Awareness of Tuberculosis and Access to Health Services and Tuberculosis Treatment among Uzbek Labor Migrants in Kazakhstan

Samantha Huffman

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## TABLE OF CONTENTS

**EXECUTIVE SUMMARY** ........................................................................................................ 5

**INTRODUCTION** .................................................................................................................. 7

**METHODOLOGY** ............................................................................................................... 8

<table>
<thead>
<tr>
<th>Study design</th>
<th>Data collection</th>
<th>Data analysis</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study design</td>
<td>Data collection</td>
<td>Data analysis</td>
<td>Limitations</td>
</tr>
</tbody>
</table>

**LABOR MIGRATION** ........................................................................................................ 11

<table>
<thead>
<tr>
<th>Migration process and occupations</th>
<th>Labor and living conditions</th>
<th>Employer relations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migration process and occupations</td>
<td>Labor and living conditions</td>
<td>Employer relations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Work contracts and registration</th>
<th>Sequestration and passport confiscation</th>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work contracts and registration</td>
<td>Sequestration and passport confiscation</td>
<td>Payment</td>
</tr>
</tbody>
</table>

**FEAR OF MIGRATION POLICE** .......................................................................................... 15

**RELATIONS WITH LOCAL POPULATION** ............................................................................... 16

**HEALTH-SEEKING BEHAVIOR** ............................................................................................ 17

<table>
<thead>
<tr>
<th>Treatment delay</th>
<th>Typical illnesses</th>
<th>Self-treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment delay</td>
<td>Typical illnesses</td>
<td>Self-treatment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Traditional healers</th>
<th>Knowledge of health care system</th>
<th>Role of employers in access to care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional healers</td>
<td>Knowledge of health care system</td>
<td>Role of employers in access to care</td>
</tr>
</tbody>
</table>

**AWARENESS OF TUBERCULOSIS** .......................................................................................... 20

<table>
<thead>
<tr>
<th>General awareness of TB</th>
<th>Symptoms</th>
<th>Transmission and causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>General awareness of TB</td>
<td>Symptoms</td>
<td>Transmission and causes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Curability</th>
<th></th>
<th></th>
</tr>
</thead>
</table>
TB treatment .........................................................................................................................21
  TB among migrants ................................................................................................................22
  Stigma surrounding TB ........................................................................................................23
  Sources of information ........................................................................................................23
  Information from doctors ...................................................................................................24
  Desire for information .........................................................................................................24

ACCESS TO HEALTH CARE ...........................................................................................25
  Registration .........................................................................................................................25
  Financial barriers ...............................................................................................................26
  Attitudes of health care workers .......................................................................................27
  Language barrier ...............................................................................................................28
  Preference for receiving TB treatment in Uzbekistan .........................................................28
    Finance ..............................................................................................................................29
    Quality of care .................................................................................................................29
    Support of friends and family .........................................................................................29
    Stigma ...............................................................................................................................30
  Treatment-seeking path of TB patient interviewees ............................................................30
    Patients on treatment in Kazakhstan .............................................................................30
    Patients on treatment in Uzbekistan .............................................................................31

ISSUES WITH TB TREATMENT .....................................................................................32
  Registration of TB patients ...............................................................................................32
  Recording of TB cases .....................................................................................................33
  Resources and drug quantification ....................................................................................34
  Treatment interruption ....................................................................................................35

PARTICIPANTS’ SUGGESTIONS ...................................................................................36
  Suggestions of labor migrants ............................................................................................36
    Information and education ...............................................................................................36
    Improving labor conditions ............................................................................................37
    Facilitating access to care ...............................................................................................37
    Screening at the border ....................................................................................................38
  Suggestions of health care workers ..................................................................................38
    Information and education ...............................................................................................38
    Field fluorography ..........................................................................................................38
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement of employers</td>
<td>38</td>
</tr>
<tr>
<td>Special clinics</td>
<td>39</td>
</tr>
<tr>
<td>Screening at the border</td>
<td>39</td>
</tr>
<tr>
<td>Sending migrants home</td>
<td>40</td>
</tr>
<tr>
<td>Communication between Uzbekistan and Kazakhstan</td>
<td>40</td>
</tr>
<tr>
<td>DISCUSSION AND RECOMMENDATIONS</td>
<td>41</td>
</tr>
<tr>
<td>Epidemiology of TB among migrants</td>
<td>41</td>
</tr>
<tr>
<td>Awareness of TB among migrants</td>
<td>42</td>
</tr>
<tr>
<td>Access to health care and TB treatment</td>
<td>43</td>
</tr>
<tr>
<td>Migration and labor conditions</td>
<td>45</td>
</tr>
</tbody>
</table>
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EXECUTIVE SUMMARY

As a result of booming economic growth in recent years, Kazakhstan has become an important destination for labor migration from neighboring Central Asian republics. Many of these migrant laborers come from Uzbekistan, and most are undocumented seasonal workers. In an effort to control tuberculosis, the Government of Kazakhstan has extended free TB treatment under the DOTS strategy to all residents of Kazakhstan. However, anecdotal evidence suggests that migrants are reluctant to come forward to access these services. A qualitative research study was conducted to assess the level of awareness of TB among Uzbek labor migrants and their barriers to access to health care and TB treatment in Kazakhstan. Data collected consisted of 12 focus group discussions with Uzbek labor migrants in Kazakhstan and returned migrants in Uzbekistan, 10 in-depth interviews with migrants on treatment for TB in Kazakhstan and Uzbekistan, and 18 in-depth interviews with health care workers in Kazakhstan. Data were analyzed using a Grounded Theory approach to uncover key themes.

Results indicate that Uzbek labor migrants live and work under very poor conditions which not only affects their health but also impedes their access to health care. They tend to live directly on the worksite, such as construction sites and markets, and employers restrict their ability to leave the worksite. Employers hire them illegally without obtaining registration for them in order to avoid paying taxes on them. They often confiscate their passports and keep them sequestered on the worksite in a state of virtual hiding for the duration of their stay. Migrants work very long hours with minimal food, performing hard manual labor with minimal safety measures, which leads to frequent work-related injuries. They often live in cold, damp, crowded conditions, with many people sleeping on a concrete floor or huddled inside a “container.” Even when they are allowed to leave the worksite, they are terrified of leaving the premises because of the police. There are numerous accounts of brutality, harassment and extortion by the police against migrants.

Overall, migrants avoid seeking health care unless absolutely critical, and resort to self-treatment whenever possible or wait until they return home to Uzbekistan to seek treatment. When migrants choose to seek care, their main barrier to access to the primary health care system is lack of registration. Migrants are often either turned away entirely or asked to pay a “fee,” whether official or not. Migrants universally consider health services in Kazakhstan to be very expensive and are often unable to afford these fees. Other barriers include the attitudes of health care workers who are reluctant to treat patients not registered in their catchment area and are sometimes condescending towards migrants, and a language barrier as migrants are not comfortable in either Kazakh or Russian.

In the context of TB, migrants’ level of knowledge and awareness of TB is fairly limited. While some migrants are able to name the basic symptoms of TB, many migrants have misconceptions about transmission. In addition, there is little belief in the curability of TB and a lack of awareness of the availability of treatment. There is also considerable stigma surrounding TB, and most migrants are afraid that they will be sent home if their employers find out about their disease. Overall, there is an overwhelming preference among migrants
for seeking treatment for TB in Uzbekistan rather than Kazakhstan. Reasons include the cost of treatment and foregone wages, perceptions about differential quality of care, and the importance of support from family. When migrants choose to access treatment for TB in Kazakhstan, they do receive free treatment but their barriers to access to care at the primary health care level impede their access to treatment at the TB dispensary level because of the need for a referral. Other issues that arise are confusion among TB doctors about how to record TB cases among unregistered patients and concern about a strain on resources since migrants are not accounted for in drug quantification.

The findings suggest that TB is indeed a problem among the migrant community and that access to care is an important issue. Migrants typically present with symptoms very late when their case is harder to treat, and migration poses a risk for treatment default and the creation of drug resistance. There is both a demonstrated need and an expressed desire among migrants for additional information concerning TB. Education campaigns should target migrants specifically and should focus on clarifying prevalent misconceptions about TB and emphasizing the curability of TB and the availability of TB treatment. Information can be distributed in the form of pamphlets at the border, on buses and trains, and at the constructions sites and marketplaces where migrants work. In terms of access to health care, guidelines should be made explicit to regulate the situation of undocumented workers and eliminate confusion among health care workers. Access could be facilitated via a temporary migration card or an insurance scheme for migrants to provide access to basic services while working abroad. While TB is considered a “socially significant disease” more needs to be done to ensure that migrants presenting with cough are diagnosed promptly and do not experience barriers to accessing care. Regulations need to be put in place to deal with the issue of registration of TB cases and drug quantification, and screening of migrants for TB can be conducted at migrants’ workplaces. Finally, an effective system of communication between Kazakhstan and Uzbekistan needs to be established to ensure that patients who default from treatment can be followed up in the receiving country. Ultimately, the context of worker exploitation and enslavement on the part of employers, and brutality and extortion on the part of the migration police, needs to be addressed. Efforts should be made towards legalization and migrants should be made aware of their rights as labor migrants in Kazakhstan.
INTRODUCTION

As a result of booming economic growth in recent years, Kazakhstan has become an important destination for labor migration from neighboring Central Asian republics. Many of these migrant laborers come from Uzbekistan, and most are undocumented seasonal workers. In an effort to control tuberculosis, the Government of Kazakhstan has extended free TB treatment under the DOTS strategy to all residents of Kazakhstan. However, anecdotal evidence suggests that migrants are reluctant to come forward to access these services.

The magnitude of the migrant population in Kazakhstan is unknown, due in large part to the undocumented, “underground” nature of regional labor migration. However, the migrant population is known to be sizable, and it is likely that TB is a problem within this group. Lack of access to the health care system for a large segment of the population is problematic, especially in the context of an infectious disease such as tuberculosis. Theoretically, migration can pose a risk for increased transmission of TB due to the regular and cyclical flow of people back and forth between two countries. In addition, migration can contribute to treatment default, if migrants initiate treatment in one country and then interrupt to pursue earning opportunities elsewhere. Treatment default is particularly problematic because of the possibility of the creation of drug resistance.

A qualitative research study was hence designed and conducted to:
- determine the level of awareness of TB among Uzbek labor migrants; and,
- understand their barriers to access to health care in general, and TB treatment in particular.

Research was conducted with Uzbek labor migrants in Kazakhstan and returned migrants in Uzbekistan, migrant TB patients on treatment for TB in both Kazakhstan and Uzbekistan, and health care workers in Kazakhstan.
METHODOLOGY

Study design

The study used qualitative methods and was conducted with three different groups of participants in an effort to triangulate the information obtained from different sources. The data collected consisted of:

- 12 focus group discussions with Uzbek labor migrants
- 10 in-depth interviews with Uzbek migrant TB patients
- 18 in-depth interviews with Kazakh health care workers

Focus group discussions were stratified by gender, location and current versus former migrant status. Eight of the 12 focus groups were conducted with current migrants in Kazakhstan and four with returned migrants in Uzbekistan. In-depth interviews with Uzbek migrant TB patients were also stratified by location, with half of patients currently on treatment in Kazakhstan, and half currently on treatment in Uzbekistan. In-depth interviews with health care workers were conducted only in Kazakhstan. Half of the interviews were conducted with doctors from TB dispensaries and hospitals, and half with doctors and patronage nurses from primary health care facilities.

Research locations in Kazakhstan included Almaty, Talgar and Taldykurgan in Almaty Oblast, and Shymkent and Maktaaral District in South Kazakhstan Oblast. Research locations in Uzbekistan included Tashkent, Ferghana and Karakalpakstan. Tables 1 and 2 show the breakdown by type and location.

Table 1. Breakdown of sample by type of data collected and category of participant.

<table>
<thead>
<tr>
<th>Focus group discussions</th>
<th>In-depth interviews with TB patients</th>
<th>In-depth interviews with health care workers</th>
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<tr>
<td>10 with male migrants</td>
<td>5 currently on treatment in Kazakhstan</td>
<td>9 from TB dispensaries and hospitals</td>
</tr>
<tr>
<td>2 with female migrants</td>
<td>5 currently on treatment in Uzbekistan</td>
<td>9 from primary health care services, including 4 patronage nurses</td>
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Final Report, 06/03/2009
Samantha Huffman
Table 2. Distribution of sample by location.

<table>
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<th>KAZAKHSTAN</th>
<th>UZBEKISTAN</th>
<th>Total Sample</th>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Almaty</td>
<td>Tashkent</td>
<td></td>
</tr>
<tr>
<td>1 focus group discussion</td>
<td>1 focus group discussion</td>
<td>12 focus group discussions</td>
</tr>
<tr>
<td>3 TB patient interviews</td>
<td>2 TB patient interviews</td>
<td>10 TB patient interviews</td>
</tr>
<tr>
<td>5 health provider interviews</td>
<td>18 health provider interviews</td>
<td>18 health provider interviews</td>
</tr>
<tr>
<td>Talgar</td>
<td>Ferghana</td>
<td></td>
</tr>
<tr>
<td>2 TB patient interviews</td>
<td>1 focus group discussion</td>
<td>1 TB patient interview</td>
</tr>
<tr>
<td>1 health provider interview</td>
<td>1 TB patient interview</td>
<td>1 health provider interview</td>
</tr>
<tr>
<td>Taldykurgan</td>
<td>Karakalpakstan</td>
<td></td>
</tr>
<tr>
<td>1 focus group discussion</td>
<td>2 focus group discussions</td>
<td>2 focus group discussions</td>
</tr>
<tr>
<td>2 health provider interviews</td>
<td>2 TB patient interviews</td>
<td>2 health provider interviews</td>
</tr>
<tr>
<td>Shymkent</td>
<td>Maktaaral</td>
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<tr>
<td>4 focus group discussions</td>
<td>2 focus group discussions</td>
<td>2 focus group discussions</td>
</tr>
<tr>
<td>8 health provider interviews</td>
<td>2 focus group discussions</td>
<td>2 health provider interviews</td>
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**Data collection**

Focus group discussions with migrants and in-depth interviews with migrant TB patients were conducted in Uzbek, Karakalpak or Russian depending on the language of preference of the participants. In-depth interviews with health care workers in Kazakhstan were conducted only in Russian. Informed consent was obtained from all participants at the beginning of each focus group and interview, the aims and objectives of the study were clearly explained, and participants were remunerated for their time. Data were tape-recorded, transcribed in Uzbek or Karakalpak and then into Russian, and subsequently translated into English.

**Data analysis**

Data were de-identified and entered into MAXQDA 2007 qualitative data analysis software and analyzed according to a Grounded Theory approach to uncover key themes. A comprehensive codebook was developed to capture all themes emerging from the data and codes were assigned accordingly to all of the data. Thematic coded segments were then retrieved for analysis by theme and compared across strata and types of informants. A description of each theme is provided herein, organized by major domain of inquiry.
Limitations

Some of the focus group discussions were interrupted or cut short because the migrants’ employers were in a hurry for their workers to get back to work. Some of the in-depth interviews with health care workers were also hurried because doctors were busy, impatient and eager to get back to work. Five of the interviews with health care workers were conducted with more than one respondent instead of individually. However, additional interviews beyond the original target number were conducted to compensate for these, and the data obtained from the problematic interviews does not differ markedly from any of the data obtained in the other interviews. Because of the fairly large number of interviews and focus groups in each category, these limitations in data collection did not significantly impact the results obtained and data saturation was achieved in most categories.
LABOR MIGRATION

Migration process and occupations

Migrants typically set up employment agreements ahead of time with former employers or employers whom they have heard of. Sometimes a middleman organizes these arrangements. Migrants are also sometimes recruited directly from labor bazaars, or “pyatak,” or at the border. Many of the work brigades consisted of migrants who were from the same “kishlak” (village, community) in Uzbekistan and often knew each other ahead of time.

Male migrants are typically involved in construction work, the extractive industries, as vendors in bazaars and as bakers. Of the ten focus groups conducted with male migrants, six were with construction workers, two with kitchen-canteen workers, one with market vendors, and one with bakers. Male migrants tend to stay in Kazakhstan for an average of three to six months, with the construction season lasting from spring until fall. Most of the migrants interviewed had come to Kazakhstan several times already on short labor migration stints.

Women typically work in cafes and restaurants, as domestic help, or are involved in cotton-picking in the rural areas. Of the two focus groups conducted with female migrants, one was with a crew of cotton-pickers and one was with returned migrants who had been employed in a variety of service industries.

Male workers tend to go to Kazakhstan alone, whereas female workers often bring teenage daughters to pick cotton with them for the season. On the whole, migrants often assist each other in many ways throughout the migration process – in sharing information about potential employers, conveying letters to relatives back home in Uzbekistan, bringing medication from home to migrants working in Kazakhstan, and pooling their money to send sick migrants home.

Male migrants, Maktaaral:
M. What about a sick person who fell ill here?
1. We would help as much as we could to send such a person back home, because he is our compatriot and a relative of somebody.
9. If he had no money, then we would give him money.

Labor and living conditions

Migrants typically tend to live on the worksite. Construction workers sleep on the construction site, often in semi-constructed accommodations with no furnishing, in basements or in cellars. Market vendors often sleep inside a “container” where they lock up their goods for the night. Cotton-pickers sleep in barracks or worker huts in the cotton fields. Some migrants pool their money to share an apartment, but this seemed to occur much more rarely in the data than living directly on the worksite. The living conditions are often unsanitary, with minimal water or electricity. Migrants often do not have beds and sleep on
bare concrete. Conditions are usually very crowded, with up to 20 people sometimes living in one room. Workers complain of dampness and cold, which they blame for some of the illnesses migrants often experience.

Male migrant, Karakalpakstan:
The other labor migrants got ill because they did not want to pay for apartments and lived in cellars, boxes, containers. They were concerned by one thing, to earn money and send it home. In cellars it was damp and cold, migrants caught cold frequently.

Migrants report working very long hours, with 10-12 hour days being the norm. Many reported working up to 15 hours a day or more on a regular basis, and even up to 24 hours during very busy periods. On construction sites, safety measures are often not observed and migrants are required to perform manual labor that normally would require machinery; this often leads to work injuries. Migrants also often report subsisting on minimal amounts of food and food of poor nutritional value.

Male migrant, Taldykurgan:
Other guys tell us that in some places there are such conditions where they get meals only twice a day. They eat only macaroni. In some places they do not have running water. There people start working without even washing their faces. They wake up and start working. Only in about two hours they get water and bread.

Although living conditions were also difficult for female migrants in most circumstances, female migrants on the whole reported much better conditions than male migrants. This is due to the nature of the occupations they are typically engaged in as well as differential attitudes of employers towards women.

Female migrant, Maktaaral:
Our masters heat water before we come back from the fields. We wash ourselves at once; they share the meal they cook for themselves. We live in the same house with them, but in different rooms. We are as one family. Maybe it is because they know that except us there is nobody to pick up their cotton, but nevertheless they treat us well.

Health care workers themselves tend to be aware of the conditions in which migrants live, and often blame these conditions for higher morbidity among migrants, including TB.

TB doctor, Shymkent:
I: In that case, why do you think migrants have more chances to get ill with TB?
R: They have very bad working conditions. These are – high humidity, under nutrition, and unsanitary living condition. I doubt they wash themselves everyday. Overwork is also a great stress for an organism.
Employer relations

Work contracts and registration

Migrants are usually hired under informal work contracts. Migrants explain that employers do not want to obtain legal registration for them because this involves paying taxes. Health care workers also confirm that this is the case. Migrants claim that they cannot afford registration even if they want to legalize their status themselves because of the cost of obtaining registration.

Male migrant, Taldykurgan:
We do not have official documents. If we are hired officially, then our boss will have to pay us less, because he will have to pay taxes, etc. He cannot afford it.

Sequestration and passport confiscation

Health care workers explain that employers are fined for hiring illegal migrants. For this reason, employers sequester migrants on the worksite in an effort to hide them from the police, and do not allow them to leave. This of course impedes their access to health care, if they choose to seek services. In many cases, these instances of sequestration amount to virtual slavery.

Male migrant, Karakalpakstan:
All of them just the same can do nothing, they are in the same rightless situation, as well as I am. Our territory is completely fenced, closed, there is not even any exit, it was a former female colony (jail) in Atirau. I had to leave it with difficulty, took a taxi and asked to take me to the nearest eye hospital.

Employers often confiscate migrants’ passports and documents so that they cannot leave and so that they can remain in charge of all the documentation for their workers. The employers’ rationale for this according to migrants is to protect migrants from being stopped by the police. However, in some cases this amounts to human trafficking, when migrants’ passports are sold to other employers and migrants are thus “transferred” to them. Debt bondage also occurs when migrants are sometimes forced to work to pay back the debt incurred by middlemen during their transit.

Male migrant, Ferghana:
There are some people who work in Kazakhstan for more than one year. Even during the winter when it is cold they lay bricks and they do not get paid for the work they do. When people arrive in many cases employers take their passports. When they finish their work these employers sell their passports to other employers as if these workers were slaves. And they do not pay them for the work done. Many people quit their job and leave.
The fact that migrants are sequestered on the worksite impedes their access to health services not only because they cannot leave the worksite, but because employers keep them hidden from the doctors and patronage nurses who attempt to visit the sites.

Patronage nurse, Almaty:
R: However, during our visits we cannot talk to them. Usually the owners of accommodation don’t allow this or migrants themselves are reluctant to talk and hide from us.
I: Why the owners don’t allow you to talk to migrants?
R: It happens because they hide from migration police. Not only the owners of accommodation, but also employers hide the fact that migrants from Uzbekistan work for them. Migrants often have no documents and work without labor contracts.

Payment

With regard to salaries, there are numerous accounts of migrants not being paid in full for their work, or even not at all. In addition, when employers accompany migrants to health clinics and pay for treatment, they deduct this amount from their wages, but often deduct more than what they paid.

Male migrant, Karakalpakstan:
There was such a system, you agree to get one amount of money, and in the end you receive less and that is why you have to leave. During these years I worked in different places, on a construction site, car wash point, I made trading on the market, I worked as a welder, a house painter, and plasterer. And always in the end the contract was ”broken (paid less or did not pay for work at all). I have lost my hope for earnings because there were bad conditions for life, bad nutrition, humiliation, you live in a cellar. I thought that it is better to work at home for a penny than there to get ill.

There is a widespread belief among migrants that the volume of labor migration from Uzbekistan to Kazakhstan has decreased in recent years, due to an increase in these types of exploitation on the part of Kazakh employers.

Male TB patient, Ferghana:
M. Are there many your countrymen who work there?
R. Yes, but recently their number has decreased, because they are afraid of Kazakhs, deception from the side of employers, militia. However, I am not afraid, because I have the place to go. When you know for sure where you can go, there is no reason for you to be afraid. At present there are many people who do not pay for work, deceive. In the past they paid without any problems.

Female migrants, who on the whole report better living conditions than male migrants, also often report better employer relations, including being paid on time and in full. However, this was not always the case and some female migrants reported similar types of exploitation as their male counterparts.
Female migrant, Karakalpakstan:
M: How do they pay here for picking cotton?
R: Here [in Uzbekistan] they pay a little and not in time. We went there [to Kazakhstan] with a group of women. In this group there were some relatives. They paid us in time for the cotton that we picked. We earned a lot and returned back home.

Fear of migration police

The great majority of migrants reported living in fear of the migration police. They avoided leaving the worksite at all costs for fear of being detained, fined and possibly deported.

Male migrant, Almaty:
We all also have a nervous disease, nervous disorder caused by our relation with militia.

Migrants and health care workers alike report countless instances of extortion on the part of the police. The most common occurrence is migrants being detained in the street for not having papers and being asked to pay a “fee,” although extortion also happens in some cases as a matter of course.

Female migrant, Karakalpakstan:
At construction sites militiamen do «shmon» (round-up and search). This is a real robbery. They take their money.

Sometimes employers also have to bribe the police for leaving their migrants alone. One employer was in the process of bribing a policeman when interviewers showed up for a focus group discussion with his workers at the appointed time, and he explained that he did this on a regular basis to avoid bigger troubles. Often, these bribes are once again deducted from migrants’ wages. Migrants are also afraid of getting their wages stolen, which sometimes happens as they attempt to cross the border. Migrants also share numerous accounts of outright police brutality against migrants, including severe beatings.

Male migrant, Almaty:
In winter I was caught by militia. I paid them 50 000 Tenges. It is more than 400 dollars (!). For 3 days I was beaten by three guys to whom militiamen gave us. If I was free I would easily manage to beat all three of them. Nevertheless, I had to keep silent and endure. Otherwise, it could be worse. I was arrested and beaten because I forgot to take my documents with me. I asked them to come with me so that I could show them my documents, but it was useless. After this ordeal I spent almost 10 days here (in my apartment). I stayed in bed and I was treating myself. My face and neck were swollen. I had many bruises on my body. However, I could not ask for help anybody. In my country I would have known what I could have done in such a case. Actually in my country it never happens that anybody is beaten if he is not a criminal.
Relations with local population

Uzbek migrants often feel discriminated against in Kazakhstan on the basis of their status as labor migrants. They are often referred to as “cheap labor” and they feel like they are looked down upon as second-class people who perform only dirty work that Kazakhs themselves would not engage in.

Female migrants, Karakalpakstan:
1: Our people have to do the most dirty and hard work. We clean and sweep their houses. We baby-sit their children.
2: Local people do not fettle cattle, they do not clean toillettes. All road sweepers and gardeners are people who came from here. We have to work as child minders because local people do not want to wash dirty nappies. Many locals keep our women at their houses as housemaids.

Uzbek migrants also feel discriminated against on the basis of their ethnicity. They often state that Kazakhs and Uzbeks have fundamental cultural differences and that Kazakhs have a long-standing resentment of Uzbeks.

Male migrant, Almaty:
M: What is your opinion? What causes all these problems – the fact that you cannot move freely, the fact that employees of medical institutions and militia have a bad attitude towards you, etc.?
R: Nationalism! First of all they consider us to be second-class people. They believe that they are supermen even though in reality everything is vice versa. They just do not see and understand that to judge people based on their ethnic origin and treat them differently based on this principle is the worst quality of a person. However, this quality is in their blood and it cannot be changed. Certainly there are some good people among them. However, there are only few good people among them.

Another factor that adds to their feelings of alienation is the language barrier they experience on a daily basis because they are not comfortable expressing themselves in Kazakh.

Male migrant, Ferghana:
Another big problem is the fact that we do not speak Kazakh language. They do not like Uzbeks.
HEALTH-SEEKING BEHAVIOR

Treatment delay

Migrants tend to work in Kazakhstan for relatively short periods of time, and thus they report trying their best not to fall ill during this period. Many even undergo medical check-ups before they leave to make sure they are in good health.

Overall, migrants avoid seeking health care in Kazakhstan unless absolutely critical. They cannot afford to forgo wages and they are scared of being sent home by their employers if they are found to be ill. As a result, they continue working for as long as they can and hide their illness for as long as possible. Both migrants and health care workers confirm this fact.

Primary health care doctor, Shymkent:
Another thing is that a Muslim wouldn’t go to a polyclinic until he has no strength left. Most of the migrants are like that. They are coming here to earn money, and can’t afford to get sick.

Migrants will typically only seek medical help once they are no longer able to work. When this happens, they are often in grave medical condition; health care workers complain of this treatment delay, which is especially problematic in the context of TB treatment.

TB doctor, Shymkent:
I: How do migrants and local population differ in the methods of TB treatment and stages of appeal for medical assistance?
R: Do not differ, except from the fact that ill migrants arrive being already in advanced stage of TB when we cannot help them anyhow. Or alternatively, they arrive with evident TB signs - hemoptysis or bleeding.

Typical illnesses

Migrants often report catching colds and influenza while working in Kazakhstan, which they attribute to cold and damp living conditions, as well as drinking cold water after sweating near a hot oven, especially in the context of bakers who spend their days working near a “tandyr” oven. Migrants also complain of diarrhea and food poisoning, and of skin rashes and sores from not having access to water and elementary hygiene conditions. Male migrants also report work-related injuries and deaths, especially for those who work on construction sites.

Female migrant, Karakalpakstan:
A guy from Kegely died there at a construction site. He worked as a welder. He fell down and his welding apparatus fell on him. They brought him back in a coffin.
Self-treatment

In case of illness, migrants will typically resort first to self-treatment. They will either attempt to buy drugs themselves from a pharmacy or ask their employer to buy them.

Male migrant, Almaty:
We just treat ourselves, we purchase medication based on past experience of one of us or our acquaintances. For instance, I know that if one has a backache, then he should rub vodka or spirit into the back and cover it by a blanket.

Some also report bringing medication with them from home, or obtaining drugs from Uzbekistan via other migrants who travel back every few months.

Female migrant, Maktaaral:
All of us brought various medicines from home; here we do not buy anything: we brought along aspirin, paracetamol, tetracycline, adhesive plaster.

Traditional healers

Some migrants report consulting with traditional healers (“tabibs”), even in the case of suspected TB.

Female TB patient, Talgar:
I: How did the healer cure you?
R: He gave me some herbs and I took the herb decoction. I felt better, the symptoms disappeared and I stopped drinking the decoction. I started working and living as before.

However, this does not seem to occur particularly often, with many migrants claiming they do not trust “tabibs.” Interestingly, there is a perception among health care workers that migrants do in fact consult traditional healers very frequently, which does not seem to be borne out by the interviews with migrants themselves.

TB doctor, Shymkent:
I: Maybe you’ve heard of cases of self-treatment, or seeking help from healers?
R: No, I haven’t heard of such cases. Tuberculosis is not a disease that can be cured by self-treatment. As for ‘tabibs’, they all can go to them, because they know they won’t send them to a hospital (is smiling). This happens quite frequently, but, in any case, they are coming to us eventually. They are telling us about that later, when we are obtaining their anamnesis.

Male migrants, Almaty:
M: Do you go to see tabibs too?
Everybody: No, we do not, because we do not trust tabibs.
Knowledge of health care system

Migrants have limited knowledge of the Kazakh health care system and do not always understand the difference between public and private institutions. In addition, they do not know where clinics are located and are unsure of where to go to obtain medical services.

Male migrant, Tashkent:
M: What about the institution where you were admitted for medical examination and treatment? Was it a state owned or private institution?
R: It was a usual polyclinic. I do not know what are the patterns of ownership of these polyclinics. I got the impression that that was a state owned polyclinic.

There is also a widespread perception among migrants that health services are prohibitively expensive in Kazakhstan, which of course acts as an important disincentive to seeking care.

Male migrant, Maktaaral:
Services are expensive because life is expensive here. Their local patients have a lot of money. That is why doctors are used to charge a lot; whereas, we cannot afford it.

Role of employers in obtaining access to care

In case of serious illness requiring medical attention, migrants will typically notify their employer who will attempt to obtain services for them. Some employers will take migrants to private clinics in order to circumvent the registration requirement. Others will take them to government clinics and obtain either free services for them based on their own connections, or paid services, the fees for which are often deducted from their wages.

Patronage nurse, Almaty:
I: If there is a case like this but a woman comes alone, will you examine her?
R: Without her employer (master) no one will provide medical aid to her. In addition, migrants are afraid to go outside without their employers.

However, there is universal agreement among migrants that in case of very serious illness, and especially TB, sick migrants will be immediately sent home by their employers if they find out about their illness.

Male migrants, Tashkent:
M: Did you address anywhere in Kazakhstan in case of TB – whether it was your own disease or disease of your colleagues or relatives?
Many. They would only send such a person back home.
AWARENESS OF TUBERCULOSIS

General awareness of TB

Overall, levels of awareness of TB among migrants who participated in the focus group discussions were relatively low. In most focus groups, only about a third of respondents had ever heard of TB, and in two focus groups none of the respondents admitted knowing anything about TB. Many respondents claimed having heard of TB, but admitted that they did not know exactly what the disease was or how it was transmitted. Several respondents stated that they knew TB was “bad” but did not know exactly why. Some knew that TB was a disease that affected the lungs, but were unclear about the causes or mechanism of the disease.

However, many migrants had acquaintances in Uzbekistan who had had TB, and much of their knowledge of TB was based on this type of hearsay or rumors. Many of these acquaintances had either died of TB or were dying of TB. There were several accounts of entire families becoming infected with TB, including children, with family members dying one after the other.

Symptoms

Of the migrants who knew something about TB, many were able to identify at least a few symptoms. Several migrants mentioned cough, serious cough, prolonged cough, or bloody cough as the primary indication of TB. Several respondents also mentioned paleness, weight loss, fever, physical weakness and chest pain as likely symptoms. A few also mentioned difficulty breathing, high blood pressure and “spitting” as possible indications of TB.

Transmission and causes

Many migrants identified TB as a contagious or infectious disease, but were often not able to identify the mode of transmission. Several admitted that it was wise to stay away from people with TB precisely because they did not know how the disease was transmitted. One respondent ventured that TB may be sexually transmitted. Several respondents knew that TB was transmitted via cough from an infected person. A few respondents stated that TB could be acquired simply by talking to an infected person, and many acknowledged that being in close proximity to an infected person was a risk factor. Some respondents stated that there were two forms of TB, contagious and non-contagious.

Other than air-borne transmission, many respondents also mentioned other causes of TB. Several respondents stated that TB starts with a cold that goes untreated, or pneumonia. Several respondents explained that TB is an inflammation of the lungs that causes rotting of the lungs and water in the lungs. An overwhelming number of respondents cited sharing of dishes and utensils as a mode of transmission. Many respondents also cited humidity as a
cause of TB, and saw a connection with the often damp living conditions in basements and cellars where migrants live. Several respondents acknowledged the danger of neglecting one’s health as a risk factor for TB, and cited the importance of nutrition in fighting the disease. Many also mentioned personal cleanliness and hygiene as important. A few respondents cited dust as a cause of TB, and identified professions such as construction, brick-laying and welding as risky for TB. One respondent cited kissing as a mode of transmission, and one attributed TB to eating canine meat. Many respondents debated whether TB was inheritable, with some affirming that it definitely was and a few stating that an infected person could still have healthy children.

**Curability**

There was considerable debate among the respondents about whether or not TB was curable. Several respondents claimed with certainty that TB was curable, either because they had heard it on television or because they knew an acquaintance who had been successfully cured. Some stated that TB was curable but that the treatment was very long and difficult, and that the disease needed to be diagnosed early in order to be curable. One respondent explained that TB could be treated but not cured, and that treatment needed to be maintained for the rest of one’s life. A few respondents explained that although generally curable, TB was no longer curable if it entered the blood or if it developed into cancer. Several respondents knew of acquaintances who had died of TB, but most usually acknowledged that the person had either not sought treatment (because of stigma or lack of funds) or that they had neglected their disease until it was too late to be cured. However, several respondents affirmed that TB was not curable and leads to death. One respondent hypothesized that there would not be such fear and stigma surrounding TB if it were curable. One respondent also affirmed that TB could be cured during the Soviet period, but was doubtful that it could still be cured in modern times.

**TB Treatment**

Of those who acknowledged the existence of treatment for TB, most stated that treatment involved pills and sometimes injections, but did not know exactly what the pills were and how long the course of treatment was. None of the respondents had heard of treatment under the DOTS program and none knew how long treatment was supposed to last. Several respondents knew of people or acquaintances who had been on treatment for a very long time, ranging from 6 years to 15 years. A few respondents claimed that TB was seasonal and that treatment needed to occur twice a year for a few months at a time.

Migrants were often unsure of where TB treatment was to occur. Some guessed that it should take place in a hospital. Some claimed that TB could be treated in special TB hospitals or dispensaries. Many could name such facilities in various cities in Uzbekistan, but were unsure of whether similar facilities existed in Kazakhstan or where they were located. One respondent knew that an infected person could go to a polyclinic and then be referred to a hospital. One respondent explained that many people are afraid to be
hospitalized for TB even when they know they have TB, because they are scared of becoming even more infected in the hospital. Among the respondents who were asked about the cost of treatment, none knew that treatment for TB was free of charge.

**TB among migrants**

Most respondents claimed not to have heard about TB among other migrants. However, many pointed out that they have very little interaction with other migrant teams because they are isolated from each other and cannot leave the worksite. Several respondents also highlighted the fact that people do not like to talk about TB when it occurs – most migrants know each other or their families because they are from the same village in Uzbekistan, and rumors spread quickly. People do not want others to know they have or have had TB, especially because it affects the marriageability of their children. If someone dies of TB, the family will often claim that the primary cause of death was something else. A few migrants claimed that they had heard of TB in Uzbekistan but that there was no TB in Kazakhstan, that they were not vulnerable to diseases like TB because they only worked in the summer, or that TB only infected old people, women and children, but not migrants.

However, several stories about TB among migrants emerged from the focus group discussions. One focus group in Ferghana talked about a migrant who fell ill with TB in Kazakhstan on a construction site. The worker kept his distance from the other workers and used separate dishes, and as a result did not infect anyone else in his team. His employer allowed him to stay in Kazakhstan, but the respondents explained that this was only because of his particular skill set, without which he would have been sent home immediately:

**Male migrants, Ferghana:**

*M: How did the employer treat him?*

*R: He was a good welder. He worked at a high altitude and it was difficult to find another such (expert). That is why the employer did not disturb him. However, as far as I know they brought for him medicine from home, from Uzbekistan, and he was constantly taking it.*

*M: What if he were an ordinary loader, would his employer treat him in the same way or not?*

Everybody laughs.

Another focus group in Tashkent cited a crew from Andijan where four migrants were infected with TB. The respondents thought that these workers had been infected in Kazakhstan, because they had been working there for a long time and were living and sleeping all together in a basement. When the employer found out these workers had TB and that it was beginning to spread to the other workers, he sent them home to Uzbekistan because he could not obtain treatment for them in Kazakhstan because of their illegal status and he did not want them to die there. The same focus group yielded another account of two workers who also contracted TB while working in Kazakhstan and were sent home by their employer. Another focus group discussion with female migrants in Karakalpakstan yielded several stories of male migrants who either acquired TB in Kazakhstan, or already had TB in Uzbekistan but their condition became acute while working in Kazakhstan.
in Tashkent included a man who had TB himself, and was currently on treatment. All migrants had returned home for treatment, either because they did not want to stay in Kazakhstan or because their employers sent them home.

**Stigma surrounding TB**

TB remains a highly stigmatized disease, and migrants are often very reluctant to disclose their status unless absolutely necessary. Some migrants admitted that they would continue living among their coworkers, in very cramped, close quarters, without divulging that they are infected. They are worried that they would be fired by their employer, and they are terrified of how they will be treated by their relatives and acquaintances if they find out. Often, they are also concerned about the impact that TB may have on the marriage prospects of female members of the family.

Male migrants, Tashkent:
- M: What is the attitude of people towards a person infected by TB? Do they avoid him, communicate with him as before, help, dismiss him from work, etc.?
- 5. People are afraid of rumors. Everybody has a family and children. If there are spread the rumors that a sick person died of TB, then these rumors may have a serious negative impact on the attitude towards relatives of the sick person. People will shun, avoid them. They will communicate less with them. Children will not be able to marry anybody.
- 4. People avoid a person infected by TB.
- 1. And they dismiss him from work.

**Sources of information**

Migrants cited several sources for the information they had about TB. These included TV and the media, print materials such as books and pamphlets, information provided at school, and posters displayed in health clinics. However, many migrants also claim obtaining their TB information from friends and acquaintances via rumors.

Male migrants, Taldykurgan:
- M. Could you tell me please how and where did you find out about TB? I mean the information that you shared with me?
- 1. I have heard it from other people.
- 3. Rumors. People speak about it. Once when I was at some funeral I heard from other people that the deceased man before dying had tuberculosis. They said that he neglected the disease, and that as a result doctors could not save his life. That is how we get such information. Rumors are spread quickly. However, there is little truth in rumors. That is why I do not know whether it is true that he died because of TB.
Information from doctors

Predictably, the migrant TB patients who were interviewed had much higher levels of knowledge of TB than regular labor migrants since there were themselves undergoing treatment for the disease. However, there is still considerable confusion even among TB patients about the curability of the disease, and patients often complain about not receiving enough information about their disease from doctors.

Male TB patient, Talgar:
I. Did they give you any information about the disease?
R. No. Perhaps they give information to the patients whose wards are on the third and fourth floors, because they are seriously ill. They say that the patients whose wards are on the second floor may recover and be discharged; whereas, the patients whose wards are on those floors do not always recover.

Desire for information

Migrants overwhelmingly express a desire for additional information about TB.

Male migrant, Taldykurgan:
Such people as us as they say do not have well developed «poniatka» (awareness, knowledge). That is why any information would be useful for us. Could you please tell us about this disease? We will write down everything on this sheet of paper.

Male migrants, Almaty:
M: What kind of information about TB should they provide to migrants?
4: Everything.
9: Disease symptoms.
ACCESS TO HEALTH CARE

Registration

The main barrier to access to care mentioned by both migrants and health care workers alike is lack of legal registration. Most migrants claimed that it was impossible to obtain services from state polyclinics without registration. They could cite several cases of acquaintances who were refused treatment outright. Some migrants claimed to deliberately bypass the registration office in polyclinics and go straight to a particular doctor’s door to obtain treatment. This usually involved paying the doctor directly for services rendered. Many migrants claimed that even with proper registration, it was still necessary to pay for services, and that access to care depended more on ability to pay than on appropriate documentation. Many migrants pointed out that they had received care thanks to their employer, who either settled all documentation requirements for them or paid for services.

From the perspective of primary health care workers, responses varied considerably regarding the issue of registration. Of the nine health providers interviewed, five stated categorically that they could not provide services to unregistered migrants. This involved not being allowed to provide services to the unregistered population. Services are provided on the basis of the population included on the residence list, so that unregistered households are never visited. One respondent declared that neither free nor paid services could be provided without registration. Some health providers claimed that outreach in the form of preventive screenings could not be conducted among unregistered patients, whereas others claimed that screening was possible but that further treatment was problematic. Without documents, only emergency aid could be provided. Two respondents mentioned the fact that the police need to be contacted in case of unregistered migrants.

In contrast, two of the primary health care workers interviewed had opinions on the opposite end of the spectrum. They claimed that services are open to anyone, regardless of registration, and that services are always free. They claimed that registration is only needed if the patient requires a medical certificate, but if not, services can be provided to migrants and a temporary card is opened for them. They stated that the only documentation needed was a form of identification such as a passport, and if possible, confirmation of an address.

Other responses were more nuanced, with two respondents claiming that without registration, services could be obtained “unofficially,” although it was not entirely clear what this entailed. One doctor admitted to circumventing the regulations herself to treat undocumented migrants, and one respondent admitted to not really knowing what to do in case of unregistered migrants:

Primary health care doctor, Almaty:
I. Let’s consider the following example: if now a person approaches you and tells you that he has not documents, and at the same time will start coughing badly, what will be your actions?
R. Depending on his place of residence we will try to manage the situation – if the person lives within my medical district, then possibly we will admit and examine him. But if he has come from another district, I will write a complaint on his employer to the police, or will examine the migrant, or will send him according to his place of residence, where he is legally registered in the migration agency. But if the migrant has not any registration, then I don’t know what to do.

In terms of the bureaucracy involved, two respondents mentioned different – and more complicated – procedures for dealing with unregistered migrants. One doctor explained that this involved processing different documents, reporting to doctors, and informing the police, and this was her rationale for not wanting to deal with migrants at all. Another doctor, who treated migrants unofficially herself, explained the differential regulations and differential costs associated with treating migrants:

Primary health care doctor, Shymkent:
I: Do state organizations also provide paid services?
R: If people do not have registration, then they have to pay for the services. We have such a law.
I: If people do not have registration, do they make a record? Do they open a medical file for them?
R: If they make a record and open a medical file, then such patients will have to pay 2 or 3 times more. We have a law regarding migrants.
I: What is written in the law? I just have not heard what is written there.
R: It is written there that state organizations have to provide paid services to migrants. There is a special tariff. If we do everything according to the law, then we will have to fill in more papers. There will be bureaucracy. Doctors will ask migrants to show their passports, registration. They will ask them to show them other additional papers. Besides, it is cheaper for migrants without documents.

Financial barriers

As described by the health worker above, treatment can be obtained at primary health care services on a paid basis in the absence of documents. Migrants confirm that they have had to pay for treatment, but it is often unclear whether these are official fees or bribes.

Male migrant, Almaty:
M: Do they provide you with services in state medical institutions?
Everybody. Yes, for money.

Male migrants, Almaty:
M: Who else paid for services? Was this an official payment or not?
3: I paid but not officially, because I do not know at all whether people are actually supposed to pay officially. We come to see a doctor, he examines us, and we give him money. That is all.
M: Did ever a doctor or anybody else tell you to go to a cashier’s office to pay?
Everybody: No, nobody ever sent us to a cashier’s office.

Financial barriers play a large role in access to care, because migrants often cannot afford the “fees” they are asked to pay, whether official or unofficial. They always compare prices to what equivalent medical services would cost in Uzbekistan, and feel that prices are exorbitant in Kazakhstan. They also sometimes feel that they are being cheated and that health providers charge them more when they realize they are Uzbek.

Male migrant, Tashkent:
If a sick person goes to see a doctor, then he will have to pay a lot of money for treatment. Otherwise, nobody will treat him. We do not have even a health insurance to be able to get medical aid. The cost of treatment may be 500 dollars and more.

Attitudes of health care workers

Migrants consistently complain that Kazakh doctors have a very negative attitude towards them and treat them in a condescending way. They claim that they make them wait in line longer, speak to them in a commanding tone, and are often rude and hostile. They attribute much of this to ethnic prejudice against Uzbeks.

Male migrant, Almaty:
R: For a usual tooth filling I was charged 2500 Tenges. It is a lot. When they see that you are not ethnic Kazakh but ethnic Uzbek, then they charge you twice more or even more than this. They charge local people much less and let them get services without waiting in a line. A doctor comes out of his office and if there are three people in line and I am the first one he invites first Kazakhs and only at the end he invites me.
M: How does he find out that you are not Kazakh?
R: It is written on our faces (he smiles).

At the primary health care level, the attitudes of health care workers towards migrants varied as much as their responses regarding registration requirements, and tended to mirror those responses. The health care workers who stated that migrants could not receive services without registration (who were the majority of those interviewed) also had fairly negative attitudes towards migrants. Many health care workers declared that migrants were an extra burden on their time and resources and that they wished they did not have to deal with them.

Patronage nurse, Almaty:
I: Have you heard about migrants from Uzbekistan who come here in order to earn money?
R: I have heard that there are many of them and they come not to work but to make problems for health providers.

They often expressed the idea that they did not feel migrants fell within their realm of responsibility. They complained that they were already overworked and underpaid and did not welcome the additional burden that migrants represented. In some cases, health care
workers exhibited outright condescending attitudes towards migrants, referring to them as “backward,” “dirty,” “uneducated,” and “ignorant.”

*Primary health care doctor, Shymkent:*  
We’ve got enough of our own patients. Our hospitals are overcrowded, there are no vacant beds. They’d rather go home and get treatment there.

In contrast, those health care workers who claimed that services were provided to migrants without any need for documentation exhibited much more positive attitudes towards migrants. They asserted that all patients were treated equally and they encouraged migrants to come to health services.

*Patronage nurse, Shymkent:*  
*I:* What’s the difference between access to health facilities for migrants and Kazakh residents?  
*R:* No difference whatsoever. Those who are living here are our people (is smiling).

In terms of the additional burden that migrants represent for the health system, one of these respondents explained that health workers are already being paid for this work, because they are responsible for all of the people living in their district, including AIDS patients, alcoholics, immigrants, commercial sex workers and homeless people.

**Language barrier**

Many migrants complain of a language barrier when accessing health services in Kazakhstan, because they are not comfortable enough either in Russian or in Kazakh. They have difficulty explaining their health problems to doctors in those languages, and the language barrier is a problem even when attempting to buy drugs from pharmacies.

*Male migrant, Taldykurgan:*  
*M:* Could not you talk to a pharmacist in Russian?  
*I:* None of us speaks Russian well enough. By our accent he could figure out that we were not locals and then he would sell the medication at much higher price.

**Preference for receiving treatment for TB in Uzbekistan**

Overall, there is an overwhelming preference among migrants for receiving TB treatment at home in Uzbekistan rather than attempting to undergo treatment in Kazakhstan. Outlined below are some of the main reasons cited for this preference.
Finance

Services are perceived to be much more expensive in Kazakhstan, and migrants who are in Kazakhstan purely to earn money cannot forgo their wages for such a long duration of treatment.

Male migrant, Ferghana:
*It is very expensive in Kazakhstan. In Uzbekistan it is either free of charge or much cheaper. Who wants to spend all earned money to get treatment in Kazakhstan!?*

Quality of care

There is also a widespread perception among migrants that the quality of care is much higher in Uzbekistan, and there is a mistrust of Kazakh doctors.

Female migrants, Karakalpakstan:
*M: Do you mean that you trust doctors from Uzbekistan and you do not trust doctors from Kazakhstan?
9: Our doctors make right diagnoses. The diagnoses that they make there are wrong.
3: Because they just want to charge money we trust them less. Perhaps they provide good treatment, but one should pay them Tenges.*

Support of friends and family

The importance of moral support from friends and family during TB treatment was emphasized consistently by both migrants and health care workers alike. Many migrants claimed that they would prefer to undergo treatment in Uzbekistan if it were free in both countries, and even if it were more expensive in Uzbekistan. Due to the long course of treatment, they felt it was necessary to be close to family for emotional support, and they sometimes linked this support with treatment adherence and completion. They also felt that family would be able to bring them food and other material support during hospitalization, which they would otherwise not benefit from while undergoing treatment alone in Kazakhstan.

Male TB patient, Talgar:
*Besides, as I said it is better to be where your family is, because treatment is half of the solution. The family makes you more self-confident. It supports you and gives you force that you need to undergo treatment. If a person is far away from his family he may be depressed. He may stop caring about his treatment and everything else.*
Stigma

While support of family was mentioned over and over again as a reason for preferring TB treatment in Uzbekistan, stigma sometimes played an opposite role. Some migrants preferred to undergo treatment for TB in Kazakhstan so that they could return to Uzbekistan cured, without having to tell relatives and acquaintances at home that they ever had the disease.

Female TB patient, Talgar:
I: Do you want people in your home country to know about the disease?
R.: I don’t want anybody from Uzbekistan to know about my disease. The only people who know about it are my family, relatives and my husband. I asked them not to tell anybody about my disease. I said to my husband that I would even divorce if he told anybody about my TB.

Treatment-seeking path of TB patient interviewees

The interviews with TB patients yielded interesting clues as to the factors that influence the decision-making process to seek care in Kazakhstan versus Uzbekistan, as well as barriers experienced in attempting to access care.

Patients on treatment in Kazakhstan

Of the ten TB patients interviewed, five were currently on treatment in Kazakhstan and five were undergoing treatment in Uzbekistan. Of the five patients on treatment in Kazakhstan, three had temporary residence registration and they credited this with enabling their access to treatment. Of the two who did not have registration, one was married to someone in Kazakhstan and the other obtained access to care through a relative in Kazakhstan who took them to a polyclinic to see a doctor who was an acquaintance of theirs.

All five reported receiving TB treatment completely free of charge. All five were also satisfied with their experience of TB treatment in Kazakhstan and reported good attitudes of health care workers towards them, with no discrimination between them and Kazakh patients. Three of the five claimed wanting more information about TB, both in the form of booklets and information from doctors. They complained about not receiving enough information from doctors on their diagnosis, which often led them to wonder whether their condition was in fact curable. Two patients also complained of a language barrier when dealing with doctors in Kazakhstan. One patient had some knowledge of both Kazakh and Russian, but had difficulty understanding information given by doctors and was afraid to ask questions. The other patient spoke Kazakh, but had an ethnic Russian doctor who spoke only Russian and hence could not communicate with him. He was given a piece of paper with treatment instructions written in Russian, which he decided to throw away.

In terms of reasons for choosing to undergo TB treatment in Kazakhstan versus Uzbekistan, three cited wanting to avoid the possibility of people at home finding out about their condition. One patient, who was a nurse in Uzbekistan, went to Kazakhstan specifically for
TB treatment in order to avoid rumors at home. The patient who was married chose to get treated for TB in Kazakhstan because her husband and baby were there. Another patient also had a wife and children in Kazakhstan, which influenced his decision to stay for treatment. Another patient opted for Kazakhstan because he was unemployed in Uzbekistan and wanted to use the opportunity to work in Kazakhstan during the continuation phase of treatment. Other reasons cited included thinking that TB treatment was paid in Uzbekistan whereas it was free in Kazakhstan. Overall, patients overwhelmingly underlined the importance of family support while undergoing TB treatment, but also recognized the role that social stigma plays.

**Female TB patient, Talgar:**

*I: How is it better to receive TB treatment – during work in Kazakhstan or on the return to Uzbekistan? Why?*

*R: In fact, the best place to take treatment is your home country. But a person is afraid of alienation. If there is no alienation, it is better to take treatment, even paid treatment, at home, where your children, relatives and friends are close to you. For instance, I would be able to see my child and husband everyday, and here.... (tears in her eyes).*

**Patients on treatment in Uzbekistan**

Of the five patients who were on treatment for TB in Uzbekistan, four never attempted to apply for treatment while working in Kazakhstan, for various reasons. One migrant fell ill towards the end of his contract as a construction worker, and therefore opted to wait until his return to Uzbekistan to seek treatment, and because his wife in Uzbekistan was pregnant. He also thought it would be difficult to undergo the intensive phase of treatment in Kazakhstan because he would need family members to bring him milk and meat to supplement the poor diet he thought he would be receiving. In the meantime, while waiting to go home for treatment, he self-treated with canine fat, badger fat, cedar oil and dried apricot. Another patient received treatment for TB in Uzbekistan both before and after his stay in Kazakhstan, but did not undergo treatment in Kazakhstan because he was there for a short period of time just to earn money, and this would have defeated the purpose. He was TB/HIV co-infected. A third migrant did not receive treatment in Kazakhstan because he was afraid of not being admitted because he did not have registration, there was a language barrier, he was afraid of the migration police, and it was just as easy for him to go home. The fourth migrant did not want to undergo treatment in Kazakhstan out of concern for her relatives; although she herself had residence registration, she was living in Kazakhstan with her sister and brother-in-law and was afraid that they would be deported as a result of her having TB.

Only one of the five patients actually wanted to receive treatment in Kazakhstan, but could not. He did not have legal registration because he could not afford it. He had had TB previously in Uzbekistan and knew which medicines to take; however he could not buy drugs from the pharmacy because he needed a prescription, which required a doctor’s visit, which was impossible without registration. He found out during the interview that he could have told a doctor in Kazakhstan that he had TB and obtained treatment free of charge.
ISSUES WITH TB TREATMENT

Registration of TB patients

In the interviews with TB doctors, several issues emerged relating to treatment of unregistered migrant patients. All TB doctors stated that TB patients were referred to them from primary health care clinics and that this was the proper procedure. They explained that while registration was a requirement for obtaining services from these clinics, it was not a requirement for TB dispensaries. The only documentation required for initiating TB treatment was a passport or form of identification and an address. There was unanimous agreement that a migrant with TB would not be turned away for lack of documents. However, doctors admitted that it would be unlikely for unregistered patients to be able to obtain services in a primary health care clinic in order to obtain the necessary referral. One doctor even declared that in his TB hospital, doctors were required to contact the National Security Committee in case of undocumented TB patients, to prevent the possibility of criminal fugitives hiding in hospitals.

A few doctors explained that theoretically, patients could bypass the primary health care system and contact TB dispensaries directly, but that this was very rare and would only happen if they already had suspicion of TB or fluorography results, or if the TB dispensary was closer to their home than a primary health care facility, or if they needed to undergo fluorography as a prerequisite for obtaining residence registration. However, in most cases, patients would be referred from primary health care clinics, and many doctors asserted that they could not accept patients without a proper referral.

Several doctors mentioned that if a TB patient showed up without documents, they would circumvent the issue by registering them as “BOMJ” – homeless. Another problem that several doctors brought up regarding migrants was their reluctance to provide a valid address for fear of being evicted by their landlords as a result of a visit from the Sanitary Epidemiological Service (SES). This caused problems in terms of contact investigation, but doctors claimed they would be willing to negotiate with migrants to come to an agreement.

TB doctor, Almaty:
*He can just come and say frankly that he came here from his country, and that he does not have documents. He may say that he works here, that he fell ill, and that he asks us not to tell his landlady about this, because if she finds out she will tell him to move. We can come to an agreement.*

Overall, attitudes of TB doctors towards migrants were much more positive than attitudes of primary health care workers. Most of the TB doctors interviewed affirmed that they treated all patients equally, regardless of their citizenship or registration status. Only two of the nine TB doctors interviewed acknowledged that migrants without legal status were much more difficult to work with, either because of bureaucratic hassles or because they were more difficult to follow up for treatment completion, but neither of these two doctors nevertheless considered this a rationale to deny treatment.
TB doctor, Taldykurgan:
I: What is the attitude of health providers to the migrants? And what is your personal attitude?
R.: The attitude is positive. As there is no difference for us, medical staff, who have come for consultations. Our main duty is to help people, without considering whether he is a minister or just an ordinary person.

TB doctor, Shymkent:
Although he is a migrant he has the right for treatment.

Recording of TB cases

Other than the initial registration procedure for undocumented TB patients, another issue that came up in several interviews was how to record new cases. There was considerable confusion surrounding the issue, due to an apparent recent change in regulations.

TB doctor, Shymkent:
I: What is TB disease incidence rate per one hundred thousand of people?
R: For the last 7 months the incidence rate was 57, 8. It did not change in comparison to the previous year. TB death rate did not change as well. However, currently, the rate of patients with active TB is considered as TB disease incidence. Regulations have changed this year. After the treatment is over we transfer patients into inactive group and exclude them from statistics. According to previous regulations, patients were under supervision for sometime after their treatment was over and they were included in statistics. This is why disease incidence was higher last year than this year.

Some of the doctors attributed this change in regulations to a desire on the part of officials to conceal the true extent of the epidemic.

TB doctor, Taldykurgan:
I: What problems does your medical institution encounter with migrants’ diseases?
R: There are no particular problems. The only problem refers to the registration of patients. According to the last issued instructions and regulations we have to hide the fact of newly identified cases of the disease, that have not been required before. We don’t know where we should register new patients. We are not allowed to transfer them to a district or town by force. Therefore we have some shortcomings in the registration and record keeping processes. These are the major problems.

TB doctor, Talgar:
R: Generally, the flow of the disease among migrants has increased after the border was open. It is reported on TV that morbidity level is decreasing. In fact, a drug resistant form of TB has already developed among the young people. The number of diseased is increasing.
I: I have also heard about this. It is said, that morbidity has decreased by 35%.
R: These are the official data and related to people who have consulted health providers and are taking treatment. Officials demand not to reveal new disease cases in order to maintain indicators of the disease at the same level. It is offered to register relapses as repeated treatment and next year as chronic disease. It is the way how the actual situation is concealed.
I: Are they afraid to lose their positions?
R: I think they are. Presently TB is developing and it has become a social disease.

**Resources and drug quantification**

All TB doctors indicated that treatment for TB was provided free of charge for everyone, regardless of legal status. However, several doctors expressed concern about the resources being used to treat migrant patients. Doctors explained that yearly drug forecasts were calculated on the basis of the registered population only, and that it was impossible to take migrants into account since the size of the population was unknown.

TB doctor, Almaty:
I: What about financial obstacles? Do you get funds for treatment of migrants?
R: Yes, this is a problem. We get a certain amount of medication for a year without taking into consideration the possibility of having migrant patients because we do not know how many migrant patients we may have. Perhaps there will be ten such patients or one hundred thousand. We certainly do not take into consideration the possibility of having migrant patients.

One doctor pointed out that although migrants are entitled to TB treatment regardless of registration, they are not entitled to more expensive second-line drugs, indicating that treatment of unregistered migrants is problematic in the context of drug-resistant TB.

TB doctor, Almaty:
A migrant is more interested to return to his home country if he has got TB. Why? Because in case he has a stable form of TB, he is strictly required to provide his registration and should have an identified place of residence. As the second-line preparations (drugs) are very expensive and it is required that all the documents are in order. Here, a patient-migrant will not be admitted to hospital for the second-line drugs’ treatment, as he has no registration and could leave the country at any time. Treatment of one patient costs about ten thousand US dollars. The patient receives drugs/medicine free of charge, as the government pays for them. In connection to this, the government admits the diseased only with the registration (residence permit). Therefore, if a migrant has a drug resistant TB form, it is better to return to his home country.
**Treatment interruption**

Although doctors overall had little direct experience treating migrants, a few stories nonetheless emerged about treatment being interrupted due to migration, which of course represents a risk factor for the creation of drug resistance. In one of the interviews with TB patients, even though the patient himself was not fully able to explain his diagnosis, there were several clues in the treatment narrative that indicated that he may have had drug-resistant TB caused by multiple episodes of treatment.

*TB doctor, Talgar:*

For instance now we have a patient who was brought to our hospital with haemorrhage. Probably TB was identified when he was in Uzbekistan, his place of residence. He came to Kazakhstan to earn money and had already been aware of his disease. He took treatment in different hospitals for a short period. When I looked at his roentgenograms there was dynamics. By the way, he made analyses in several hospitals. Within one and a half year he got 3 pictures. When I asked him whether he had taken any TB medicine, he gave negative answer. But from the pictures it was clear that he took medicine and treatment process was interrupted. Then he confessed that his friends had brought the medicine for him. He had taken the medicine for about one month.
PARTICIPANTS’ SUGGESTIONS

All research participants – labor migrants, TB patients and health care workers – were asked their opinions on possible interventions to remedy some of the issues in access to care that emerged during the interviews and group discussions.

Suggestions of labor migrants

Information and education campaigns

The overwhelming majority of migrants were in favor of receiving booklets and pamphlets explaining basic information about TB such as symptoms and prevention. Many suggested that they should be translated into several languages, including not only Uzbek but Russian, Kazakh and Karakalpak. One migrant pointed out that the Uzbek brochures should be written in the Cyrillic alphabet to make it easier for the older generations to read. Migrants were in favor of these pamphlets being distributed at the border and on buses so that they would have something to read during the long journey.

Male migrants, Almaty:
2: They should use booklets, leaflets, and books. They should give them to each person at the customs.
M: If you were given such booklets would you read them?
Everybody together: Yes, certainly.
6: They should be written in several languages so that people could understand them. They should be written in 3 languages – in Uzbek, Russian and Kazakh languages so that everybody who gets such a booklet could read it. We would not throw away such a booklet. We would give it to some other person. He may give it to another person. These could be people of different ethnic origin.

Many migrants also suggested broadcasting information via television and radio, but this suggestion was more popular among the migrants who were already on treatment for TB; migrants working on construction sites pointed out that they typically do not have access to this type of media and have little time to watch TV even if they could. Most migrants agreed that posters would not be useful, because they tend not to read them, even when they are displayed at polyclinics.

Many migrants were also in favor of disseminating information in the form of discussions rather than pamphlets. These discussions could be held in buses, at bus terminals where migrants arrive, at the “pyatak” or labor markets where they are recruited, or at the border since they are forced to wait there for several hours to cross. Others preferred to have these discussions back home in the mahallas in Uzbekistan.

Female migrant Maktaaral:
Nurses at our place visit our homes; doctors from SVP conduct different talks. Let them tell us about it. Here we have no time for talking, we value each minute. And there we have more
free time and we can listen to their conversation, especially in winter, when there is not any work neither about the house nor here.

Improving labor conditions

Most migrants felt that it was necessary to improve labor conditions for workers in Kazakhstan. Many advocated for having inspectors visit worksites to ensure adequate living conditions. Some advocated for simplifying legalization and registration procedures, as well as having work contracts that stipulate an employer’s responsibility towards migrants in case of illness. Others suggested greater assistance to migrants and coordination of migration on the part of the Uzbek government.

Male migrant Tashkent:
*It would be good if our government could provide assistance to migrants in Kazakhstan. Provide the bus trips to Kazakhstan, keep record of migrants, provide assistance in case of illness and cooperate with migration police. It would be good if small firms and plants could provide assistance with search for job for illegal workers.*

Facilitating access to health care

Many migrants stated that their access to health care in Kazakhstan would be improved if check-ups could be free or at least much cheaper. Many advocated for sending doctors to worksites such as markets and construction sites on a regular basis, every few months, to do check-ups of the population. Another suggestion was setting up first-aid posts, preferably staffed by Uzbeks, at markets and construction sites that could provide health care to the migrants. A few migrants also suggested the possibility of purchasing some form of insurance policy prior to departure that would help to cover them in case of illness.

Female migrant, Karakalpakstan:
*At construction sites they should open first-aid posts with medics. There should work a doctor and a medical nurse at each such a post. Then people would have an opportunity to have examination done and to get some treatment. At one construction site there usually work up to 500 construction workers. They could deduct fees from salary in the form of medical insurance to cover the running costs of such first-aid posts. This would be good for the health. People will not need to go anywhere else and pay a lot of money.*

Male migrant, Tashkent:
*It would be good if employers could be responsible for the health of their workers. It would be even better if they could oblige each person entering the country to purchase an insurance that he would show to his employer and if necessary at medical institutions. Then, even if such a person does not register as a worker it would be cheaper for an employer and a worker than if an employer has to pay taxes.*
Screening at the border

Many migrants were in favor of tighter government control of migration requiring screening via x-ray at the border, or at least presenting a medical certificate. However, many migrants also objected to this saying that this added procedure would delay border crossings even more, and that it would contribute to the high levels of corruption and extortion that already take place at the border from customs officers.

Suggestions of health care workers

Information and education

Most health care workers echoed the sentiments of the migrants regarding the necessity of targeted TB education programs. They confirmed that migrants typically have low levels of awareness of TB, and that increased ability to recognize symptoms of TB would lead to earlier detection.

Field fluorography

Many health care workers suggested that a “field fluorography” system with mobile fluorography units would be the most appropriate intervention for accessing migrants directly at their place of work.

Primary health care doctor, Almaty:
You know, here in order to prevent morbidity among migrants is necessary to develop and introduce field laboratories, which will examine migrants and take analyses. Therefore it is important to set up field medical groups and not to overload outpatients’ clinics with visitors. There should be “field fluorography system”, as at present time it is the most reliable method of TB identification. It is necessary to simplify this prevalent method of TB identification. But we don’t have enough equipment, therefore we try to examine firstly our registered patients and then all the rest. Migrants are examined during field screenings, but their further treatment is problematic.

Involvement of employers

Several health care workers emphasized the importance of encouraging employers to take their workers to health clinics for x-rays and to allow hospitalization of their workers in case of TB. They suggested that this could be achieved through education for employers, laws mandating fluorography for employees, or decreased taxes on registered employees in order to encourage registration.
Special clinics

Several health care workers suggested setting up special clinics specifically for migrants and people without registration where fluorography and HIV testing could be provided on an anonymous basis to encourage migrants to seek care.

Primary health care doctor, Almaty:
R. I can only advise that it is necessary to organize a kind of special center or clinic, where migrants can legally go through fluorography examination and take other analyses for identification of any disease.
I. But if in 2-3 months there are no migrants, what will you do then?
R. Then this medical institution will be used for our citizens. But now it is important for us to have at least a center of AIDS identification and fluorography laboratory for TB identification, as these two diseases are dangerous, therefore anonymity should be provided for patients.

Screening at the border

In accordance with the migrants, many health care workers advocated for fluorography screening at the border, either by presenting a medical certificate with fluorography results or by undergoing fluorography on the spot.

Primary health care doctor, Shymkent:
They should require that migrants from Uzbekistan had ‘sanitary books’. At least, last year’s fluorography test results. I don’t think blood tests or urinalysis should be necessary, but there should be a doctor at the customs who should ask for fluorography test results, or examine them there.

TB doctor, Shymkent:
Maybe, they should be checking them all at the Customs, when they are crossing the border? The best method would be to put a photofluorographic unit at the Customs, and examine them there.
I: Can you get immediate results at a photofluorographic unit?
R: Yes, you can.
I: That is, if the results are not so good, they will have to send a person back to Uzbekistan?
R: That’s right. If tuberculosis is suspected he shouldn’t be allowed to enter Kazakhstan, but should be sent back for treatment. I think this should be done as a priority measure. They can put a mobile fluorograph at the Customs.

One health care worker suggested that the migration service itself should have its own fluorograph, though it is unclear where exactly screening would take place in this scenario.

Primary health care doctor, Shymkent:
I think migration service organizations should purchase a fluorograph and set up a special facility for that. I understand that it’s not an easy task. According to our management, they
hardly found enough money to buy one fluorograph for our polyclinic. Why should we provide services to these illegal migrants? It's the responsibility of the migration service who should have their own fluorograph.

**Sending migrants home**

Most health care workers advocated for sending migrants home to Uzbekistan in case of TB, rather than treating them in Kazakhstan. At the primary health care level, the reasons cited by health care workers were either that they already had too much work with their own registered patients, or that it was better for migrants to receive treatment at home to benefit from the support of friends and family. At the TB dispensary level, doctors were more likely to say that migrants were entitled to TB treatment in Kazakhstan, but many of them still expressed a preference for migrants receiving treatment at home. The rationale used here was an epidemiological one, claiming that migrants would be less likely to adhere to the full course of treatment in Kazakhstan and this constituted a risk of creating drug resistance. However, almost none of the health care workers seemed to be concerned about the epidemiological risk of having migrants travel long distances home while openly infectious.

**Communication between Uzbekistan and Kazakhstan**

All health care workers declare that there is no current form of communication between medical facilities in Kazakhstan and Uzbekistan, but acknowledge that such a system would be beneficial in terms of keeping track of patients who initiate TB treatment in one country and continue in the other. However, few health care workers were willing to take responsibility for envisioning what such a system of communication would look like, or to accept the additional workload that this cooperation would entail.

*TB doctor, Shymkent:*

_I:_ What are the forms of communication between Kazakhstan and Uzbekistan facilities in case TB has been detected in a migrant worker?

_R:_ No communication in this case. However, it would be a good thing to have such. In this case we would at least be able to find out whether the person is registered at his place of residence or not. Or, to notify them that they should 'immediately come here and take their patient'; or 'be ready to meet such and such person we are referring to you'. It would be enough to have communication with border oblast centers, because they can always communicate with other regions and rayons – that is, they would be able to communicate with neighboring countries through us, too.
DISCUSSION AND RECOMMENDATIONS

Epidemiology of TB among migrants

Although it is impossible to quantify prevalence of TB among the migrant population on the basis of a qualitative study such as this, it is still possible to piece together from migrants’ and health care workers’ accounts a tentative picture of the epidemiological situation. Although many migrants claimed not to have heard about cases of TB among the migrant population, many were in fact able to cite cases of acquaintances or other migrants who had contracted TB. However, as the migrants themselves pointed out, they are less likely to find out about TB cases among migrants because of the stigma surrounding TB which causes people to conceal the disease as much as possible, as well as the relative isolation that migrants experience while working in Kazakhstan which impedes their access to information about other migrant groups. Therefore, it is possible that TB in fact occurs more frequently among migrant work brigades than the migrants interviewed in this study were aware of.

Although many of the health care workers interviewed had not had direct experience treating migrants themselves, it does appear that cases of TB occur among this group, based both on the interviews with migrant TB patients and anecdotal evidence from health care workers who had heard of migrants being treated for TB in the past or by other doctors. As one TB doctor from Taldykurgan pointed out, the data on TB among migrants is just “the tip of the iceberg,” since these are only the migrants who seek care for TB and are able to successfully navigate the health system to obtain TB treatment.

In any case, the data suggest that migrants might be more vulnerable to TB because of the poor living conditions they experience. They are most often overworked, tired and malnourished, and these conditions may contribute to a weakened immune system which would render them more susceptible to TB.

In terms of the transmissibility of TB, the conditions under which migrants live and work certainly constitute a risk factor for transmission at least among migrants. They live in very crowded, close quarters with many people all together for months at a time. They spend all of their time together as they never leave the worksite, and live in poorly ventilated rooms such as basements and cellars. These are ideal conditions for transmission of TB if one person is infected, and there is evidence of this phenomenon in stories where several people in a particular work brigade became infected one after the other. It is difficult to gauge from the narratives whether migrants seem to be contracting TB in Kazakhstan or coming from Uzbekistan already infected, but both scenarios seem to be occurring. Although migrants could be considered a relatively “closed” group due to their isolated living conditions, there is also evidence of transmission to non-migrants. Several health care workers mentioned cases where members of a wealthy Kazakh family were infected with TB due to contact with the migrant workers who lived with them.

In terms of the dynamics of TB within the migrant group, it seems that initial self-treatment and treatment-seeking delay contribute to disease severity among migrants. In addition, there
seems to be a real threat of drug resistance within this group due to treatment interruption and treatment default. Several health care workers mentioned cases of migrants who quit treatment in Kazakhstan to return home. According to all health care workers interviewed, there is currently no system of communication between Kazakhstan and Uzbekistan for follow-up of patients who initiate treatment in one country and aim to continue in the other.

**Awareness of TB among migrants**

It is impossible to actually “quantify” levels of awareness of TB among the migrant population without a quantitative survey and a representative sample of the population. However, qualitative findings such as these can help identify the different dimensions of migrants’ awareness of TB and suggest specific areas to be targeted in communication campaigns.

Overall awareness of TB appeared to be low, but migrants were often able to name some of the classic symptoms of TB. However, there were misconceptions about transmission and curability. Many migrants were convinced that TB could be transmitted via sharing of dishes and utensils with an infected person. Interestingly, this notion was also held by many of the health care workers interviewed, including some of the TB doctors. Although this is not a medically-recognized form of transmission of TB, the situation of migrant workers presents an interesting case. Given the crowded, communal conditions under which migrants work and live, the act of sharing a meal with an infected person can very well constitute a risk factor for infection, even if the utensils per se are not to blame.

Many migrants hold a belief that TB is an inheritable disease. What may be contributing to this notion is the fact that migrants have heard of many families where the entire family became infected with TB, including children – which suggests genetic rather than air-borne transmission. This contributes additional, unnecessary stigma to an already highly-stigmatized disease, because it impacts on the marriageability of those who are known to be related to someone with TB.

In addition, migrants had very tenuous belief in the curability of TB. This may be due to the fact that migrants knew of many cases of TB patients who had either died of TB, or been on treatment for numerous years. Although lack of treatment and treatment neglect in these cases are often to blame, there is a very real situation of multi-drug resistance which may be contributing to the notion that TB is incredibly difficult or impossible to cure. This was especially salient among the TB patient interviews, because patients were continually exposed to chronic or severe TB cases in the hospital, which affected their perception of how curable their own disease was. This general misconception about the curability of TB is important because it may act as a disincentive to seeking care.

Given the low levels of awareness of TB among migrants, the prevalent misconceptions about transmission, and the lack of knowledge of both curability and the availability of TB treatment, it is necessary to develop information and education campaigns targeted at migrants. Both migrants and health care workers identify such a need, and migrants in
addition express a strong desire to receive such information. The most popular form of dissemination seems to be informational pamphlets or brochures. These could be distributed at the border, on buses and trains, at markets and construction sites where migrants work, and through NGOs that have contact with migrants.

Messages to emphasize in such communication efforts should include:
- the symptoms on the basis of which to seek care for TB
- the need to seek care early
- the danger of transmission within close quarters
- the curability of the disease
- the availability of TB treatment, including cost and procedures

In terms of information regarding TB treatment, special care should be paid to mention that treatment for TB is free and that everyone is entitled to TB treatment. Explicit instructions should be given about where to seek care for TB, since there was considerable confusion among migrants about this. Details should also be included about what the specific registration requirements are for migrants seeking care for TB.

In addition, some of these messages could be disseminated via the mainstream TB communication campaigns already in place in both countries. While migrants do not always have access to TV and radio while working in Kazakhstan, the migrants interviewed did nevertheless report receiving much of their TB information from these channels, both in Kazakhstan and prior to migration in Uzbekistan. TB awareness campaigns should thus be strengthened in both sending and receiving countries.

**Access to health care and TB treatment**

It is clear from the data that migrants experience multiple barriers in their access to health care in Kazakhstan. Some of these barriers are structural in nature and involve the control exerted over migrants by both employers who keep them captive, and the police who restrict their movements with the threat of extortion and deportation. At the health system level, the main issues are legal and financial in nature, involving both migrants’ lack of legal registration and the affordability of the fees they are asked to pay. Real and perceived negative attitudes of health care workers as well as language barriers also play a role in impeding access to care.

One of the main issues seems to be the lack of a clear policy concerning treatment of undocumented migrants. Many health care workers expressed confusion about what to do in this type of situation, and there was extreme variability in the responses of health care workers to this dilemma. Reasons for this variability may be that not all health care workers are equally informed about what the existing regulations are, or that a lack of clear guidelines leaves it to the discretion of each individual doctor about whether or not to accept an undocumented migrant for care. Individual attitudes of health care workers towards migrants also play a role in this decision-making process, as does corruption within the health care system. While official fees in exchange for services for unregistered patients are mandated
by law, many of these payments seem to be occurring on an “unofficial” basis, and may even exceed the amount prescribed for official fees. Reasons for this may include both the low salaries of health care workers which encourage them to seek additional income, as well as the extra bureaucratic hassle of registering undocumented patients according to the regulations. There is a need for clear legislation regulating these circumstances, as well as simplified registration procedures in order to encourage lawful registering of migrant cases and to decrease this type of extortion within the health care system. There would also be benefits accrued from increasing salaries for health workers to encourage better treatment of all patients.

In terms of access to TB treatment, most of the barriers to access for migrant workers are occurring at the primary health care level, for all of the reasons detailed above. Once migrants have made their way to the TB dispensary level, their access to treatment is enabled. They are always provided with free treatment and never turned away. However, they must first successfully navigate their way through the system. Although many migrants and health care workers claim that employers tend to take their sick workers to private clinics instead of state clinics to avoid registration requirements, it is difficult to gauge whether this occurs in the case of suspected TB, and whether these migrants are then transferred to the TB dispensary network from there. Additional data would need to be collected on migrants who specifically went through the private health care system to determine how this impacts their access to care.

In order to facilitate access to the primary health care system for migrants, a system should be put in place to afford migrants access to care on the basis of a type of temporary migration card. It may also be possible to set up a medical insurance scheme for migrant workers that would entitle them at least to a basic package of services while working in Kazakhstan. Ideally, migrants would have access to all basic health services in Kazakhstan, and not just in the event of emergency medical aid. However, at least in the case of TB, efforts need to be made to ensure that access to diagnostic services is not impeded because of lack of documents. Although TB is already included on the list of “socially significant diseases,” barriers to care need to be removed to ensure that migrants presenting with cough or symptoms of TB are diagnosed and treated promptly.

In terms of screening for TB among migrants, screening at the border may not be the best option despite the fact that it is being advocated by both health care workers and some migrants alike. Screening at the border would prolong an already lengthy customs process, and would create additional opportunities for corruption. If just a medical certificate were required, it would be very easy for migrants to falsify, and very easy for customs officials to request bribes for. The feasibility of screening via fluorography examination at the border is questionable, and such procedures might have the unintended effect of driving migration further underground. A better alternative might be to screen migrants for TB directly at their worksites, including construction sites and markets, as part of routine screening of the registered population.

Regarding TB treatment, regulations concerning the registering of new TB cases need to be clarified to avoid the confusion among TB doctors about how to register new cases, and cases
of TB among migrants need to be systematically recorded. Proper surveillance is critical in order to accurately portray the extent of the epidemic. Efforts should also be made to estimate the magnitude of the migrant population and include them in yearly drug forecasts, to eliminate some of the problems that doctors have with drug quantification and their resulting reluctance to give migrants TB drugs that were reserved for the registered population.

Finally, an effective system of communication needs to be put in place to share medical information between Uzbekistan and Kazakhstan. It is vital for TB patients to be able to be traced and followed-up when they interrupt treatment and migrate back and forth between countries. Until a fully functioning system is in place, an interim solution could be to establish communication as some of the health care workers suggested, with TB dispensaries in at least the bordering provinces of Uzbekistan, which could then relay information to the relevant parts of the Uzbek TB dispensary network. A special card could also be given to migrant TB patients who transition between the two systems, to avoid the issue of patients not carrying their medical records with them when they migrate.

**Migration and labor conditions**

Ultimately, what needs to be addressed is the appalling situation of worker exploitation, trafficking and enslavement by employers, as well as the brutality, harassment and extortion of migrants on the part of the migration police. Options may include imposing harsher penalties on employers who employ illegal migrants, inspecting worksites to ensure adequate living conditions, and minimizing the cost and bureaucracy of registration to encourage legal registration of migrants.

Migrants should be made aware of their rights as labor migrants in Kazakhstan, and should be put in touch with relevant human rights organizations as a recourse in case of exploitation. In the context of TB, it might also be possible to target education campaigns at employers themselves, to make sure that employers are aware of the symptoms of TB and to encourage them to enable access to care for their workers at least in cases of suspected TB.