration in the café or at home.”* Idris, a 25-year-old Kyrgyz migrant worker, referred to his recreational spending, especially after getting a pay check: *“Yes, we go a lot. We go there after we receive money. We go to the city centre, cafes, eat shashlik [mutton kebabs].”* Other migrant workers, including Mukhit, a 28-year-old from Kyrgyzstan, preferred to stay inside to relax, which was different from back home in Bishkek: *“No TV. We sit enjoying the Internet (...) We rarely go to cafes. There are two religious men who say Friday prayers, we call them ‘taksyr’. Sometimes when we receive our salaries we go to Muslim café with them to eat there, their food is good. But it’s also not always, rarely. We don’t think of going to cafes or having fun like in Bishkek (...) It’s very simple here; you’re wearing working clothes, these boots [laughing].”* In contrast, Qadir, 41 and also from Kyrgyzstan, shared that he was too exhausted after a long day’s work to have any leisure time: *“How? You come home closer to 8 p.m. Then you have your supper. After the supper you want to sleep (...) You have to do the weekly laundry. Then you wash yourself. You’re working hard all week, and when you get tired you have one day to get rest, and you do not notice how the week passes...”*

The larger construction companies, which contracted their employees through the employment agency, informally controlled migrant workers by monitoring their whereabouts. Migrant worker Qadir recounted his discovery of being watched by a construction company staff member, Dina:

“...that Dina says ‘I know where he is. He’s walking at Central market together with Yegor, the newcomer.’ I was surprised – how did she know that? I was the last one who left the room. She said that our Yegor was walking there with his foreign passport. All other documents were with them, they were still arranging something. Who called and told her everything? This meant that they were following us [smiling] (...) This means that someone is watching us and then tells everything to personnel department.”

Victims of trafficking who were interviewed, however, had their freedom of movement heavily restricted via financial, physical and legal means. Captivity began from the moment they received money to pay for travel expenses to Kazakhstan, which made them indebted to their traffickers. Abay, a 25-year-old victim of trafficking who was an ethnic Kazakh but who had come from China, described the strong effect of having this debt to his trafficker: *“Many people, almost everybody stayed because they were bounded. Well, again, in Kazakh way, we put up with the circumstances. Not that much time was left, we could stand it for a while – that’s how we consoled ourselves.”* Abay explained how debts obligated him to stay despite how bad things were: *“There were people who said that they wanted to leave, there were those who did. You know, when we were leaving [China], many of us borrowed some money to come here. The ones who worked off their debts could leave. But even those who worked off the money could not easily go away. You see, in this respect, there was no freedom, we were not able just to go away.”* Dilshod, the 36-year-old victim of trafficking from Uzbekistan, described patiently working, with the hope he could return home with at least some money to buy presents for his children: *“Closer to May 11 we said – ‘when our migration card expires, give us our passports and the promised money, we will go home.’ We said that we were not going to pay for our overstay from the money we earned. We said ‘Just give us our wages. If getting to Uzbekistan costs 10 thousand tenge [USD 54], we still have 7 thousand [USD 38] to buy presents for our children’. He replied ‘I will pay you 400 dollars for a month if you stay here for three more months. You got 200 dollars for two months and for the next three you will get 400 for each. Also I’m gonna give you 100 dollars to pay the fine for the expiration of migration card.’ (...) Later, we were not given anything.”*

Victims of trafficking were also physically constrained by being kept in geographically isolated locations or in guarded, enclosed compounds. Vlad, a 45-year-old from Kazakhstan but of Russian ethnicity, described never being alone: *“He [the trafficker] hurried us up, pressed, never let us to get rest (...) In the morning he came and woke us up – come on, get up quicker, we need to finish everything (...) He was just watching us (...) He was close all the time.”* Beksultan, 21 and from Uzbekistan, explained the dynamics of the large compound he was kept in: *“There were about 300 or 400 buildings. The houses were enclosed with a single fence. There was security, strangers were not allowed (...) Yes, the security watched us.”* Dilshod described not being able to walk freely, even within the compound for every movement was tightly regulated: *“If a foreman saw us walking to a shop for cigarettes or home he asked the reason. As we explained he asked to come back, as he would bring everything necessary himself. It is prohibited to leave a working place during the working time. Even inside the territory.”* In order to ultimately escape, some victims of trafficking interviewed recalled observing the guards’ patterns and running at just the right moment. Oleg, a 47-year-old victim of trafficking who was an ethnic Russian from Uzbekistan, recounted telling his fellow victim of trafficking: *“the door is open’. I asked him ‘Where are they?’ – ‘They entered the house.’ He said that we should run, and we quickly ran outside. The dogs began to bark. We jumped over the fence, further there were fields. I didn’t know what distance we ran. Fortunately, it was dark, we lay for some time, and then we saw cars and lights.”* Baibek, a 28-year-old Uzbek victim of trafficking, spoke of a similar process of circumnavigating monitoring by guards and cameras in his escape: *“When we went outside there were cameras above watchman’s booth. There were big monitors showing objects full length. To be short if we went out for more than 15 minutes they (the guardsmen) came to check. That’s why we got together here and there, trying to distract them; we walked in pairs.”*

This physical isolation was further compounded by lack of registration of the victims of trafficking and by employers’ confiscation of their passports. Abzal, 20 and an ethnic Kazakh from China, put it this way:

“If I wanted to leave I had no documents, they wouldn’t let me go. And I was afraid to escape. So I had to suffer it all.”

Abay, 25-year-old and also an ethnic Kazakh from China, shared a similar story: “After our arrival they took our documents for registration, we didn’t know the laws of Kazakhstan so they told us that after our arrival we immediately must get registered. They said that it was necessary to register with the authorized agencies. We agreed and gave them our passports. They said that they would give them back after registration. But we haven’t seen our passports for more than four months.” Beksultan described how his lack of access to his passport meant he could not flee: “I said ‘give me my passport, I will leave too.’ He said that I could go. How could I leave if I had no money, no passport? (...) I had the money. But I couldn’t go without my passport. Passport became a problem.” The combination of the lack of passport and the registration delay was an effective form of legal captivity utilized by the traffickers. According to Beksultan: “They took my passport to arrange the documents. And then, when I said that I was going to leave they told me that there was no passport. They said that I wouldn’t go anywhere (...) We were told: ‘You’re gonna pay 100 dollars at the border, 18-odd thousand tenge. It’s due to registration delay.’ He said ‘I’m gonna pay it for you.’ Three months later, these guys left. I had to get back my passport but they told me that there was no passport.”

Interviewees from Uzbekistan noted that they could leave Kazakhstan without a passport by bribing border guards. However, once back in their home country, the lack of passport can be considered a criminal offence and would be strictly prosecuted by the authorities of Uzbekistan, particularly true for migrants from the villages located in the Tajikistan border areas. Dilshod, the 36-year-old victim of trafficking from Uzbekistan, described having to choose between continuing to work under his trafficker or risking jail time in Uzbekistan because he was not in possession of his passport:

“Then he took our passports for registration procedure. He didn’t give them back (...) Of course, I thought about escaping this place. But if I went to Uzbekistan without my passport and tried to get the new one, they would ask me about how did I enter Uzbekistan without passport. And, what would I answer? If I would say I did that illegally, it could be considered as a criminal offence. Fine or criminal responsibility. I had no money to pay the fine. Maybe they would put me to jail, I don’t really know what later could happen. I could easily run in any other situation. The reason I stayed was my passport.”

The wife of Gaziz, a 43-year-old victim of trafficking from Kyrgyzstan, died and his trafficker mocked him when he requested his passport to return home: “When I was here on the 10th, my daughter called, she said that her mother died and asked me to come immediately. I told the employer to give my passport, I said that my wife died and I wanted to go there. But he said that there was no passport, that he tore it, he said that I could go wherever I wanted. Anywhere where I wanted to, north, south, east, west.” Among the interviewees, even a citizen of Kazakhstan, Boris, was duped into giving his ID card to a trafficker.

Verbal and physical threats, described in detail above, were also used to prevent victims of trafficking from leaving. Altynbek, 43 and from Uzbekistan, described it like this: “Yes. When we arrived to compound, they told us ‘I bought you. Work without noise. Don’t even think to escape. If you escape, we’ll catch and beat you.’ That’s how it was.” Beksultan, 21 and another Uzbek, explained the trafficker’s volatile coercion manifested by using complements and then turning to physical violence: “I was a good worker that’s why he [trafficker] said that I wouldn’t leave. But I said that I would, because I had to enter the university. I wasted my time staying there. ‘You don’t understand’ he said. I answered, ‘There is no one who can understand us’. He attacked me but the foreman stopped him.”

In contrast to the migrant workers, victims of trafficking rarely had time to relax, though one, Oleg, a 47-year-old ethnic Russian from Uzbekistan, described having some mental time to himself: *“I read the Bible, watch Christian movies, think of something, pray.”* Even when they had time to themselves, Oleg recounted the guards and guard dogs keeping watch: *“I couldn’t go outside the compound because there were dogs. Or even simply breathe some fresh air in the evening. And I would dare to say that we felt we were being watched by a jailer. They could insult you, for example say something bad...”*

Phone and Internet access

Most migrant workers kept in touch with relatives at home via phone calls, text, WhatsApp (a smartphone messaging service) and would do so frequently, ranging from every day to once a week. For example, when asked if he spoke with his family, Yernur, a 25-year-old migrant worker from Kyrgyzstan, stated: *“Yes, almost every day on the phone. Sometimes every other day.”* Edil, 42 and also a migrant worker from Kyrgyzstan, talked about how often he spoke with his family: *“Yes. Everyday (...) I talk to my mother, I ask her about her health, I call my sisters, relatives; my mother is 85 so I have to ask about her health every day. If I don’t call her she will worry.”* Idris, a 25-year-old migrant worker from Kyrgyzstan, mentioned the frequency and duration of communication with his wife, who had stayed home in Kyrgyzstan, via WhatsApp: *“Sometimes we go to sleep at 2–3 a.m. when we talk to them. Usually we go to sleep at 10–11 p.m. Agent [another smartphone app], WhatsApp, the Internet – all this till 2–3 a.m. We get up at 8 a.m., everybody’s up after 8 a.m. You get used to that (...) Sometimes every day, sometimes every few days. My wife and I talk almost every day.”* Mansur, 55, spoke about the expensive nature of texts and voice calls back home to Kyrgyzstan: *“Well, one minute of conversation is expensive. We’re texting. SMS message is also expensive. So I rarely talk to her. Others do that more often. Young people get in touch through the Internet. They use WhatApps. I’m an old person, my cell phone is simple, I don’t know. That’s why I talk with the old woman [wife] once a week.”* Mukhit, a 28-year-old Kyrgyz, described sharing a modem with other migrants to access wifi on tablets to communicate with family members at home: *“There’s access from the tablet (...) Everybody owns one, we stay in touch through it (...) We all chip in to buy a modem for a month, and then get connected to it.”*

While most victims of trafficking had access to cellphones, they were less able to communicate with relatives because they lacked money to pay for phone calls.

However, in one instance Aday, a 44-year-old victim of trafficking from Uzbekistan, described how his cell phone and passport were taken as an initial step in his captivity: *“The police took our cell phones. Then we spent 20 minutes just driving on some road. Then one guy arrived, he got out of the car and talked to the police officers. They took us to some place. We asked them about our passports and phones. I saw the money, he sold each of us for 15 thousand tenge [USD 82].”* Another victim of trafficking from Uzbekistan, 36-year-old Dilshod, described the trafficker granting him some phone credit to call home after Dilshod reminded him of the wages he was promised: *“I asked him twice to give 500 tenge [USD 2.74] for the phone to call home. He didn’t give me. At first he didn’t give me. Once, I heard him bragging, I came out and said ‘stop bragging, you gave me 200 dollars, but you owe me 600. You couldn’t even give me 500 tenge [USD 2.74] to call home.’ – that was the second time I asked. I shamed him. That’s why he gave me money. He didn’t give the others.”*

If they were able to access them, the use of phones was often a key part to the release of the victims of trafficking from slavery. Abay, 25 and an ethnic Kazakh who had come from China, described how one group of victims of trafficking escaped by making a phone call: *“Yes, we had cell phones. We called our parents and relatives in China (...) Yes, of course, we could get in touch with other people (...) Then we got that he shafted us, so we didn’t wait for him any longer and went to the police. We called the police.”* Azat, 33 and from Uzbekistan, recounted borrowing a stranger’s phone to get help after escaping from the compound: *“When I escaped (...) There was no traffic in the morning (...) a disabled man came out. I came up to him and asked ‘Please, let us make a call, brother, we really need it.”* Beksultan a 21-year-old Uzbek, recounted a complex web of exchanges involving phones and the embassy that resulted in his freedom: *“I gave the phone number to guy in Uzbekistan. A mother*

of one of the missing men gave the phone number to the embassy. Cops in civvies came there [place where he worked] to search the place (...) A woman from the embassy came. She said to call her if the help was needed. 12 of us came that time."

Health beliefs

Migrants and victims of trafficking were most fearful of accidents that could leave them dead or disabled. Stories of other migrants who experienced such accidents were widely known. This fear also explains why, among the interviewees, working on larger construction sites was felt to be unsafe – for example, there was the potential of falling from a greater height on such jobs. Despite these fears, though, PPE was not pervasively worn and most of the accidents and injuries reported occurred while not adhering to basic safety standards. Interviewees were also aware of the dangers of dust inhalation (but most were unclear as to the reason for the danger) but often did not wear masks due to discomfort. One interviewee, Abzal, the 20-year-old Kazakh from China who was a victim of trafficking, attributed fatigue and eye problems to the dust: "I became weaker, my eyes were itchy."

In addition to perceptions of occupational health risks related to disabling accidents and dust exposure, interviewees were aware of the risks of living in close quarters with many people. Qadir, a 41-year-old migrant worker from Kyrgyzstan, elaborated on this: "*Flu began here. As I came here there was a climate change. One got sick, infected the other. As they got cured, the whole room was ill.*" Abzal, the 20-year-old Kazakh victim of trafficking who had come from China, shared his association between poor nutrition and other victims of trafficking getting sick: "*Nutrition was poor (...). Thankfully I was not ill. But there were many guys who became ill.*"

Interviewees also believed that a cold, wet environment caused illness. Mukhit, a 28-year-old Kyrgyz migrant worker, explained: "*Especially when we came here in the winter, it was hard to get used to the climate. Catching a cold, get sick kidneys.*" Edil, 42 and also a migrant worker from Kyrgyzstan, related how he caught pneumonia: "*Summer, but it was cold. Twice it was raining, then after shower you go out under strong wind. So I caught pneumonia. That's what I did not know, and when it relapsed I suffered greatly.*" Zhambul, a 23-year-old migrant worker from Kyrgyzstan, described how wearing masks in the cold led him to get sick: "*We work in masks. When we work in freezing temperatures and breathe through this mask, there is vapour in place of mouth and nose. Vapour and cold. And you get sick from it. Maxillar sinusitis, flu.*" Beksultan, a 21-year-old Uzbek victim of trafficking, connected the dampness with his fever: "*I was slightly fevering at that time. It's because of wetness. In my shoes [the shoes were wet].*" Mansur, a 55-year-old Kyrgyz migrant worker, linked the draught in the room he shared with others to the spread of the flu: "*And now, in the room ... someone leaves the door open, someone feels stuffy and opens it intentionally, so there is still a draught in the room all the time. But then you try to take care of yourself.*" Beksultan described, on the other hand, the healthy catharsis of sweat: "*I was sweating, that's why I recovered.*"

In addition to the illnesses mentioned in the section, 4.3 Occupational risk exposures and outcomes and 4.7 Health beliefs, interviewees reported respiratory illness including TB, pneumonia and flu; ear infections, sinusitis, an abscess, anal fissure, dysuria (painful or difficult urination), frequent urination, impotence, kidney problems, hypertension, weight loss, gastric ulcers, appendicitis and frequent headaches. The frequency of descriptions of pulmonary disease, whether described as chronic bronchitis, pneumonia, flu, low-grade fevers or colds, raises concerns about a high level of tuberculosis in this cohort. In fact, one victim of trafficking, Dilshod, was diagnosed with TB after his escape from trafficking: "*Yes, already after this work I gave analyses: blood, urine, sputum, fluorography. X-Ray examination showed up a problem.*" Dilshod had also mentioned an earlier and concerning vague constellation of symptoms that sounded similar to other interviewees' narratives: "*In March, when I came, I had the flu for one day. The boss gave the tablet. (...) Had a fever a bit.*"

Medical care and service access

Access to medical care

Access to medical services was limited due to cost and legal status (for migrant workers), and due to physical restriction (for victims of trafficking). Employers did not pay for medical services for victims of trafficking or for migrant workers. Most interviewees treated themselves with various pills, rarely under the guidance of a health professional. The pills most commonly mentioned included No-Spa (anti-spasm medication for stomach pains), activated charcoal (for stomach problems), Citramon (an acetaminophen-based pain reliever), Antigrippine (flu medicine).

In response to questions about access to health care, some common themes arose. Mansur, 55 and a migrant worker from Kyrgyzstan, described accessing the public hospital in Kazakhstan due to a variety of illnesses, including those requiring a surgery: *“It’s called anal fissure (...) This operation was provided just last year in the public hospital (...) Then there is a chronic bronchitis. It begins in winter, in different situations. Last year, too, I was in the public hospital for 1–2 months, got a imaging, shot, as a result got in debt (...) Yes. Even our guys younger than me are sick with influenza. We did not have money as we came. We had three days off due to the holiday in honour of Independence Day of Kazakhstan. Just in those days I had a bed rest in a warm room.”* This quote illustrates the costly nature of health care (Mansur recounted that he went into debt to get treatment). It is also yet another account from among those interviewed that involved personal and community respiratory illness, again highly concerning for tuberculosis. Mansur also mentioned the lack of time to recover from illness – in his case, the only sick days were those that happened to coincide with a national holiday.

Migrant workers in general used fee-for-service medical care, which could be quite expensive. Formal medical care was often a last resort. Mukhit, a 28-year-old migrant worker from Kyrgyzstan, described a kidney disease he attributed to the cold, his delay in seeking care, and the fact that co-workers had had an unidentified respiratory illness he labelled as the flu: *“Here at the construction site you can work one or two years maximum, and then health will not allow it (...) Kidneys ached a little, first from the left side and then on the right, the inflammation emerged because of the cold. When they began to hurt, I started to go to the hospital. Once everyone had strong flu.”* Yernur, a 25-year-old Kyrgyz migrant worker, paid to have a tooth pulled at a private clinic when the pain became too debilitating, and also spoke about his severe stomach pain: *“I had a severe toothache in autumn, so that I had to pull it out (...) Yes, I went to a private clinic. Made it on my own account (...) Last year, initially everything was fine, then I got a stomachache. As if I got poisoned, but I did not understand. The stomach began to twist me up, it was very sick.”* While stomach pain may have been due to a myriad of causes, a stomach ulcer due to *H. Pylori* is quite possible as it is common in the region.¹⁸³ In one case, a migrant family mortgaged their jewellery to pay for medical treatment. Some groups of migrants organized and obtained medical insurance but it was not felt to be helpful. Jahan, a 47-year-old migrant worker from Kyrgyzstan, described delaying care for appendicitis until the pain was very severe. Ultimately, he called for an ambulance: *“As I arrived to Astana in 2012 I had a severe pain in my stomach (...) It really tied up, great pain, so, there were some serious problems, I had nausea. I thought about appendicitis. Then my friend called for ambulance. They checked for appendicitis, gave me some water to throw up, but it didn’t help. So they brought me to he hospital, made an injection and only then I felt better.”* Idris, a 25-year-old Kyrgyz migrant worker, spoke about having an abscess on his hand drained after he was not able to clear the infection himself: *“Here [pointing at hand] it hurt for three days then, as I pricked it with a needle, oozing pus was flowing. Basically, an infection occurred. Then I went to the health clinic, where they cleaned the pus.”*

Even if an interviewee could visit a health-care provider, he was often unable to obtain all of the medications that were prescribed. This inconsistent adherence to medication is concerning given the multidrug resistant tuberculosis widespread in the region. Mukhit, a 28-year-old migrant worker from Kyrgyzstan, described having night sweats (a common symptom of tuberculosis) but spoke also

¹⁸³ Valery Benberin et al., “Prevalence of *H. pylori* infection and atrophic gastritis among symptomatic and dyspeptic adults in Kazakhstan”, *Anticancer Research* 33, no. 10 (2013), pp. 4595–4602.

of his conundrum of being prescribed many medications, but not being able to afford them all: *“I got a lot of pills prescribed. There I picked up about 30 per cent of these drugs, the rest I had to buy myself. They prescribed it stupidly, so I took some drugs, some not. They are very expensive (...) And I had no money to buy all the drugs (...) Did not help much. For example, you start taking the medicine, and the next day you have to go to work, and it is cold there, in the evening when you come back from work, the temperature rises again. So we survived like this.”* Mambet, a 31-year-old Kyrgyz migrant worker, recounted deciding himself which prescribed pills to take:

“So you followed the doctor’s prescription for hundred per cent? Money was not enough.... mostly for major drugs .. I took them, and I did not take less important drugs.”

One interviewee did not seek health care because he was undocumented; another was refused care for her children because of lack of citizen documentation. Some migrant workers received help from expat community members who were also in the medical field. Edil, a 42-year-old migrant worker from Kyrgyzstan, used a migrant health worker connection – and also hid the fact that he was Kyrgyz – to get medical care: *“We went to their home, the daughter wrote a note, called a taxi and put me there with his son, and his son was known in the hospital. So we went to the hospital, handed a note. The doctor asked, “Are you a son of Kolya?” and accepted us. Then he asked for my passport. I said that the passport was in the police, what should I have done. They said that I did not have to worry and if I was asked, I had to reply that I was going straight from work and did not take my passport. So they did not know that I was Kyrgyz. I passed a full examination, I gave blood work.”* Jahan, a 47-year-old Kyrgyz migrant worker, described the high cost of medical care; he leveraged a migrant network contact to get the care they sought: *“There are debts. When my wife got sick we spent a lot of money for medicine (...) We purchased. We mortgaged precious rings, earrings in a pawnshop, and took the money. Now we need to buy out these things. And there was some good moments (...) there was one friend helping us. We met her when our children were examined, then she helped us too to get a doctor’s certificate, [she was] Kazakh. There is one nurse, Kyrgyz from our village, who works as a doctor, and they turned out to be colleagues.”*

Fatima, the 48-year-old migrant worker from Mongolia, spoke of a frightening time when her daughter, who was undocumented, was refused medical care: *“Only when my daughter who doesn’t have documents got sick I was very scared. The doctors refused to treat her, they wanted tax reference number, and she didn’t have any documents at all, so they didn’t want to treat her, she suffered, her liver swelled and protruded. I was lost and cried. Took the sick child to the akimat [municipal government] of Tselinograd and asked there for a document, I said ‘Look the liver takes all belly, help us’. They said ‘We can’t give you anything. Go to Mongolia.’ But Mongolia has nothing to do with this since she was born here, she’s Kazakh, the citizen of Kazakhstan.”*

Neither employers nor traffickers paid for medical services for the interviewees, but sometimes provided them with pills. Yernur, a 25-year-old Kyrgyz migrant worker, spoke fondly of his boss for dispensing medicines to him: *“I called my foreman-contractor. He came immediately, took me into his car. It is good, he knows about this pain, he had it earlier. He came and immediately gave the drug.”* In some cases, workers hid their illness to be able to work.

Migrants treated themselves for respiratory illnesses and some minor injuries or simply waited for symptoms to resolve on their own. Yerlan, a 55-year-old migrant worker from Kyrgyzstan, described going to the clinic for a broken bone he sustained in the Russian Federation; however, he would not go to the clinic for a cold. He also explained how he was not paid during the time he was recuperating, but that he was pleased that he was not fired: *“I was taken to the clinic to take X-ray. The guys I worked with brought me to the hospital. They did not put the plaster, just bandaged my foot tightly. For half a month I did not go to work. For that time, of course I was not paid. However, the employer kept my place of work. And two weeks later I went back to work (...) When I have cold I do not need medical care. I treat myself.”*

Interviewees who were victims of trafficking had more limited access to health care than did migrant workers. Some were able to obtain a limited number of pills from their guards. Aday, a 44-year-old Uzbek victim of trafficking, received antibiotic pills for a headache from one of the guards, which he surmised did not help his headache as it was due to high blood pressure: *“I asked the guard about pills from headache or cold. He is a good man. He gave me some pills. He gave me four, I took two at once. Those were pills for headaches. I think something like tetracycline (antibiotics). But it didn’t help. I had headache because of high blood pressure.”* Altynbek, 43 and another victim of trafficking from Uzbekistan, received pills for a stomach “attack” from a guard: *“Yes, I had an attack there (...) No, I told the guards. I told the supervisor. The guard gave me pills (...) black pill, coal (...) Yes. Activated carbon. I didn’t tell the director because it didn’t hurt much. It was ok then (...) No, they wouldn’t let me go anyway (...) Yes, yes. It stopped aching in two days.”* 33-year-old Azat, a victim of trafficking from Uzbekistan, also received activated charcoal from a guard and noted the lack of true medical care: *“They had kind of a first aid kit. A black pill, is it? (...) Yes, yes. They gave us such (...) The guard. We asked him. He brought it (...) Nothing medical is possible there.”* Beksultan, 21 and a victim of trafficking from Uzbekistan, was also treated with the typical cocktail of medicines for his fever: *“He gave Citramon against fever. I took about five pills during these one and a half days. There were also some other pills, I don’t remember now. But I had a friend beside me, he checked what medicines I was given. He said that I shouldn’t drink everything (...) I was sweating, that’s why I recovered.”*

Alternative traditional medicine

It was common for migrant workers and victims of trafficking to carry medicines with them from their homeland or to rely on traditional treatments. Traditional treatments and including drinking fat, mixing analginum (an anti-inflammatory medicine similar to aspirin or ibuprofen) and Citramon with red and black pepper, or dunking their head in cold water. Some migrant workers sought medical advice from mullahs. Gaziz, a 43-year-old victim of trafficking from Kyrgyzstan, treated his headaches by dunking his head in cold water. Dilshod, a 36-year-old victim of trafficking from Uzbekistan, recounted: *“In March, when I came, I had the flu for one day. The boss gave the tablet. In the morning I drank six tablets, and in the evening six tablets. It seems they were analginum and Citramon. I mixed them with red and black pepper and drank. Had a fever a bit.”* (Of note, Dilshod was later diagnosed with TB.) Mansur, 55 a migrant worker from Kyrgyzstan, struggled to self-treat his respiratory illness: *“I can not find a true cure for lung disease. Ordinary small drugs are no longer active for me. Just a waste of money. But there is one medicine – ‘ACC’ [acetylcysteine, which thins mucous], it costs 700 tenges [USD 3.84]. I buy it. It helps to cleanse the lungs. It helps to expectorate. But there is a cure for this disease – but I cannot find it. Or I should drink fat. And then, this is due to the situation. You want to take care of yourself, and then you don’t have enough money.”*

Victims of trafficking noted that they were rarely permitted to take a day off in the case of illness, often being forced to work through the illness. When asked what happened when somebody got sick, Boris, a 26-year-old victim of trafficking who was from Kazakhstan but of Russian ethnicity, answered: *“Nothing. We somehow recovered on our own (...) I asked him for help. He would forget...well, I asked him twice, but he would forget or have no time for this. I didn’t ask him again.”* Baibek, a 28-year-old victim of trafficking from Uzbekistan, described his self-treatment for a hernia: *“I just held the groin for a couple of days. I didn’t work.”* Beksultan, 21 and also an Uzbek, noted: *“You’ve been working there since February. Did you get sick? (...) I had a flu for one and a half days. In March (...) I told myself that I wouldn’t work. I said that I was too weak. The foreman gave me some medicine. I took it and recovered.”* When it was a serious injury the bosses would take the victim of trafficking to receive medical care. If the injury was serious enough to prevent further work, the individual was released from service. Beksultan corroborated this: *“If somebody got seriously sick – yes. If it was really bad – he let them go home.”*

Law enforcement and migration officials

Migrants who did not have proper documentation were particularly aware of the possibility of fines or imprisonment if stopped by the police, as mentioned in section 4.6 on Freedom of movement.

Idris, a 23-year-old Kyrgyz migrant worker, described the bribes that their construction site intermediary had negotiated with the police, so that none of them would be indicted: *“We made the deal concerning the police raids. We give 5 thousand [tenge, or USD 27] per month and nobody comes to check us. And even if someone is taken from here, the Head of the Migration police will let him go (...) Mm. First we had to pay 10 thousand [USD 55]. That’s why I’m saying I’m grateful to Alexei. We were happy to give 10 thousand, but then, after two days Alexei came and told us that he had good news for us. He agreed on lower price which was 5 thousand. Of course, everybody was glad. After such things, you feel enthusiastic.”*

Victims of trafficking interviewed spoke about how law enforcement and migration officials were complicit with the deception process, in some cases profiting from the trafficking. In the cases of Aday (44) and Azat (33), two Uzbek victims of trafficking, migration police were explicitly involved in the trafficking process, including the taking of the migrants’ passports and cellphones. Aday recounted:

“The migration police stopped us and demanded to show passports. All our documents were fine. But ‘the chief’ said that we should go to the police station to get everything clear. We trusted him and got into cars. The taxi driver kept out of this. Then the taxi driver called someone, I saw that he was talking to someone. He had a friend who worked here. They were fellow countrymen; maybe they lived together. The police took our cell phones. Then we spent 20 minutes just driving on some road. Then one guy arrived, he got out of the car and talked to the police officers. They took us to some place. We asked them about our passports and phones. I saw the money, he sold each of us for 15 thousand tenge [USD 82]. That’s how we got our first job.”

Azat recalled a similar version of the story, “Senior guard explained us that he bought us for 15 thousand tenge. He gave money to the migration police saying that we saw that ourselves. We were there when he did that.”

In contrast, Dilshod, a 36-year-old victim of trafficking, described a call to the police as the initiation of his escape: *“After that this guy asked me about what we were going to do next. I asked him if he had a number of the police department. He said yes. ‘Call them, let them take us’ I said.”*

5.5 SUMMARY IMPLICATIONS

Migration is a social norm in Central Asia. While our interviewees largely travelled for economic reasons, it was rarely driven by abject poverty. Victims of trafficking and migrant workers alike described the desire to pay off debts or pay for future expenses related to education, family gatherings (such as weddings) or building a home. As a group, the migrant workers, in general, appeared to be wealthier before migration than the victims of trafficking.

There were two main recruitment avenues for the migrant workers interviewed: they were recruited either via the official employment agency or through migrant networks. Those recruited via the official employment agency had specific construction vocational certificates, migrated with all of the proper documentation, did not have personal contacts at the destination, and worked for large construction companies. Migrant workers recruited more informally were recruited via known contacts and had

someone they knew at the destination. Nearly all participants described the importance of having a trusted contact in the destination country to ensure safe migration. Migrant workers did not always follow the proper in-country registration or work permit processes.

Victims of trafficking, in contrast, were not recruited by an official employment agency and did not have contacts in Kazakhstan. They were typically recruited through an intermediary who was a stranger. In two cases, the introduction to that individual was through a friend. Victims of trafficking took on a debt prior to beginning their work, typically to the future employer, who gave a cash advance prior to travelling or paid the migrant's travelling costs. The traffickers used this debt as a tool to manipulate and detain the victims of trafficking. Often, the exploitation was not immediately apparent to the victim of trafficking and it was not until after an initial period of work that they became aware of their captivity.

It should be noted that safe migration in this cohort occurred for two groups: those who travelled formally through the employment agency in Bishkek, and those who had trusted contacts at their destination. This implies that migrants should have one of these processes in place prior to migration to ensure they are not exploited. Of note, one victim of trafficking described hearing about trafficking prior to being trafficked, so despite awareness, he was still exploited. This finding brings into question the effectiveness of awareness campaigns.

Descriptions of trafficker tactics in this cohort reveal some important trends: they paid for transportation of victims of trafficking to the destination and in some cases gave cash advances to the victim; they stole the migrants' passports at the earliest possible moment; and they used the leverage of the registration laws to further extend the monetary debt the victims of trafficking owed them. Policies should target these exploitative practices.

Both migrant workers and victims of trafficking were exposed to and described health outcomes that were typical for the construction industry, including musculoskeletal injuries, lacerations, lung disease and ocular injuries. Both groups learned most of their construction skills on the job, although the work the victims of trafficking engaged in tended to require fewer skills. Use of PPE was rare among victims of trafficking, inconsistent among the informal migrant workers, and more consistent among the formal migrant workers (that is, those who were recruited via an official employment agency). Most of the injuries described by interviewees were avoidable with proper PPE. Construction is a dangerous industry, and migrant workers and victims of trafficking alike inadequately protected their head, ears, eyes, lungs, hands and feet with PPE. Helping migrants to understand the real risks associated with not wearing PPE may be beneficial. Employers should be engaged in creating incentives to wearing PPE.

All groups of respondents noted the negative impact of the harsh environmental conditions – including the presence of dust as well as extreme cold and hot – on their health. The intensity and duration of the workday for migrant workers and victims of trafficking were similar, but the migrant workers were able to control the tasks they were engaged in and if and when they took breaks.

Migrant workers experienced mostly psychological violence, usually in the form of ethnic conflict, though they occasionally engaged in physical altercations. Victims of trafficking experienced pervasive psychological violence that started with their initial coercion and continued throughout their exploitation. Psychological violence included constant monitoring, threats, sleep deprivation and dehumanizing insults. Physical violence was reserved for deterring escape.

Both migrant workers and victims of trafficking described crowded, cold, wet living conditions with poor access to running water and electricity. Victims of trafficking noted that they were monitored while they were sleeping. Moreover, in some cases they may have had less access to basic elements of hygiene than did the migrant workers. Both groups largely lived at their worksite, though migrant workers had the option to live elsewhere.

Living conditions among all interviewees were conducive to the spread of tuberculosis. However, interviewees had a very low awareness of the symptoms associated with TB, and may have been actively infected and spreading to other migrants without realizing it. Increasing migrant knowledge of tuberculosis and its repercussions, as well as improving their access to treatment may help reduce the spread of TB including drug resistant TB in the region. The government could consider implementing mobile health screenings during the height of migration season and placing these clinics along commonly accessed migration routes and in migrant destinations.

Migrant workers, particularly those of Kyrgyz origin, were able to move about quite freely. Those without all of the proper legal documentation were fearful of meeting the police. Victims of trafficking had extremely restricted movement, which was reinforced via guard dogs, guards, geographical isolation, monitoring systems, threats, withholding of documentation and victims' perception of indebtedness to the trafficker.

It was common for interviewees to describe lung and flu-like illnesses. There was the belief that wet and cold conditions made one sick and that dust was bad for one's health.

Migrant workers generally had the freedom to access medical services, but barriers to care included undocumented status and cost. Overall, migrant workers and victims of trafficking self-treated with a sundry assortment of pills that they brought with them from their countries of origin, or, in the case of the victims of trafficking, were given to them by guards. Victims of trafficking were released to return home if they sustained a disabling illness or injury. Access to medical care was poor for both migrant workers and victims of trafficking; therefore expansion of health care for all migrants, including undocumented migrants, is vital.

Irregular migrants had a fear of law enforcement and migration authorities because of their legal status; they would circumvent possible fees or detainment through regular, negotiated bribery of the police. Two victims of trafficking cited migration police as complicit with their trafficking, through directly receiving payment for helping to kidnap the victim.

Police corruption, exemplified in this study by migrant police officers actively involved in trafficking respondents, should be deterred and prosecuted.

5.6 RECOMMENDATIONS KAZAKHSTAN

General

- Support and invest in achieving the Sustainable Development Goals (SDGs), particularly SDG 8 to “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” and “to eradicate forced labour, end modern slavery and human trafficking”. Specifically, protect labour rights and promote safe, secure, non-exploitative work environments for all, particularly migrants working in informal, under- or unregulated sectors.

National and regional policymakers

- Develop a multisector health protection and response strategy, with specific actions to address the health risks and service needs of migrant workers, particularly those in high-risk sectors.
- Designate a dedicated budget and sufficient resources within relevant ministries to ensure protection of workers' health and safety and support coordinated actions by the health and other ministries (including those covering labour, law enforcement, judiciary, social services, education, women and social development, commerce, and others) responsible for implementing Articles 12 and 35 of the Kazakh Law on Migration and the new National Action Plan on combating human trafficking for 2015–2017, introduced by Resolution No. 23.
- Enforce Articles 12 and 35 of the Kazakh Law on Migration, which entitle foreign workers to medical insurance. For services not included in the list of free services (according to the Rules for Providing Health Care to Immigrants issued by the Ministry of Healthcare and Social Development), the Ministry should, together with NGOs and insurance companies, disseminate information about voluntary medical insurance among labour migrants, including explanations about voluntary and employer-funded insurance.
- Establish measurable indicators and/or benchmarks for the effective monitoring and evaluation of the implementation of the National Action Plan and workers' entitlements to insurance. Additionally, monitor the implementation of training for health personnel.
- Standardize the terms of national legislation as necessary, bringing them into line with the terminology used in international labour standards for migrant workers, which will enable these individuals to obtain access to social welfare and social protection in a degree equal to that of the citizens of Kazakhstan.
- Provide information for migrants at the border check points.
- Promote coordination of information dissemination between countries of origin and destination, for example, with religious/community leaders, in community gathering places in Kazakhstan, via schools, mosques, bazaars and other informal gathering places of workers.
- The root of many problems originates from the absence of registration at the place of residence. However, even the legal temporary registration cannot guarantee access to social services. Certainly, registration gives no right to a migrant to work on the territory of Kazakhstan. Thus, first, the temporary registration should acquire the status of notification rather than permission. Second, in view of the fact that a large number of migrant workers stay and work in Kazakhstan, a mechanism to procure an authorized work permit after migration should be available. Furthermore, migrants should have an option to register themselves, rather than rely on local citizens to register them and risk losing their documentation in the process.
- Develop measures to eliminate corruption within institutional regulation of migration processes.
- Create regional and national mechanisms for referral of victims of human trafficking among law enforcement agencies, NGOs, health-care establishments and social services and safe and supported voluntary return procedures.

Health services sector, related to various health service delivery platforms and access to and use of services (interpreters, culture) (national/local)

- Provide information and training for health practitioners about occupational health risks for the construction sector (for example, dust and respiratory illnesses), as well as other common health problems among migrant workers, such as TB.
- Provide information and training for health practitioners on trafficking in persons and labour exploitation, including health risks and consequences, the need for specialized care, and how to identify and safely refer suspected victims of trafficking.
- Led by health practitioners, conduct activities among migrant construction workers to inform workers about symptoms of and treatments for common health issues in the construction sector, and on where to seek care and assistance.
- Provide health care to migrant workers according to their rights and national regulations. Support advocacy for further health-care access, including insurance coverage and accessible services for non-Kazakh residents. Advocate for inclusive health services for migrants.
- Inform migrants about other common health risks (for example, common occupational hazards, communicable diseases, particularly TB and the risks of multi-drug-resistance) and simple PPE and other health access options. Highlight the longer-term health effects, as well as the immediate and more evident illnesses or injuries for which individuals are more likely to seek health care. Information provision and awareness-raising should provide clear and feasible guidance about where to obtain and how to use appropriate protective gear. If possible, gear or vouchers for free or subsidized gear should be provided.
- Develop a standardized check-list, informed by evidence and local stakeholders, to foster an understanding of common and serious symptoms among labour migrants and facilitate medical history-taking and diagnoses by health practitioners.
- Carry out mobile health screening for common diseases, injuries and illnesses during the high season for migration in common places of work and residence for migrants.
- Coordinate training for state labour inspectors to monitor construction sites taking into consideration occupational health risks for workers, living conditions and use of PPE, as well as safe and voluntary referral options for health care. See below.

Ministry of Health and Social Development

- Recognize the health and safety needs of migrant workers and their families, particularly trafficked people, by developing better evidence upon which to build an evidence-informed strategy to address their protection and service needs. Include plans for multisector coordination with relevant ministries (for example, those covering labour, trade and commerce, social services, child protective services).
- Review and support the dissemination of research-based evidence, multisector strategies, as well as civil society knowledge and expertise about the health effects of exploitative conditions of migrant workers. Specifically, highlight the dangers of construction-specific hazards and the benefits of proper training/apprenticeships, safe work places and protective equipment.
- Allocate specific and sufficient funding and human resources to support outreach work to migrant workers and/or mobile health units.
- Ensure medical schools and other health education platforms include training on occupational health and safety in particularly hazardous sectors such as construction work, as well as approaches for addressing cases of extreme exploitation and human trafficking, including identification, safe referral, and specialized care.

- Develop and implement a specific protocol for health providers to recognize and respond to the needs of male and female vulnerable migrant workers and victims of trafficking for labour exploitation, including identification, safe referral and specialized care.
- Ensure health and safety responses are gender and age-sensitive and recognize the challenges and barriers to services (for example, discrimination) among marginalized migrant populations.
- Ensure the Ministry is an active member of the national counter-trafficking coordination mechanism.
- Strengthen the capacity of labour inspectors to recognize health and safety violations in the construction sector, including in circumstances that might be irregular or illegal. Specifically, build staff capacity to recognize situations of extreme exploitation, including human trafficking.
- Strengthen capacity of and operational logistics for labour inspectors to detect hazardous work, safety conditions (for example, checking equipment, instruments, tools) and emergency response measures for accidents.
- Design and provide specific guidelines to labour inspectors to be able to detect and safely refer individuals who are suspected of being trafficked or in other situations of extreme exploitation or forced labour to appropriate support services. Draw on input from local non-governmental or international organizations.
- Monitor abuses of overtime work and compliance with the Labour Code of the Republic of Kazakhstan. Promote the use of fair labour contracts, which codify negotiated terms of employment.

Ministries of Internal Affairs, Justice, Law enforcement

- Implement training for relevant law enforcement officers to detect and sensitively interview and safely refer individuals who are suspected of being in situations of extreme exploitation, forced labour or trafficked. Emphasize distinctions between victims and perpetrators and the global minimum standard of not criminalizing victims of trafficking, even if involved in irregular or illegal work situations.
- Implement training for relevant law enforcement officers to refer survivors of trafficking and exploited migrant workers to appropriate support services, prioritizing their health and safety needs. Draw on input from local non-governmental or international organizations.
- Strengthen law enforcement capacity to collect evidence on injuries, illnesses, mental health, including through voluntary forensic examinations, to advocate for criminal sentences and potential compensation (past wages, health-care needs) commensurate with the harm that was caused by the crimes. Consider future lost earning capacity related to disabilities (physical, mental) caused by abuses.
- Strengthen mechanisms and operational skills to detect, investigate and prosecute law enforcement officials or other authorities who contribute to the exploitation of migrant workers, including cases of corruption or collusion with human traffickers, especially labour inspectors and migration border officials.
- Provide legal representation and victim-sensitive legal support procedures for victims of trafficking. Develop minimum standards involved for support to victims of trafficking with clearly designated and well-operating referral systems.
- Reconsider migrant worker registration procedures so that workers can maintain possession of their identification documents. Temporary registration should aim to acquire the status of notification versus permission, followed by a mechanism to obtain an authorized work permit.

Ministry of Education and Science

- Conduct education sessions in schools and in the wider community, if possible, to increase awareness and knowledge around labour rights to health and safety, fair wages and hours, compensation and redress for violations, along with information on the rights of migrants. Distribution of information in schools should aim to include family members, spouses and children, who may influence workers' actions and decisions. Campaigns should explore implementation in bus terminals where many migrants start/finish their journey, as well as market places, mosques and other community centres.

Donors and NGOs

- Fund awareness campaigns to inform migrants of their rights to health and other services and their rights as migrants and as workers, as well as occupational risks and protection options.
- Fund migrant health outreach initiatives in locations known for high migrant populations.
- Fund initiatives that focus on the mental and physical rehabilitation of victims of trafficking, including health-care services. Consider a mentorship programme to help survivors identify options (education or labour) to reintegrate. Consider drawing on the knowledge and experience of survivors to facilitate these programmes.

Private sector (business, employers and industry)

- Engage employers and contractors to implement full safety procedures, provide skills-training, provide relevant protective gear and institute responses to accident and injuries.
- Develop procedures for accident- and illness-related support and compensation.

Donors and NGOs

- Provide funding to develop mechanisms for co-financing medical insurance for certain types of health care.
- Fund outreach services to migrant workers, including health and legal services and provision of information about migrant and worker rights.

5.7 FURTHER RESEARCH PRIORITIES

- Follow-up this study with longer-term quantitative survey to identify patterns of migration decision-making, migration experiences and health risks among migrant workers.
- Document patterns of construction-related accidents, illnesses, injuries and health-care access and use.
- Explore types of protective gear that can be used by construction workers in extreme weather conditions.
- Consider implementation and evaluation of peer education for use of and attitudes towards protective gear.

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6

MIGRANT WORKER EXPLOITATION AND HEALTH:

COMPARATIVE
MULTISECTOR,
MULTI-COUNTRY
FINDINGS

6. MIGRANT WORKER EXPLOITATION AND HEALTH: COMPARATIVE MULTISECTOR, MULTI-COUNTRY FINDINGS

This section synthesizes what report findings reveal about migrant workers' experiences across the different labour sectors and regions. It also seeks to compare experiences of migrant workers with individuals working in the same sector who were formally identified as having been trafficked. Although there are significant differences in context, culture, legislative structures and task-related circumstances among the study sites and populations, there also appear to be important similarities in health hazards and in migrants' financial, social and legal challenges to achieving a safe and financially successful migration outcomes, regardless of which corner of the world people were in or what jobs they were doing.

Important notes about comparisons

There are several core characteristics of each study subject that limit comparisons between the three study arms, particularly factors related to legal migration and work status. Most notably, in Madre de Dios, Peru, migrants travelled internally within their own country; however, as an industry, most of the artisanal gold mining sector is informal or illegal. These circumstances distinguish Peruvian workers' situation from those of international migrants who may have greater complications and fears about their immigration documents and status. Bolivian workers in Argentina generally did not have problems with legal migration status because of the Mercosur Agreement; however, they may have misperceived or been misled about their migration status as possibly being irregular or putting them at risk somehow with the authorities.¹⁸⁴ Additionally, the informal textile sector is illegal under Argentine labour laws. Citizens from surrounding Central Asian countries may enter Kazakhstan without a visa; however, in order to work legally they must obtain official legal and worker status and accompanying valid paperwork to avoid financial penalties and expulsion.

Peruvians working in an illegal mining sector had reason to worry about law enforcement crackdowns on these activities, particularly because exploited (and potentially trafficked) workers are currently not seen by Peruvian authorities as victims, but rather as part of these illegal activities. The Peruvian migrants' fears appeared to be somewhat similar to concerns of the Bolivians who worked in the Argentine textile workshops that were run in private houses to avoid detection by police or labour inspectors. However, in Argentina, these fears were largely engendered by misinformation (often provided by the owner of the clandestine textile workshops), because the reality in Argentina is that there are broad protections for both migrants and Argentinian workers under Argentinian law. In Kazakhstan, migrants worked primarily on legal constructions sites.

Perhaps the most important difference between our study sites was the absence of identified victims of trafficking in Peru. To date, the system to identify trafficking victims working in mining in Madre de Dios has concentrated mostly on minors, and in particular on women and girls trafficked for sexual exploitation. It was therefore not possible to make comparisons between the experiences of migrant workers and trafficking survivors in this sector, or to compare any trafficking survivors there with survivors in other countries.

¹⁸⁴ Argentina's Law 25,871 considers migration to be a human right and recognizes migrants' rights to equal treatment, non-discrimination and access to medical, educational and social services, regardless of migrants' legal status. Article 6 of this law requires educational and health-care authorities to inform migrants about how to resolve their irregular migration status. The law facilitates migrants' ability to obtain residency (nationals of neighbouring countries such as Bolivia are eligible for residency, regardless of whether or not they have a job); however, some Bolivians do not have this information.

Migration motivations

We only worked on the farm; my kids were smaller. We did not have enough money and we worked to pay for food and could not buy anything else (...) I had heard so much about Madre de Dios that we decided to come and work here.

Sandra, 26, migrant worker, Peru

The thing is that in Bolivia, we don't have much money and I have five children and I can't support all five, we're going there [Buenos Aires] to work for a while, people come back with a lot of money, so we're going there to work.

Sofía, 36, migrant worker, Argentina

Based on the interviews, there is little doubt that most people's main reason for migrating was to earn a better living elsewhere. Very often, these financial hopes and expectations were based heavily on what potential migrants knew or had heard about the experiences of family, friends, neighbours or people in their community. Put another way, decisions about migration often reflect migration norms or local migration patterns, knowledge and practices.¹⁸⁵ It would seem that, in many ways, migration begets migration. It also would appear that the normalization of migration affects the amount of information that prospective migrants collect before deciding to migrate. In most countries we found that migrant workers took the migration process for granted – it was something that everybody did, hence they did not ask many questions about working and living conditions, and some even migrated before securing a job. It is likely that the informality of the sectors included in this study had a strong impact on the decision to migrate without information, a seemingly important risk factor for our interviewees.

A majority of interviewees in each of our study sites explained that their main motivation for migrating was to meet basic needs and/or pay off accumulated debts, because local income options were limited or not as lucrative as elsewhere. Many interviewees noted that agricultural conditions were bad or had worsened over time, so that income from farming was small or nothing, and that other local job opportunities were slim. Some women noted that loss of a spouse by death or abandonment meant they had to seek a better income to care for themselves and their children.

I was not able to provide education for my eldest son (...) He became a builder. The same story with my daughter, she also doesn't have [an education]. Now I want to make an effort to provide an education for my youngest son."

Mansur, 55, migrant worker, Kazakhstan

Migration was viewed by most interviewees as the best way to strive for a better life, achieve better income to support basic needs as well as invest in education, especially for those with children. Some of the workers interviewed in Kazakhstan seemed to have been motivated less by abject poverty than by aspirations to significantly raise their standard of living or secure a high level of education for their children. In Peru, participants mentioned important improvements to the infrastructure that eased the transport to worksites (highways), which may also have influenced their decision to migrate.

¹⁸⁵ Gordon F. De Jong, "Expectations, gender, and norms in migration decision-making", *Population Studies* 54, no. 3 (2000), pp. 307–319. Available from www.jstor.org/stable/2584787.

Most migrant workers interviewed in Kazakhstan intended to return home after having earned money, with few explicitly expressing plans to migrate permanently. However, in the case of Peruvians and Bolivians, many migrants ended up relocating permanently to Madre de Dios and Buenos Aires. For some migrants permanent relocation was positive while for others it was an economic necessity.

Implications: Migration patterns appear to be closely related to community migration norms and networks, which seem to make people feel relatively at ease about migrating. Clearly, individuals are primarily motivated by financial need and aspirations for a better future for themselves and their families. People appear to make migration decisions based primarily on anecdotal information and local knowledge, particularly when migrating to work in an informal sector. To ensure that messages and practical information about how to migrate for work safely are well communicated and well targeted, programmes will benefit from drawing on greater evidence about local migration perceptions, patterns and migrant decision-making processes, as well as information on migrants' understanding of and expectations for their future employment.

Gender aspects of labour migration

I wouldn't want to send my wife to work abroad (...) A man must create conditions for his wife and children. A woman's work is at home. Today women work and earn because of difficulties.
Idris, 25, migrant worker, Kazakhstan

Gender norms expressed in people's migration intentions were somewhat apparent, because men tended to emphasize their role as the family "bread-winner". However, women also noted their financial responsibilities to support their children. Men, especially in the Central Asia arm of the study, described their household obligations and felt ashamed of not being able to support their families "properly".

Gender divisions were evident in the construction and mining sectors. Nearly all interviewees working in construction were men. In mining areas, men were doing the dangerous, hard (and higher paid) labour in the mines, while women worked primarily as cooks. Among the textile workers, it appeared that both men and women undertook similar work, although only women were employed as cooks.

My previous partner left me with my small little boy and I had no way to provide for him, my parents complained.

Olga, age unknown, migrant worker, Peru

Single Bolivian women tended to migrate alone to Argentina to earn money to support their children (who were often left behind in Bolivia with relatives). Some eventually brought their children once they were earning enough to support them. In Peru, single women tended to migrate with their children.

Interviewees appeared to have fairly traditional images of gender roles, but also simultaneously recognized the financial exigencies that required both men and women to go to work. However, many noted that women migrating or working alone might be at greater risk for sexual abuse or harassment. Women workers were also often double-burdened with housework or childcare.

Some families opted to migrate together, particularly in Peru. For the other families, it remains unclear, how families decided who would migrate and who would remain home.

Implications: Women, men and children migrate for work. People appear to have fairly traditional perspectives about gendered roles and responsibilities. Yet financial necessity means that both men and women generally seek work. While men often maintain that they must serve as the primary "bread-winner" for their families, families may also migrate together, with women also seeking

employment or managing their household in the new location. Not surprisingly, it is common for single mothers to assume financial responsibilities for their children. Youth also migrate for work. Programmes communicating with migrant workers need to be tailored to meet the information needs of men and women and the developmental needs of youth. Programmes to support their psychological and physical health needs will have to provide care according to age and gender.

Recruitment

In Argentina we know someone who is a relative (...) she's the one who proposed us to go and work there (...) we dived into it confident that we would be with someone we knew when we arrived"

Ada, 33, victim of trafficking, Argentina

Across the sites, few formal recruitment mechanisms were mentioned, except for the IOM-facilitated Employment Centre of the Kyrgyz Republic. In many cases, interviewees found job opportunities through people they knew, such as family, extended family members and acquaintances from their local village. Some interviewees were accompanied by individuals who had arranged their job, but other individuals travelled on their own to agreed meeting locations. Peruvians and Bolivians did not necessarily have to arrange a job prior to arriving at the worksite, because Madre de Dios and Buenos Aires were well-known locations for mining and textile jobs and they did not need to obtain a visa in advance. In Kazakhstan, some migrants only knew they would be working with a family member or friend at their destination; they did not necessarily know the exact location or content of their future job.

There does not appear to have been a clear method of recruitment that was protective against severe exploitation, except for those migrating to Kazakhstan via the the Employment Centre of the Kyrgyz Republic. For Bolivians going to Argentina, it is unclear whether it was protective to use migrant networks (except immediate family) versus other resources to secure a job, such as information from the radio upon arrival. At the same time, in our study, all Bolivians who were trafficked had been recruited prior to departure and seemed to have had less information than their compatriots who were not formally identified as having been trafficked. In Central Asia, receiving money or having arrangements paid prior to starting a job seemed to be linked to cases of exploitation, whereas knowing someone at the worksite in Kazakhstan appeared to be somewhat protective. For migrants going to Argentina and Kazakhstan, those who paid their own way – versus those who had their passage paid or agreed to have money for travel deducted from their future wages – appeared less likely to be exploited.

Two of my friends were here [in Astana] (...) They said we could come if we wanted to work...so that's how we came.

Yernur, 25, migrant worker, Kazakhstan

In Peru, there did not appear to be many clear distinctions between those who might ultimately be more or less exploited in terms of recruitment practices.

However, the sample for this study was small, so distinctions remain difficult to interpret.

Implications: For interventions and specifically for programming messages, these findings suggest that there may not be clear advice to offer most prospective migrants related to job recruitment when dealing with primarily informal sectors. It is clear that the absence of information regarding conditions and terms is problematic, but these highly informal sectors tend to lack formal and transparent recruitment mechanisms that can be monitored and improved. Further research is

urgently needed to learn and test what information and messages will provide the greatest potential for migrants in specific settings to achieve their financial and other goals, and what actions can be taken to reduce their risk of exploitation.

Contracts

Our job was different from what the boss of the company promised us, he didn't keep his word.

Abay, 25, victim of trafficking, Kazakhstan

Written contracts appeared to be rare, with the exception, again, of those going through the IOM Employment Centre of the Kyrgyz Republic. In nearly every case, people received only verbal explanations from those who recruited them, with suggested information about pay. As this type of casual employment information and arrangements was so common, most participants did not appear to question the absence of a written contract. In Kazakhstan, apart from those going through the employment agency, two victims of trafficking from China signed contracts which they poorly understood and which outlined their debt to their future employer. In Argentina and Peru, migrant workers were informally employed and had no written contract, contrary to the laws of both countries.

It was just an offer (there was no contract) nothing of the sort (...) they offered me to go, that I would earn a salary, I was supposed to even get a bed to sleep, a table and all that stuff.

Leo, 19, victim of trafficking, Argentina

Indeed, it is probable that obtaining a written contract – as so often suggested in anti-trafficking programs – would not have been possible in most cases; moreover, demanding a written document may have meant that prospective migrants might not have secured a job. As discussed further below, few participants had any understanding of their rights, entitlements or responsibilities. But, even had they understood the rules, it is questionable whether they would have been able to assert their rights and maintain their jobs – regardless of having something in writing.

Practically nobody informed us about the working hours or how we would work."

Cesar, 54, migrant worker, Peru

Implications: Written contracts appeared to be rare for most of the workers in this study. Many current interventions focus on advising migrant workers to obtain written contracts. However, this appears to be impractical advice for the majority, who rely on informal networks and work in unregulated job settings. More migrant-led and employer-informed insights are needed to learn how to help migrant workers ask the most relevant questions and obtain clearer information and commitments about pay and work and living conditions, before they are trapped in an exploitative situation.

Pay arrangements

Pay and pay arrangements for their work varied significantly in the interviewee group. Most interviewees were paid by piecework or a percentage of the day's production (textile, gold mining) or by job completed (construction job). However, there were also salaried workers, for example, cooks at mining sites, lower-rung textile jobs (e.g., ironing, cleaning), construction workers hired through the Employment Centre in Kyrgyzstan, and identified trafficked workers in Kazakhstan. In many instances, lodging and/or food was supposed to be included. But, as noted previously, work

contracts were generally verbal and often vague. Study findings on earning a salary versus being paid by job or piece, seemed to suggest that people's pay arrangements did not necessarily indicate whether or in which ways someone might be exploited.

It's not like earning a monthly salary, we get a percentage (...) if you mine 40 grams, you get 25 per cent, that is, 10 grams for us and 30 for them (...) only by shift. Four per shift and the other four wait until the next day for the following shift and two remain stand-by just in case someone falls ill and must be replaced.

Edson, 38, migrant worker, Peru

However, when individuals were loaned money upfront, for example, for travel to the destination location, it seemed that this type of loan arrangement was used against some of them, putting them at various levels of debt bondage. This was especially the case for trafficking survivors in Kazakhstan, who had been loaned money for travel and knew they might have to pay additional fees upon leaving the country because their exploiters had not registered them with the police. In Argentina, travel-related debt was used to tether the workers to their job.

Delayed payment was also an effective means of detaining workers in their jobs. In Argentina and Kazakhstan, workers, particularly those who were victims of trafficking, were likely to report delayed payments and having to ask repeatedly for back wages. Many noted that they remained in difficult, even abusive situations because they were owed months of promised – and hard-earned – pay.

Implications: Debt arrangements occurred in various forms. When participants thought that they owed money, they felt obliged to remain in difficult circumstances. Delayed payments also served to keep people in their jobs because they hoped to eventually obtain what was owed to them. It will be very difficult to ameliorate these unfair practices in sectors that remain outside the reach of the law, unless reporting mechanisms can be strengthened and workers who make reports are assured they will not be prosecuted for violations, such as illegal work, immigration or visa violations.

Identity documents

For those travelling internationally, it was necessary to possess identity documents to cross the border. For workers in Kazakhstan, the necessary registration at their destination location was only possible through a Kazakh citizen; this required the migrants to hand over their identity documents to employers or other Kazakh citizens. Bolivians in Argentina crossed borders with their national IDs, because the local law allows nationals of the Plurinational State of Bolivia to do so without a visa or other permit.

They said that it was necessary to register with the authorized agencies. We agreed and gave them our passports. They said that they would give them back after registration. But we haven't seen our passports for more than four months.

Abay, 25, victim of trafficking, Kazakhstan

Most Bolivians working in Argentina did not necessarily understand their (legal) migration status and believed that they might have been present in Argentina illegally. Many seemed uninformed about how to register for worker status in Argentina. In addition, it remains unclear whether they would have preferred not to regularize their situation and work in a formal job, because then they would have needed to pay taxes. For many Bolivian migrants, this did not make sense because they did not see themselves retiring in the country, so they felt that they would “lose” that money. In both Kazakhstan and Peru, victims of trafficking in particular had their documents taken by traffickers.

Implications: It is common for anti-trafficking and safe migration programmes to advise migrant workers to maintain possession of their identity documents at all times. However, in reality, this would not be possible for many foreign workers who require the participation of employers in order to be registered to work. Many – if not most – workers would not know how to or be permitted to apply for the necessary local registrations on their own.

Pre-departure information and awareness

This section about awareness is of particular importance because of the considerable global funding invested in awareness-raising.¹⁸⁶ Findings of this study show few strong indications about what might have made people safer or less safe, more able to earn good wages or more likely to earn lesser income. In fact, there were cases where interviewees made similar decisions (for example, was recruited by friend or acquaintance or took job with no written contract) and one ended up in trafficking-like circumstances and the other did not.

Yes, I'd heard about it, but I didn't give much importance to it because I never thought... let's say I heard that one day and I forgot the next day.

Leo, 19, victim of trafficking, Argentina

This raises questions about how to make pre-departure information activities useful and ensure the information is accessed, believed and used by prospective migrants. There were a number of comments by interviewees that are emblematic of the potential problems with awareness-raising activities.

Yes, I heard about it, but, I trusted my family... it didn't cross my mind for a second that I would go through something like that.

Ada, 33, victim of trafficking, Argentina

Similarly, even if the awareness campaigns are received, individuals may be more likely to put more faith in the information they receive from those that are close to them.

It is also possible that when people hear about some of the extreme examples of highly abusive circumstances, they cannot believe this would ever happen to them.

Yes, I heard stuff, rumors, (...) they take you on false promises, and when you get there, it's not what they promised, but I went being aware of all that, in God's hands.

José, 18, victim of trafficking, Argentina

Interviewees seemed to question the truth of disastrous migration tales and also thought that it might have been simply a matter of being lucky or unlucky.

I saw on TV. Then I heard about it from a guy in town... I just heard his story about a house in Kazakhstan desert (...) There were four people with chained legs in that house; they were forced to make bricks from clay.

Dilshod, 36, victim of trafficking, Kazakhstan

¹⁸⁶ Mike Dottridge, "Editorial: How is the money to combat human trafficking spent?", *Anti-Trafficking Review*, no. 3 (2014), pp. 3–14, doi: <http://dx.doi.org/10.14197/atr.20121431>.

Even when people hear about human trafficking via the media, and also directly, many, if not most, will still go and take their chances. This raises concerns about the widespread donor belief in and investment in awareness campaigns.

Implications: Findings from each study country and sector indicate that identifying effective messages for pre-departure information and awareness campaigns is not likely to be simple or straightforward. As described in the above sections, there were no obvious patterns indicating particularly dangerous practices that would likely lead to extreme exploitation. Clearly, as noted above, before more large sums are invested in awareness-raising, greater work needs to be done to learn what messages will be useful to help people migrate for work in the safest possible ways. It is worth considering how prevention strategies used in public health, such as health promotion interventions, might be useful in the field of human trafficking prevention.¹⁸⁷

Occupational health and safety, injuries and illnesses

Workers in each study country experienced common risk exposures similar to the general risks described in previous research on migrant worker health.^{188,189} Each of the sectors we studied was poorly regulated or not regulated at all, in particular the smaller enterprises. Thus, workers were left to try to protect themselves in work that posed numerous hazards, with few measures to ensure their safety, mitigate risks or respond to injuries.

*We decided to look for another job to save money and buy our own machines.
Ada, 33, victim of trafficking, Argentina*

Most migrants expected that if they put in their time and effort now, even in the face of many potential health hazards, they would earn good money in the near term or “climb the ladder” to more lucrative income in the long run: that is, it would be worth the investment and possible sacrifice. For example, many Bolivians hoped to become sewing machine-operators and then maybe own a small enterprise themselves. Similarly, Peruvians hoped to become extraction machine operators and then maybe buy their own extraction equipment. Workers in Kazakhstan hoped to earn and save enough money to take home and advance their families’ quality of life through education or building a home.

These aspirations and the payment methods migrants encountered (per garment for sewing, a percentage of the gold extracted per day, or by edifice constructed) commonly kept people labouring extremely long hours in jobs they knew or suspected to be harmful to their health – even if these situations did not necessarily meet the criteria for human trafficking, debt bondage or forced labour.

It was not uncommon for workers to incorrectly attribute the health risks and consequences of their work, misunderstand potential prevention measures and erroneously apply various traditional and rumoured remedies to symptoms of ill health.

Long hours

Regardless of work sector, interviewees were very likely to work extensive hours. Long hours were common, in part, because for many interviewees, pay was related to work completed. Long hours were particularly common among those who lived at or near their worksite. People preferred working and making money to spending time resting or travelling longer distances to and from work. Leisure hours were limited for most workers, particularly for women, who often reported using free hours to

¹⁸⁷ Patrick Koeppl and Emily Robertson, “The healthy choice: How behavioral factors create influential health campaigns”, Deloitte University Press, 2015. Available from <http://dupress.com/articles/behavior-change-communications-in-health-care/>.

¹⁸⁸ Emily Q. Ahonen, Fernando G. Benavides and Joan Benach, “Immigrant populations, work and health – A systematic literature review”, *Scandinavian Journal of Work, Environment & Health* 33, no. 2 (2007), pp. 96–104.

¹⁸⁹ Joan Benach et al., “Migration and “low-skilled” workers in destination countries”, *PLoS Medicine* 8, no. 6 (2011), e1001043, doi: <http://dx.doi.org/10.1371/journal.pmed.1001043>.

take care of household chores. Men who had migrated without family also reported using free time for cooking and for cleaning their clothing.

[I start work] from four in the morning, so they can have breakfast at six in the morning; then we need to have lunch ready by one, and at five or six start with dinner (...) I worked all the time, and when I finished serving dinner, I washed the plates at eight, and at nine was resting (...) I had no rest, work was from Sunday to Sunday, we rested for a while when they finished lunch, a short while, and at 3 or 4 [p.m.] were back cooking, that was the only rest we got.

Olga, age unknown, migrant worker, Peru

Although migrant workers reported very long working hours, individuals who were identified as trafficking survivors described more gruelling schedules – hours that were not optional in order to earn more money, but imposed by employers. Additionally, it was not uncommon for trafficking survivors to report having to undertake extra tasks, such as cleaning, repairs and cooking, in addition to their designated employment workload. Those identified as trafficked in Kazakhstan, for example, noted they work long days doing various additional tasks, such as repairing machines, which reportedly left them only four to five hours for sleep.

I have suffered a lot at this job, it was very difficult for me. I worked 15-16 hours a day, we also had to do repairs. If a machine went out of order, we had to repair it ourselves. When other workers had some rest during the day, we did not. When others had a rest in the evening, we did not, we repaired the machines till 11 p.m. or midnight. So we could sleep only four or five hours a day.

Abzal, 20, victim of trafficking, Kazakhstan

Not surprisingly, research from around the world focused on various labour sectors indicates that working long hours with limited break time is among the most important risk factors for workplace accidents.^{190,191} Extensive hours can reduce people's concentration and caution in tasks that require significant attention. In the case of gold mining, for example, those involved directly in mining activities (the *maraqueros*) tended to work for stretches of 24 hours. Similarly, workers in textile workshops often laboured long hours doing work beyond their designated garment tasks or to gain additional skills to advance to machine operator.

"It was from 6 [a.m.] to 10 [p.m.] (...) but since I was an assistant I also had to stay and clean, clean the workshop, sweep, all that (...) so I went to sleep at 11, 11:30 depending how quick I was (...) On Saturdays we worked until noon, afterwards we had to, I had to stay until 3 or 4 because I had to clean, mop the floor (...) I wanted to use the straight-stitch machine, that's what I had in mind, and at night or if I tried to learn, I stayed up until late, until midnight, if that's what it took to learn, because nobody wanted to teach me."

Omar, 26, victim of trafficking, Argentina

¹⁹⁰ Margaret Chan, "Fatigue: The most critical accident risk in oil and gas construction", *Construction Management and Economics* 29, no. 4, pp. 341–353, doi: <http://dx.doi.org/10.1080/01446193.2010.545993>.

¹⁹¹ Zewdie Aderaw, Dagne Engdaw and Takele Tadesse, "Determinants of occupational injury: A case control study among textile factory workers in Amhara Regional State, Ethiopia", *Journal of Tropical Medicine* 2011, doi: <http://dx.doi.org/10.1155/2011/657275>.

Workplace hazards and injuries

Specific occupational risk exposures differed by labour sector and often by particular task within each sector.

Textile. Common occupational hazards experienced by textile workers were: inhalation of particulate cloth fibres; injuries from iron burns; musculoskeletal problems from repetitive actions and long-held postures; and crowded facilities shared with others infected with tuberculosis (TB), which is highly contagious.¹⁹² The most commonly reported workplace injuries were cuts or punctures produced by the sewing machine needle, the blade of the cutting machine, yarn cutting scissors or the tagging gun. Workers reported accidentally “sewing up” their hands, and being hurt by the needle, which could penetrate the fingers (and even bones). Individuals perceived that inhaling dust fibres was not good for their health, but did not necessarily comprehend the magnitude of the potential long-term lung damage, such as byssinosis, or “brown lung disease.”¹⁹³ Cooks and workers who ironed fabrics commonly reported burns resulting from accidental contact with hot irons or pots.

You may sew up your finger or if you're a cutter, you can cut your finger.

Pablo, 30, migrant worker, Argentina

Gold mining. Among the most significant longer-term health hazards associated with gold mining is mercury poisoning.¹⁹⁴ Miners are exposed to mercury when they burn the material with mercury in open air and also when consuming contaminated water and fish. The occupational hazards more commonly noted by the migrant workers in our interviews, however, were snake bites when clearing the land; malaria and dengue from mosquito bites; leishmaniasis from sandfly bites; infectious diseases and parasites from contaminated water; heavy objects falling on them; landslides of extracted material; burns from the heated engines; inhalation of toxic fumes from mining machinery and burning mercury; and working on unstable scaffolding. Workers were submerged in water for long periods, which is associated with nail and dermal fungi, joint problems (such as arthritis and rheumatism) and kidney problems. The pressure hoses were reported to pose particular risk of injury, especially when they were not under control and reportedly could hit workers with the force of an iron bar.

One of his co-workers went into the jungle and brought him in arms, a three-hour walk, he almost died because he was bitten by a poisonous snake (...) he could not drink water 'cause the venom would go to his heart, a month without drinking water (...) it was horrible.”

Elsa, 30, migrant worker, Peru

Construction. The most common occupational hazards mentioned by workers were: dust inhalation (both from construction-site dust and dust storms); electric shock; falling from a height or being hit by falling objects; vision loss from welding or penetrating objects; back injuries and hernias from lifting heavy objects; lacerations sustained while cutting metal or from being hit with concrete shards during drilling; and harms due to extreme temperatures (severe cold and hot weather as well as heat due to proximity to furnaces and boilers). Dust on construction sites is ubiquitous because it is aerosolized from processes including grinding objects, cutting or handling concrete powder. Migrant construction workers report arthritis and back injuries from such repetitive movements as hammering, heavy lifting and constant bending.

¹⁹² See, for example, “Clandestine textile workshops: Manufacturing disease”, available from www.conicet.gov.ar/ clandestine-textile-workshops-manufacturing-disease/ and “Dust” available from www.hse.gov.uk/textiles/dust.htm.

¹⁹³ A. Gerson Hollander, “Byssinosis”, *Chest* 24, no. 6 (1953), pp. 674–678, doi: <http://dx.doi.org/10.1378/chest.24.6.674>.

¹⁹⁴ Katy Ashe, “Elevated mercury concentrations in humans of Madre de Dios, Peru”, *PLoS ONE* (2012) 7(3): e33305, doi: <http://dx.doi.org/10.1371/journal.pone.0033305>.

There are sites with balconies, or electric currents, sometimes you do not notice a cord and then hit with a rock drill or start working with a hole puncher or disk grinder, and you are struck with electric shock (...) You can fall off during outdoor work.

Edil, 42, migrant worker, Kazakhstan

Chemical hazards in construction commonly included asbestos or lead, which, among migrants, have been shown to cause fatal lung cancers like mesothelioma, brain disorders such as leukoencephalopathy, skin inflammation (contact dermatitis) and elevated lead levels.

“My little brother died while they were working (...) the post came on top of him, killed him, we saw the accident (...) he died right then and there (...)”

Cindy, 24

Infectious diseases

Alongside occupational risks, migrant workers and victims of trafficking were highly exposed to and therefore vulnerable to tuberculosis and malaria. Of particular concern was tuberculosis and the potential for late diagnosis because of workers’ tendency not to seek medical care for numerous reasons: fear of lost work time, cost of clinical services and – particularly for trafficked persons – restricted freedom. Constrained access to health services meant not only that individuals would present late for treatment, but that there was significant likelihood of transmission to co-workers and/or family members. Migrants’ living conditions were often conducive to the spread of TB. Moreover, migrants appeared to be unaware of the symptoms associated with TB and unable to detect when they might have been actively infected and already spreading TB to co-workers or family. Increasing migrant knowledge of tuberculosis, its symptoms and longer-term effects, as well as access to treatment may help reduce the spread of TB.¹⁹⁵

Small versus larger enterprises

Workers in small textile and construction enterprises appeared more likely to experience exploitative practices, including longer hours, below-standard protections and withholding of pay. Small textile and construction enterprises were often operating illegally or not properly registered and so were much less likely to be regulated or inspected compared to larger textile factories or big construction sites. It is possible that knowledge of regulations or expectations of inspections meant that employers of somewhat larger operations (for example, in textiles, up to around 20 workers) were more likely to impose certain safety standards, fearing, for example, potential fines for violations. At the same time, construction workers who were interviewed perceived the larger sites as more hazardous, because these generally involved bigger projects, working at greater heights. Interviewees who were textile workers in bigger enterprises perceived that while they may have had more personal protective equipment, they had fewer opportunities for informal training for higher-level positions, such as sewing machine operator.

Sometimes because it was very hot ... and didn't want to wear [the mask], I felt it didn't let me breathe and having to move from here to there it made me feel uncomfortable.

Luz, 27, migrant worker, Argentina

¹⁹⁵ Samantha A. Huffman et al., “Exploitation, vulnerability to tuberculosis and access to treatment among Uzbek labour migrants in Kazakhstan”, *Social Science & Medicine* 74, no. 6 (2012), pp. 864–872.

Personal protective equipment (PPE)¹⁹⁶

Personal protective equipment is gear used by individuals to prevent or minimize potential harm from hazardous work tasks. It is worth noting that labour health and safety experts do not view PPE as the first line of defence for worker health and safety, but as an additional protection meant to accompany the full range of efforts that can be made to “control or eliminate hazards at the source”.¹⁹⁷ Certainly in the case of many workers we interviewed, work conditions did not appear to be set up to protect worker safety.

Each interviewee was asked about PPE. Few people reported using any protective equipment.

The most commonly discussed protective gear for textile and construction workers was masks to protect them from work-related dust and particles or fibres. However, in both Argentina and Kazakhstan, workers explained that the climate, particularly the hot (or cold) temperatures, made it too uncomfortable to wear masks. For some, the equipment did not necessarily fit properly, which made it difficult or uncomfortable to wear.

It is very uncomfortable to get a hard hat on. It does not sit, falls down. That is why we often work without it.

Yernur, 25, migrant worker, Kazakhstan

The importance or usefulness of protective gear also appeared to be underestimated by interviewees. For instance, construction workers indicated that they did not use safety harnesses (or hard hat) when working at the third or fourth stories of a building project, but maybe on the sixth or seventh floors they would.

Here there is no safety, no safety measures, each one sees to his own safety, when you work as a machete handler you have to see how you do it, take care of yourself (...) when you are cutting down the underbrush you risk coming across snakes.

Ernesto, 30, migrant worker, Peru

Workers seemed to believe that employers were not responsible for supplying health and safety gear. And when individuals thought they were working in irregular circumstances, they were even more likely to explain that they had no rights and that employers had few obligations other than to pay them. Trafficking survivors in Kazakhstan, for example, explained that they themselves supplied their own protective gear, when they had gear at all. Gold miners in Peru also reported that they did not use any protective equipment, only mentioning caps to protect themselves from the sun and boots to work in water, which, in all instances, they had to buy themselves.

They didn't teach you what to do or how to do it. First, you worked with the team, watched how and what everything was done, got the understanding of what they did and started working.

Mukhit, 28, migrant worker, Kazakhstan

¹⁹⁶ Personal protective equipment, commonly referred to as "PPE", is gear or garments (e.g., gloves, mask, hardhats) that aim to minimize a worker's exposure to workplace hazards, including chemicals, injuries from heavy equipment, electrical or airborne dangers. See: www.osha.gov/SLTC/personalprotectiveequipment/.

¹⁹⁷ Saskatchewan Construction Safety Association, "Safety tip – Personal protective equipment", web article. Available from www.scsaonline.ca/safety-tips/personal-protective-equipment. Accessed 28 October 2015.

I didn't know how to sew, I learned on the machine (...) I entered on tiptoes at any time when I felt like it and I was free and I took a machine and started to cut fabric remnants.

María, 27, migrant worker, Argentina

Moreover, workers often believed that if they complained they risked losing their jobs, which was particularly dangerous for those whose employers owed them money or those who believed they could be charged with immigration crimes.

Training

Training for the workers interviewed often appeared to be "on-the-job", in the form of informal apprenticeships, and primarily taught by other workers – and often only if there was co-worker good-will and if time allowed for this type of observation, support and practice. As noted, most interviewees hoped to gain the skills that would allow them to engage in the higher-earning, more specialized tasks.

During the last month I started learning how to mine gold (...) My friends working there (...) my workmates of the different shifts taught me.

Carlos, 27, migrant worker, Peru

Perceptions of health risks

Workers in textile manufacturing and gold mining were generally more aware of the hazards that were more visible and direct (sewing machine punctures, mining machine injuries), or which generally led to shorter-term and more painful injuries or death, in the case of the gold miners. They were less conscious of or knowledgeable about the pernicious hazards associated with serious and longer-term health outcomes, such as lung diseases from inhalation of fabric fibres and the health consequences of mercury poisoning. In Argentina, interviewees seemed confused about the way tuberculosis was spread.

[Dust] enters your lungs and causes a virus and you don't know it's eating up your lungs, that I found out because the doctor told me, I asked her, she said yes, it eats up your lungs and if you share a plate or use the same spoon, you catch the virus, there are many workers that know about how contagious it is, and, and they don't let you work, even if you're off the books or working legally, that's how I know it's contagious (...) because it's contagious, with tuberculosis you can't, if you don't eat well, nothing, others don't drink milk and that's why they get tuberculosis (...) the doctor says that you have to drink plenty of milk so that you don't catch it, you don't get tuberculosis (...) it helps you not catch that disease, it expels the dust you may've inhaled.

Luz, 27, migrant worker, Argentina

"Quicksilver (...) that harms you (...) to obtain gold (...) some call it mercury we call it quicksilver (...) They say it can make you blind (...) when burning it, the fumes it lets off can blind you; that's all I have heard, nothing else.

Elsa, 30, migrant worker, Peru

In Kazakhstan, although workers noted numerous serious hazards associated with construction (for example, electric shocks, welding burns, back problems from lifting), the most universally mentioned concerns were fears about the dust from the construction sites and general environment. Dust was reported to be ubiquitous and visible and most interviewees knew that inhaling this dust would have long-term effects on their lungs and overall health. Despite this, as mentioned above, masks were frequently not worn.

Here at the construction site you can work one or two years maximum, and then health will not allow it.

Mukhit, 28, migrant worker, Kazakhstan

Workers commonly understood that the tasks they were undertaking would take a large toll on their health and that it would be difficult to stay in these jobs for very long.

Medical service access and use

Last year, too, I was in the public hospital for one-two months, had an imaging, shot, as a result got in debt.

Mansur, 55, migrant worker, Kazakhstan

For most migrant workers, access to medical services was limited because of cost and legal status (or local registration issues for Peruvians and Central Asians). What's more, losing wages from missing work was a significant disincentive to seeking care. Some workers in Argentina were given false information about their rights to services. For those working under more exploitative circumstances or who were trafficked, accessing formal medical care was not possible. There were no reports of employers or traffickers paying for medical care, even in the case of work-related accidents. To the extent possible, most people tried to treat themselves, using home remedies, medications they brought from their countries of origin or those they received from co-workers or employers. Only for what they perceived as major medical problems would workers seek professional clinical care.

Of significant concern for those workers who contracted tuberculosis was their ability to access and maintain a course of medication, particularly because of the risk of increase in drug resistance.

In Peru, health care was limited because the overall health-care system was weak and because the mining sites were so remote. These circumstances, combined with the extreme risks associated with mining, suggest that mobile health clinics could have enormous value in meeting migrant workers' health needs.

Work was far away and there was nowhere to get health care (...) There was a technician two hours away (...) a two-hour walk to a rural health post.

Ernesto, 30, migrant worker, Peru

Implications: In each work sector, individuals were exposed to various health hazards related to both working and living conditions. There appeared to be few if any measures taken by employers to protect people's health and well-being, as workers' training was limited and PPE was rarely sufficient or suitable to the dangers of the tasks. There is a clear role for better information for workers about health hazards and potential options for their safety, as well as more effort to conduct labour inspections (although many of the worksites were operating irregularly, which may limit formal interventions). It was suggested that perhaps gaining more advanced technical skills (for example, as

a machine operator or a craftsman) before leaving home could enable people to earn a better income from the start and also be protective in terms of occupational safety. Skills-building interventions, such as those that are being tested in some regions and sectors (for example, domestic workers in South Asia) might help foster safer, thus more successful migration experiences. It is worth noting, though, that in our interview groups, the trafficked workers in Kazakhstan were skilled – but were forced to undertake low-skilled tasks. This also occurred with victims of trafficking in Argentina.

Until I started getting worse, they didn't want me to go (...) I even had blood in my urine and all that, I showed my boss, but she still didn't want me to go even seeing that.

Ada, 33, victim of trafficking, Argentina

There is good reason to invest in mobile health units to provide medical care directly to migrants. This easy access to health care would help break down barriers to access including cost, lack of awareness of migrant rights to health care, and a low level of understanding of infectious diseases with public health implications, such as tuberculosis. Moreover, wider-reaching occupational health promotion in locations with high numbers of migrant workers based on culturally informed economic behaviour theory could help to mitigate many of the occupational health hazards observed in our sample.

Abuse and violence

Psychological and verbal abuse (especially for work-related mistakes or misunderstandings) appeared to be more common than physical abuse, although there were certainly reports of violence, particularly from those that were identified as trafficked – in fact, physical violence and physical confinement were defining features of the experiences of these individuals. Some interviewees described having been physically abused and injured.

They beat one of our guys a couple of times. A couple of those foremen injured our colleague, they beat him.

Abay, 25, victim of trafficking, Kazakhstan

A number of participants in each study site mentioned having witnessed abuses by employers against other workers. Demonstrations of abuse were very effective means of controlling workers. Participants also described fights between workers.

It was a battle from the start, since she saw me (...) she had it in for me, when she cooked, she had tools, machines to slice vegetables and that kind of thing, but when I had to cook, she hid stuff or ruined it, she disconnected cables so that it wouldn't work, and gave me the heaviest pots.

Ada, 33, victim of trafficking, Argentina

In some cases tensions, verbal abuse and even physical abuse were instigated because workers perceived that a co-worker was not keeping up with the work or was causing the worker to lose time and money. In other cases, particularly in Kazakhstan, there was strife between ethnic groups (between Kyrgyz and Kazakhs, for example).

Threats were also mentioned frequently, especially as a means to control individuals. Employers warned people against escaping and many reported that employers threatened to report them to immigration authorities, risking deportation or imprisonment. (See "Law enforcement" section, below.)

Trafficking survivors were much more likely to have experienced physical violence. Among the construction workers, physical abuse, threats and restricted freedom and surveillance were particularly common.

Women in the mining camps reported being worried about other miners sexually harassing them and some interviewees reported having problems with colleagues who had molested their partners.

They started harassing my wife; I had a word with him (...) Why is he going to be disrespectful to my wife if he supposedly has a wife, a commitment? And he said "no". My wife said he had been disrespectful.

Edson, 38, migrant worker, Peru

Freedom of movement

I couldn't go out, sometimes I asked to go to the bathroom and his wife would ask me: Where have you been? Where did you go?

Raul, 38, victim of trafficking, Argentina

Many migrant workers said they were free to come and go as they pleased, while those identified as trafficked often had their movements highly restricted; frequently, were held at the workplace via threats, regular guard visits or in locked facilities. For those who had migrated across an international border, many (mostly victims of trafficking in Kazakhstan) felt they could not leave their workplace because they did not have possession of their identity documents and feared they would not be able to travel back across a border or would be detained as irregular or illegal immigrants. Fears of police and immigration officers also kept many migrants from going far from their worksites.

There were about 300 or 400 buildings. The houses were enclosed with a single fence. There was security, strangers were not allowed. (...) Yes, the security watched us.

Beksultan, 21, victim of trafficking, Kazakhstan

Yet most workers, even those who were not physically confined, remained (and often resided) at the workplace because they could earn more money (by working longer hours) and avoid the expense and time of a commute to and from the job. Moreover, for many, back salaries and debts caused them to remain in situations that they might otherwise have left. Participants also remained at workplaces because of severe financial constraints (for example, they had not been paid, or not paid enough), which meant they could not afford to go out. For example, Bolivian workers explained that when they were not at their worksite, they could not afford meals, so they preferred to work the extra days so that they could access the food supplied at the workplace.

A number of interviewees preferred to remain together with other workers at or near their workplace because this is where they felt most at ease, sharing meals and enjoying the companionship of compatriots.

A number of victims of trafficking and migrant workers also mentioned that they were under regular surveillance. Victims of trafficking (especially those in Kazakhstan) reported extremely restricted movement, including fences, locked facilities and guard dogs. Many also reported having witnessed abuses of co-workers, for example of those who tried to escape or made mistakes, which sent clear and chilling warnings to follow the rules.

Work-related stress

I had a headache, I was stressed out, so much, every day I'm there at the machine, and I got so stressed out, being in the machine constantly, sewing... so nervous, to move quickly, to grab more fabric (...) How can I put it? You don't want to be in the machine anymore but you must, you have to because you need the work.

Dora, 46, migrant worker, Argentina

Not surprisingly, psychological stress was very common among the workers interviewed. Regardless of sector, country and gender, fundamental sources of stress included long hours, financial worries and poor living conditions. Additionally, frequently workers felt pressure from colleagues, because most jobs were paid by the piece (clothing item, gold) or job completed (building). Because people worked in teams that depended on one another's skill and efficiency, inefficiency and errors could result in less income, conflicts between co-workers and potential accidents. Accidents and injuries were also a result of stress and exhaustion, because workers rushed to complete as much as possible and attempted to put in as many hours as they could. Accidents in construction work and gold mining could readily lead to permanent injuries or fatalities.

A scaffold board can slide from under feet. For example in July in summer at "Koktem" site [a high-rise in Almaty], near "Aisana" 18 guys fell off the frame scaffold (...) they were putting stones up to the 9th (...) Fell completely.(...). Some of them died.

Idris, 25, migrant worker, Kazakhstan

Implications: Workers were under considerable stress, especially psychological stress, even when they were not physically abused. This has implications for prevention interventions to make workplaces safer, inform workers of their rights and reporting processes for violations. This should also inform the development of mental health support services for migrant workers, particularly those who have been trafficked or experienced extremely abusive or exploitative circumstances. The abuses reported also indicate the need for considerable involvement of law enforcement and more mechanisms to provide financial or material compensation for harm, especially long-term disabilities.

Living conditions and nutrition

Poor living conditions, poor food and bad nutrition were a source of great stress and frustration for most workers and victims of trafficking who were interviewed. While some workers were able to rent their own accommodations, many workers lived in shared and overcrowded accommodations. Workers in all sectors described unhygienic and uncomfortable housing and sleeping arrangements, including dirt, bugs, exposure to the elements (heat, cold, rain), lack of access to running water and very unhygienic toilet facilities.

When it's very cold, we have no protection from the cold, you are exposed to the cold air.

Gustavo, 26, migrant worker, Peru

The bathroom was used by all staff, but there were too many, and it was, as I said, filthy, they didn't clean it (...) around 200 people used it (...) it was, as I said, too dirty indeed, you went to the toilet longing to pee and found everything filthy.

Doris, 26, migrant worker, Peru

Victims of trafficking reported worse living and sleeping arrangements, sometimes sleeping on kitchen floors and storage sheds. Victims described receiving very bad and very little food, some only receiving one meal per day or only bread and water.

Those who paid for their housing and food found the cost of living was much more expensive than home and this meant it consumed a great deal of their income; this was particularly true for those who came from villages in Peru to work in mining. Workers in Argentina often mentioned their hesitancy to go out during their free time because of the expense of food and leisure activities and concerns about living in rough or dangerous areas of town.

Migrant workers and identified victims of trafficking who were living outside their countries of origin lamented the loss of food from home and appreciated when they were able to share meals with compatriots. Workers in all three study settings commonly complained about the poor nutritional quality of their meals, and in particular the absence of good or any meat, noting that when they worked so hard, they needed food of higher nutritional quality.

When you are employed, you only get that, unless you are the owner and can perhaps take maybe a yogurt or some fruit.

Pablo, 30, migrant worker, Argentina

Also a poor diet, I also fell ill at one time with a pleural haemorrhage, the food is horrible too (...) we ate red pepper soup for lunch, mixed with banana, as if it were for pigs.

Sergio, 37, migrant worker, Peru

Compatriot communities

For those who travelled outside their country, spending time with others from the same culture appeared to be a source of comfort. Compatriots also seemed to form a useful network for assistance, such as links to medical care. Compatriot co-workers also were a good source of information on such things as fees, immigration requirements and legal rights, and helped to counter misinformation provided by exploitative employers.

For example, in Argentina, the Bolivians are the largest foreign community and have established many expatriate sources of entertainment, such as radio stations, restaurants and dance venues. In Kazakhstan, in addition to accessing general expatriate networks, Muslim migrants found community in praying together.

When I have free time, on Fridays, after saying Friday prayers I take my son to Khan-Shatyr [a shopping and entertainment center], Duman [aquarium].

Edil, 42, migrant worker, Kazakhstan

Workers made differing decisions about whether to migrate with or without their families. Bringing family members sometimes meant that, for married couples, both spouses might be able to generate income. But, for some, it meant greater expense to support a family in locations where the cost of living was higher. Additionally, having accompanying family also meant that it was often more difficult for workers to live on-site, which meant longer commutes to work.

Weather and environment

The weather in each of the study locations had a significant influence on people's well-being. Participants talked about the effects of climate on both their living and work conditions. For example, in Buenos Aires, temperatures go down to 3°C in the winter to highs of 35°C in the summer. In Astana, Kazakhstan, the range is -20°C to 26°C. Textile and construction workers frequently explained that extreme heat while working not only caused great discomfort, but also made them opt to work without safety equipment such as dust masks, even when masks were available. In Madre de Dios, the average high temperature does not drop below 30°C.

When I got here it was very hot, difficult to get used to, very hot, the aegypti mosquitoes [which can transmit the virus that causes dengue fever], all these things are difficult, difficult to get used to, I suffered the change in climate for a whole month, the mosquitoes bit me.

Gustavo, 26, migrant worker, Peru

We work in masks. When we work in freezing temperatures and breathe through this mask, there is vapour in place of mouth and nose. Vapour and cold. And you get sick from it. Maxillar sinusitis, flu.

Zhambu, 23, migrant worker, Kazakhstan

Workers across various sites described very moldy and damp housing. Mine workers in Peru were particularly vulnerable to persistent fungal skin diseases from working for long periods in and near unclean water, and the inability to ever get completely dry because of the regularly hot and damp climate.

I had fungi, because of the weather, the water (...) in the genitals, bottom, all that part (...) even my feet swelled up (...). There was a doctor here before who helped me a lot but because of our job we get into the water, get wet so it's a bit difficult to get rid of the problem (...) [do you still have that disease?] Yes, but I no longer work in mining and although I work in a dryer place, my problem is still there.

Ernesto, 30, migrant worker, Peru

Though I have three days rest, still my fingers are slightly swollen. We put on gloves, but they do not help against frost. From morning till evening we twist and knit reinforcement metal [pointing with hand].

Mansur, 55, migrant worker, Kazakhstan

Kazakhstan was the only study site where extreme cold was a problem. Freezing weather caused enormous physical discomfort, skin problems and illness. Complaints about frostbite were not uncommon – especially involving fingers among men who were working without gloves or with gloves that were not sufficiently protective. Some interviewees reported living in tents either without heat or with extremely poor heating.

In Kazakhstan, interviewees regularly described how dust from both dust storms and worksites would enter their housing, and how they were regularly covered in and inhaling dust.

Implications: For international migrants who were interviewed, expatriate communities and contacts ameliorated feelings of loneliness and cultural loss. Future interventions with migrant workers need to use various means (helplines, Internet resources, local religious centres) to help them link better to compatriots and local foreigner community resources. General living conditions and climate factors were often a source of discomfort and sometimes illness for interviewees.

Legal status, law enforcement and migration officials, and workers' perceptions of rights

A senior guard explained us that he bought us for 15 thousand tenge [USD 82]. He gave money to the migration police saying that we saw that ourselves.

Azat, 33, victim of trafficking, Kazakhstan

Study findings demonstrate a potentially untenable contradiction in the role of the law enforcement and migration authorities. Interviewees made it very clear that law enforcement and migration officials were more often a source of stress and fear than a potential resource for assistance. Among some interviewees, concerns seemed to arise from warnings from employers about workers' vulnerability to arrest, detention or deportation or from interviewees' concerns about corruption. Some employers warned interviewees that they had connections with the police and other officials; and it is certainly the case that many workers would not doubt that the police were colluding with employers or would discriminate against foreigners, even in places where the local legislation provided protection for both migrants and workers, which was the case in Argentina. In Kazakhstan, one group of victims of trafficking reported they had been sold to their trafficker by law enforcement.

Migrant workers interviewed who were, or who believed they were, working irregularly (for example, in an illegal factory, or with an expired visa or in a job "off the books") avoided contact with law enforcement and migration officials, because they feared losing their options for employment, being subject to extortion or being deported.

In Madre de Dios, the fact that interviewees worked in informal or illegal mining settlements made them fear any contact with law enforcement and made it nearly impossible for them to assert their rights or seek assistance from police. In that setting, it was common for law enforcement to raid the camps and detain everyone working in them regardless of their role as workers or owners, or the possibility that they might qualify for assistance as victims of trafficking in persons under national law.

Interviewees were asked what they knew about their labour rights. In all three study sites, most seemed very unsure of the concept of worker rights. In fact, many of the interviewees' responses focused on what they perceived as their responsibility to do their work versus employers' responsibilities (safe conditions, insurance), or they focused on their own legal responsibilities versus the state's obligations to workers (for example, pensions).

Implications: These findings raise questions about global investments in interventions to train individuals about their rights and police training, and the global minimal standard of not criminalizing potential trafficked persons. Programming must carefully consider whether workers would feel able to assert their rights given the many warnings they receive from employers and their own doubts about their legal status and police integrity. It also raises important questions about global investments in

police training and how to overcome deep tensions between migrant workers and law enforcement, including reportedly rampant corruption.¹⁹⁸

They deducted the ticket they'd sent us, then the taxi used to pick us up at the bus station, and the food of the two first weeks, I mean the weekends, they deducted that also.

Sofía, 36, migrant worker, Argentina

Comparing identified victims of trafficking and migrant workers¹⁹⁹

Similarities

Findings from this study reveal notable similarities and differences between the experiences of migrant workers and identified victims of trafficking. Not surprisingly, people had very similar reasons for migrating and common aspirations for their future, such as meeting basic needs, paying off debts and funding education. General occupation-related hazards and health consequences were similar for workers in a given sector. Workers also faced similar exposure to and health outcomes from poor living conditions and environmental and climatic extremes. Use of health services was limited among victims of trafficking and migrant workers, with most interviewees seeking health care only if injuries or illnesses were severe or urgent. Neither migrant workers nor victims of trafficking had the costs of health care paid by employers, even when injuries were caused by accidents at the workplace. Nor did interviewees from either group receive any compensation when injured at work.

Perceptions of law enforcement were also comparable. Most participants wished to avoid contact with law enforcement and labour inspectors. They viewed law enforcement, both immigration officials and police, more as a source of problems than as a potential resource for assistance. Similarly, when asked about their rights or entitlements as workers, migrant workers and identified victims of trafficking alike perceived that “labour rights” referred more to their own obligations to do their jobs well as opposed to their rights as workers to, for example, fair wages, reasonable hours, social security and other benefits.

Critically, as noted above, awareness-raising efforts seemed to have fallen on deaf ears in both cohorts. Warnings about human trafficking did not seem to be protective for victims of trafficking. Most workers, whether identified victims of trafficking or migrant workers, seemed to have heard about human trafficking via media, word of mouth, and through other avenues, but generally reported that they did not believe these types of things would happen to them.

Distinctions

Results of this study suggest that individuals who were identified as victims of trafficking were more likely to be physically abused, work and live in worse conditions, labour for longer hours per day and be paid less than migrant workers who were not identified as trafficked. While occupational health risks for both groups appeared to be similar, because trafficking victims were frequently exposed to work-related hazards for longer hours and seemed to work under harsher, more abusive conditions, these risks were likely to be more hazardous and cause greater injury and illness. Victims of trafficking were also more likely to be made to work through illness and injury and less likely to access professional medical care. At the same time, victims of trafficking often lacked the freedom of movement, information and funds to access health services to the same extent as migrant workers.

Pre-migration risk factors for being trafficked remain somewhat of a conundrum. While our study was able to identify a number of distinctions between the severity of exploitation and abuses experienced by trafficked people versus migrant workers, at the same time the study was unable to identify with certainty definitive pre-migration risk factors for human trafficking. Findings on risk factors prior to

¹⁹⁸ Bakhyt Nurgaliyev, Kuatphan Ualiyev and Branislav Simonovich, “Police Corruption in Kazakhstan: The preliminary results of the study”, *Review of European Studies* 7, no. 3 (2015), doi: <http://dx.doi.org/10.5539/res.v7n3p140>.

¹⁹⁹ Please note that this analysis is based on Kazakhstan and Argentina, given the lack of victims of trafficking in the Peruvian sample.

migration often appeared to be mixed and sometimes even contradictory, and generally site- or even case-specific.

When considering site-specific risks, findings from Kazakhstan suggest that pre-migration arrangements for those who were identified as trafficked often included receiving some payment or upfront investment, for example, for a workers' travel. That said, this was not always the case. Some workers did receive upfront payments or were promised reimbursement for travel and were not trafficked.

Engagement with migrant networks or networking via compatriots known to the worker, including family members, did not necessarily prove to be protective. Prior to migration, many workers arranged their job through someone known to them. Some were exploited; some were not. However, again, findings can also be site-specific: Among Bolivians working in textiles in Argentina, most of those who were identified as trafficked had arranged their job prior to migrating, while those who found their job upon arrival in Argentina were less likely to end up in exploitative situations. In Kazakhstan, on the other hand, none of the migrant workers who had had a known contact at the destination were trafficked.

Conclusions and recommendations

This study has generated evidence in several important areas. First, it offers detailed findings about occupational health and safety risks in commonly under-regulated sectors and about the implications of migrants' hazardous living conditions. We hope these results will open a wider dialogue on the occupational health of migrant workers and their access to safe and hygienic living spaces, a discussion which, to date, has been quite limited.²⁰⁰

Further, this research confirms much of what we suspected about the abuses and health and safety risks associated with extreme labour exploitation and human trafficking. Moreover, it also breaks new ground by exposing some of the similar risks faced by the larger population of migrant workers in the same unregulated sectors that are common workplaces for victims of trafficking. The study results appear to corroborate much of what has been found about the abuses experienced by people who are identified as trafficked, including the ways that they are controlled by exploiters, such as through extortionate debt arrangements, retention of identity documents, threats to report people to authorities, deception about labour and immigration regulations and absence of rights, restricted freedoms and physical and psychological violence. And, yet, at the same time, we also noted that many of these abuses reported by victims of trafficking were also reported by numerous migrant workers who were NOT identified as victims of trafficking. Although without additional details it is difficult to say how many of the migrant workers we interviewed should have been identified as victims of trafficking, the fact that we were able to make so many comparisons suggests that perhaps policymakers and programme staff need to look more carefully at what is happening to the larger population of people working in these unregulated, informal sectors.

Indeed, these initial insights into the similarities and differences – but especially the similarities – in the harm experienced by migrant workers compared to that undergone by those who were identified as having been trafficked offer an important lens through which to view the potential policy and programming crossover to address the health and other service needs of both groups.

Furthermore, by considering labour exploitation from a health perspective, it is also possible to make more informed decisions to make better use of scarce intervention resources. We hope these findings will raise pressing questions about the distinctions – or limits of distinctions – between migrants and trafficked people working in the same sector, and in particular questions about their health and service needs. Perhaps with a greater focus on the harm caused by various circumstances of exploitation, future interventions will aim to include the larger populations of those who are in need

²⁰⁰ Emily Q. Ahonen, Fernando G. Benavides and Joan Benach, "Immigrant populations, work and health – A systematic literature review", *Scandinavian Journal of Work, Environment & Health* 33, no. 2 (2007), pp. 96–104.

of assistance rather than relying so heavily on labels as the gateway to intervention. That is, we believe that there has been a terminological “elephant in the room”, which is the problem of determining who “fits” within the definition of “trafficked” or “slave” and therefore who should benefit from certain entitlements and for whom should we target interventions. As the results suggest, many of the protection and assistance needs are similar, and in many cases, people who are not being identified as trafficked are in need of the same levels of assistance.

Investments in combating exploitation need to extend beyond a narrow definition of “victim of trafficking” or “modern slave” and whether the exploitation reaches a “criminal threshold”. Instead, we need to think more broadly and determine what levels of exploitation and harm meet a programmatic investment threshold, where we aim to protect the much larger and – perhaps – less evidently exploited group of migrant workers. And, perhaps by making this broader investment, we will simultaneously protect against the more extreme abuses that we call human trafficking or modern slavery.

As the dialogue progresses on achieving the Sustainable Development Goals, we hope these findings make it clear that strategies to reduce poverty and support people’s aspirations to a better life must address the larger context that puts migrant workers at risk of significant and long-term harm. By investing to ameliorate the larger problem of labour exploitation, we can simultaneously achieve significant gains in the protection, health and well-being of people who are exposed to some of the most extreme forms of exploitation or human trafficking.



7

SUMMARY RECOMMENDATIONS

7. SUMMARY RECOMMENDATIONS

General recommendations

- Support and invest in achieving the Sustainable Development Goals (SDGs), particularly SDG 8 to “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” and “to eradicate forced labour, end modern slavery and human trafficking”. Specifically, protect labour rights and promote safe, secure, non-exploitative work environments for all, particularly migrants working in informal, under- or unregulated sectors.

Ministries of health

- Recognize the health and safety needs of migrant workers, particularly trafficked people. Budget for and implement evidence-based health-sector strategies to ensure protection of migrant workers and victims of trafficking and to meet their service needs. Undertake multi-sectoral coordination with relevant ministries (for example, labour, trade and commerce, social services, child protective services, law enforcement, and others).
- Participate actively in counter-trafficking efforts at the local, regional and national levels. Ensure that health services for victims of trafficking and exploited migrants are addressed in national plans and integrated into post-trafficking referral mechanisms.
- Provide information and training for health practitioners about occupational health risks, especially for sectors known to be exploitative and under-regulated. Highlight common health problems among migrant workers, such as tuberculosis. Develop and implement a clear protocol for health providers to provide care for male and female adult and child migrant workers and victims of trafficking for labour exploitation, including identification, safe referral and trauma-informed care.
- Inform migrants about common health risks (for example, sector-specific occupational hazards, infectious diseases, particularly tuberculosis) and longer-term health hazards (inhaling dust particles, exposure to toxic chemicals). Disseminate clear and feasible guidance about obtaining and using appropriate personal protective equipment (PPE). If possible, subsidize or provide gear or vouchers for free PPE.
- Provide health care to migrant workers, regardless of whether they are engaged in informal work or have irregular migration status. Offer outreach care (for example, mobile health services) in common places of work and residence for migrants. Support advocacy for migrant workers’ health protection, including insurance coverage and accessible services for non-residents, and for inclusive health services for migrants.

Ministries of labour

- Strengthen the capacity of labour inspectors to recognize health and safety violations, particularly in under-regulated sectors or irregular work situations. Coordinate and fund training for labour inspectors to strengthen monitoring of workplace health and safety conditions, including use of PPE.
- Build the capacity of inspectors to recognize situations of extreme exploitation, including human trafficking. Design and provide training on labour inspection guidelines to detect individuals who are suspected of being in situations of extreme exploitation, forced labour or trafficking; and to safely refer individuals to support services. Draw on input from local non-governmental or international organizations.

Law enforcement and justice ministries (police, prosecutors, judges)

- Implement training for relevant law enforcement officers to detect individuals who are suspected of being in situations of extreme exploitation, forced labour or trafficking and safely refer them to health and other support services. Draw on input from local non-governmental or international organizations. Emphasize distinctions between victims and perpetrators, adhering to international standards to avoid criminalizing victims of trafficking or others who have had their rights violated.

Donors

- Fund strategies to inform migrants of their rights to health and other services and their rights as migrants and as workers.
- Fund health outreach initiatives in locations with high migrant populations.

Private sector (business, employers and industry)

- Engage employers (and contractors within their supply chains) to ensure safe workplaces, including well-implemented and monitored workplace safety conditions, procedures, skills training, provision and use of relevant protective gear and clear responses to accidents and injuries.
- Develop and implement guidelines to identify and prevent exploitation and abuse, including protections for whistleblowers, procedures for coordination with law enforcement in the case of trafficking and regular inspections of supply chain partners.

Civil society and international organizations

- Participate actively in service networks and/or national referral mechanisms to ensure migrant workers, and in particular exploited workers, can access health care.
- Strengthen awareness activities within communities about the health risks associated with human trafficking and labour exploitation.

Further research priorities

- Follow up on findings from this study with quantitative surveys to identify broader patterns of migration risk and decision-making, migrant health and health service access and use; carry out longitudinal research to identify migrants' long-term health needs.
- Explore barriers to identification and referral of victims of trafficking for labour exploitation, in collaboration with regional and local stakeholders.
- Conduct intervention research to develop evidence-based strategies to improve migrant worker conditions, especially protection and response mechanisms (for example, information and advisory services); outreach clinics for health and legal services; labour inspections of registered and irregular enterprises; worker coalitions and victim-centred law enforcement responses.

The image features a light blue background with several overlapping geometric shapes in various shades of blue. A large, bold, dark blue number '8' is positioned on the left side. To its right, the word 'ANNEX' is written in a bold, dark blue, sans-serif font. The overall design is clean and modern.

8

ANNEX

Figure 2: Conceptual framework

Occupational exposures	Migration-related risk	Health outcomes
<ul style="list-style-type: none"> • Chemical • Physical (work conditions and PPE) • Biological • Social (lack of training, violence and abuse) 	<ul style="list-style-type: none"> ↑ Legal insecurity ↓ Living conditions ↓ Health service access ↓ Social support ↑ Financial insecurity/migration related debt ↑ Social marginalization and stigma ↑ Acculturative stress 	<ul style="list-style-type: none"> • Disease of the: <ul style="list-style-type: none"> ▪ Nervous system ▪ Sensory system ▪ Circulatory system ▪ Respiratory system ▪ Liver ▪ Skin ▪ Musculoskeletal system ▪ Genitourinary system • Infectious and parasitic disease • Mental and behavioural disorders • Malignant neoplasms and non-malignant disease of the blood



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