博士論文

Perceived access and unrealized access to health care among Nepalese migrants in Japan

（来日ネパール人の認識する医療ケアへのアクセスと

医療ケアアクセスの未実現）

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Abbreviations

AOR	Adjusted odds ratio
CES-D	Center for Epidemiological Studies- Depression
CI	Confidence interval
MSPSS	Multi-dimensional Scale of Perceived Social Support
NHI	National Health Insurance
PSS	Perceived Stress Scale
SD	Standard deviation
SCL-90-R	Symptoms Checklist-90-R
UDHR	Universal Declaration of Human Rights

Abstract

Background

Access to health care is critical for migrants. Only a few studies have been conducted on this issue among migrants in Asia, despite hosting 75 million migrants. I examined the predisposing, enabling and need factors associated with perceived access and unrealized access to health care among Nepalese migrants in Japan. I also examined the association of those factors with their perceived access and unrealized access to health care, when several key factors are combined.

Methods

I conducted a cross-sectional study among 659 Nepalese migrants residing in 10 prefectures of Japan. I used two separate multivariable regression models to explore the key predisposing, enabling, and need factors with or without combining them, respectively.

Results

The key factors associated with the migrants' better access to health care were longer length of stay (predisposing factor), not needing the Japanese language interpreter during the visit to health facility and paying the health insurance premium regularly (enabling factors), and self-rated health status as good or very good or excellent (need

factor). Migrants were more likely to perceive better access to health care (AOR=8.32, 95% CI 3.48-20.51) when they had all these three key factors, compared to those who had none of them. They were less likely not to see health worker when needed (AOR=0.17, 95% CI 0.04-0.81) when they had predisposing and enabling factors, compared to those who had none of them.

Conclusion

Nepalese migrants were more likely to have better perceived access and less unrealized access to health care when they had all the three key predisposing, enabling and need factors, compared to those who had none or either two of them. Moreover, the key enabling factors had more important roles than key predisposing or need factors when combined with either of them. Such key enabling factors were language skill and health insurance.

Key words: Nepalese migrants; perceived access; unrealized access; health care; enabling factors; Japan

1. Background

1.1 Global context of international migration

Migration is a universal phenomenon. Over the last 30 years, international migration has grown rapidly as a result of industrialization, changing labor markets and conflict related displacement [1]. The number of international migrants reached 244 million worldwide in 2015, up from 175 million in 2000 and 154 million in 1990. Among them 76 million were residing in Europe, followed by 75 million in Asia, 54 million in North America and the rest in other regions [2]. International migrants can be divided into following categories: a) Labor migrants b) Students c) Family reunification migrants (dependents of migrants) d) Forced migrants (including refugees and asylum seekers), and e) Irregular migrants (undocumented/illegal migrants without visa status or work permit) [3]. Most of the international migration occurs from developing to developed countries [4].

1.2 Migration and health

Migration is closely linked with the health status of migrants. Migrants' health is affected by various factors such as socio-economic and cultural factors, previous health history, and access to health care in the host society [3]. Such migration related factors may have both positive and negative effects on health. A few studies among

Latino communities in US have identified a particular phenomenon known as “Latina paradox”, where such migrants have better health outcomes than non-migrants [5]. Moreover, studies have also identified “healthy migrant effect”, where migrants are healthier upon arrival compared to the general population in the host country [6, 7]. However, such effect decreases over time as migrants face several challenges in the host environment [3, 8].

Poor health condition among migrants is associated with several risk factors [9-13]. Based on the migration process, they can be divided into pre-migration, during the migration, and post-migration risk factors. Pre-migration risk factors include the events in the home country such as violence, conflicts, unemployment, poverty and poor access to health care. During the journey to the host country, migrants’ health may be affected due to insecurity, human trafficking, and poor access to medical assistance. Post-migration risk factors include language barrier, working and living conditions, social isolation, unemployment, limited knowledge on health care system and discrimination.

1.3 Access to health care among migrants

Migrants’ access to health care is an important area of concern in global health. It is generally defined as the timely use of personal health services to achieve the best

possible health outcome [14]. More specifically, optimal access to health care is defined as "providing the right service at the right time in the right place" [15].

Access to health care is critical for migrants in the host society. It is closely related with the notion of "health and human rights". The Universal Declaration of Human Rights (UDHR) states: "Everyone has the right to a standard of living adequate for the health and well being of himself and of her/his family, including food, clothing, housing and medical care.."[16]. This concept is closely related with another important global health notion of "equity in health". Equity in health is defined as the absence of systematic disparities in health between groups with different levels of underlying social advantage/disadvantage [17]. However, migrants are one of the most deprived and vulnerable groups who receive the least health care services in society, leading to their poor health status [18].

Apart from the human rights point of view, access to health care among migrants is also critical for their integration in the host societies. Integration of migrants to the host societies will be difficult if migrants have health problems [19]. This will lead to the marginalization of the unhealthy migrants. Proper access to health care improves the health condition of migrants which ultimately increases their access to education and employment. It also empowers them to cope with the socio-cultural

burden in the new society. Thus, access to health care prevents from marginalization and promotes the integration of migrants in receiving societies [3].

For the studies of access to health care among migrants, most of them are conducted for migrants in Europe and North America. Majority of them have poor access to health care [20-23]. The factors affecting their access to health care occur in three different levels: system, provider and patient levels. The system level factors include immigration policy, high cost of services, unavailability of health services, lack of resources such as interpreters and cultural mediators, transport and geographic barriers, and lack of social support networks [24-27]. The provider level factors include attitudes of service provider, discrimination, lack of cultural knowledge, and weak communication skills [23-29]. The patient level factors include demographic variables (age, gender, marital status etc.), social structural variables (ethnicity, education, economic status, living conditions, cultural perceptions, length of stay, local language skills, stigma etc.), health beliefs, health insurance, personal health practices, and knowledge of health services [22-25, 27, 30-32].

1.4 Access to health care among migrants in Asia

Migrants' health is an understudied area in Asia, despite hosting 75 million migrants. Only a few studies have been conducted on access to health care among migrants in

this region. About 50% (out of 450) of Central Asian migrants in Kazakhstan had lower utilization of health services and poor self-reported health status [8]. More than 60% (out of 408) of Nepalese migrants in Qatar, Saudi Arabia and United Arab Emirates did not have health insurance, which led to their poor access to health care [33]. Indian labor migrants in Lebanon had poor access to health care due to the lack of health insurance and high medical costs [34]. Evidence is limited on the factors contributing to access to health care among migrants in Asia. The socio-cultural environment of Asia is different from that of the Western world, which may reveal different dynamics of these issues among its migrants. Moreover, it is not known globally what kinds of associations exist with access to health care among migrants, when such factors are combined.

1.5 Access to health care among migrants in Japan

Evidence is even more limited on access to health care among migrants in Japan. Japanese immigration policy favors migrant control over migrant rights, which has negative consequences on their access to health care [35, 36]. Their health outcomes are worse in comparison with general population because of untimely access to health care. For example, the incidence of tuberculosis is higher among migrants than the Japanese population due to inadequate access to diagnosis and treatment [37]. About

38% (out of 107) Japanese Brazilians (foreign descendents of Japanese emigrants/*Nikkejins*) had anxiety disorder [38]. Poor mental health and poor quality of life were reported among North Koreans living in Japan [39]. Thus, it is important to conduct a study on access to health care among migrants in Japan.

1.6 Nepalese migrants in general

Foreign labor migration is an important aspect of Nepal's economy and society. Around four million Nepalese are working overseas, mostly in India, Middle East, East and Southeast Asian countries [40]. International remittances contribute to 29.1% of the country's GDP [40]. Around 20% of the Nepalese population lives below the poverty line and Nepal remains one of the poorest countries in the world [40]. Factors such as poverty, unemployment and unstable political situation force many Nepalese to fly overseas to seek employment opportunities.

1.7 Nepalese migrants in Japan

Japan is also a popular destination for Nepalese migrants. They constitute the largest South Asian community in the country [41]. About 60,000 Nepalese were residing in Japan in 2016 [41]. Their number increased by three folds in Japan from 2011 to 2016 [41]. About 20,000 of them are students, most of whom are studying in Japanese language schools and professional training colleges, and not so many in universities

[41]. Most of the students are also engaged in part-time jobs in convenience stores, restaurants, delivery services and housekeeping jobs. A majority of the Nepalese male migrants are also working as cooks in Indo-Nepali restaurants under the legal status of skilled labors. Another majority are the wives of those cooks, who are engaged in part-time jobs under the legal status of dependents. A small number of the Nepalese migrants have office jobs in companies or have their own business.

I did not find any published studies conducted on health issues of Nepalese migrants living in Japan. Therefore, I conducted a preliminary study (before the main study) to have a general overview on their access to health care in Japan. I conducted a total of six group discussions with some of the Nepalese migrants residing in Tokyo, Kanagawa and Saitama prefectures. Majority of them were students, cooks or dependents. Most of them had poor access to healthcare in Japan. I identified several factors that might contribute to their poor healthcare access, such as language barrier, insurance status, and poor social support. I also identified their mental health problems such as depressive symptoms and anxiety. I also asked them about their motivations and reasons to come to Japan. The most common reason was the economic benefit. Their monthly income in Japan was much higher than in Nepal. Even if many of them were students in Japanese language schools and professional training colleges, their main aim

was to earn more by doing part-time jobs. Most of the students were engaged in at least two part-time jobs and worked more than 50 hours per week, despite the government rule of maximum 28 hours per week. It helped them to pay back the loan they took for coming to Japan. They also mentioned that it is easier to get student visa to come to Japan. Another majority of the Nepalese migrants, who work as cooks in Indo-Nepali restaurants have demanding job with long working hours. They mostly work inside the kitchen and do not get much chance to go outside and interact with people. They also have poor language skills. Most of them bring their wives to Japan under dependent visa status. These dependents also earn money by doing part-time jobs. Furthermore, unstable political situation and lack of employment opportunities in Nepal were the pushing factors for these Nepalese to migrate to Japan.

Most of these Nepalese students, cooks and their dependents may be in vulnerable health conditions. They may have limited access to health care due to socio-cultural factors, language barriers and poor social support. However, little is known about access to health care and its associated factors among this vulnerable population in Japan.

1.8 Conceptual framework

Access to health care among migrants is influenced by several factors. Moreover, these

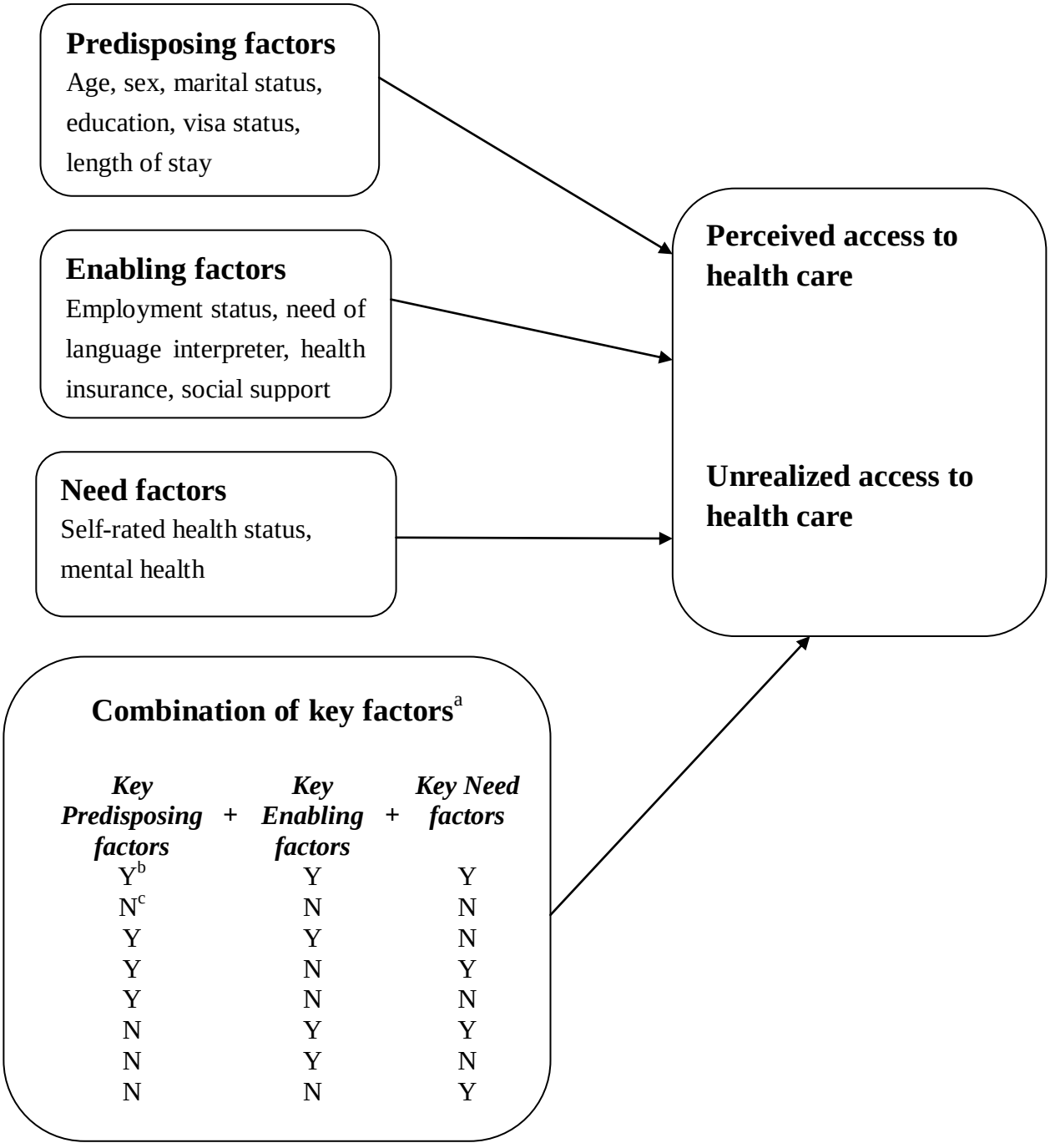
factors operate in various ways. Some factors affect the predisposition to use of the health services. Some factors impede or enable the use of those services, whereas some depend upon the need of the health care. Thus, access to health care is a function of individual's predisposing, enabling and need factors [42]. Predisposing factors are characteristics that affect a person's tendency to seek health care services. These include demographic and social characteristics such as age, sex, ethnicity, education, occupation, and length of stay [42-44]. Enabling factors are characteristics that facilitate or impede access to health care. These include financing factors and resources such as employment status, income, health insurance and language proficiency [42-44]. Need factors are individual's perceived or evaluated health conditions for which a person is likely to require health care. These include individual's perceived health care need such as self-rated general and mental health status, and evaluated need such as clinical evaluation at a health facility [42-44].

Access to health care concerns both potential and realized entry of an individual into the health care system [3]. Potential access to health care is reflected by the individual's perception on his current access to health professionals or health services. Indicators of potential access also determine the realized access [3, 44]. Those who have better perceived access to health care are more likely to utilize the

health services. Exploring such perceived access to health care among migrants helps to assess the uncertainty they may feel regarding their ability to access health services in the host society should they need it in the future.

A number of studies have used “actual use of health services” (realized access) as a proxy measure for access to health care among migrants [24, 43, 45-48]. However, such measure cannot identify the individuals who are unable to access the health care when they are ill; precisely because their lack of utilization is, by definition, unobserved [49]. An individual’s inability to actually use the health services when needed reflects his unrealized access [8, 50]. So, unrealized access to health care concerns the unmet need for the health service utilization [51-55]. Unmet need arises when an individual is not able to receive the available and effective health services that could have improved his health [56]. Thus, measuring unrealized access helps to identify access barriers among non-users of health services. Moreover, the direct measurement of unrealized access may complement the conventional method of using “actual use of health services” and address its limitation for non-users of health services [56]. Exploring the factors associated with unrealized access among migrants helps to identify the barriers impeding migrants to utilize the health services in the host country.

In this study, I hypothesized that predisposing, enabling and need factors are associated with perceived access and unrealized access to health care among migrants (Figure 1). I also hypothesized that there are different associations with perceived access and unrealized access to health care among migrants, when the key predisposing, enabling and need factors are combined with each other in several ways (Figure 1). Exploring such associations by combining the factors may reveal the factors which can play more important roles compared to others. Future interventions may first focus on such more important factors. Furthermore, it helps migrants to take step wise action to improve their access to health care.



[a] Key factors are the ones which are significantly positively associated with better perceived access or less unrealized access to health care.

[b] Presence of the key factor

[c] Absence of the key factor

Figure 1: Conceptual framework

1.9 Objectives

- To examine the predisposing, enabling and need factors associated with perceived access and unrealized access to health care among Nepalese migrants in Japan.
- To examine the association of those factors with their perceived access and unrealized access to health care, when several key factors are combined with each other.

2. Methods

2.1 Study design and area

I conducted this cross-sectional study in the following 10 prefectures of Japan; Tokyo, Fukuoka, Osaka, Gunma, Tochigi, Hyogo, Kanagawa, Chiba, Aichi and Saitama. Most of the Nepalese migrants are residing in these prefectures. Among them, Tokyo had the largest Nepalese population of 18,869 followed by Fukuoka (4,876) and others in 2015[41].

2.2 Sampling strategy and participants

I recruited the migrants based on convenience sampling method, in each study prefecture. I along with the research assistants visited language schools, professional training colleges, Indo-Nepali restaurants and other work stations in the study area to

recruit the migrants. We first identified the key informants, who were the leaders of the local Nepalese communities in each study area. The key informants helped us to identify the language schools, professional training colleges, Indo-Nepali restaurants and other work stations in the study area where most of the Nepalese migrants are studying and working. They also introduced us to other Nepalese migrants residing in respective prefecture.

I recruited the migrants (both male and female) who fulfilled the following eligibility criteria.

Inclusion criteria:

- Nepalese citizen
- Aged 18-60 years
- Who have stayed continuously or with interruption for at least three months in Japan
- Willing to participate voluntarily

Exclusion criteria:

- Those who cannot read and write in Nepali language

2.3 Sample size

I calculated the required minimum sample size using the G power software version 3.1

for 80% power and alpha error probability 0.05. For assumption, I used the data from a previous study conducted among international students in Japan [57]. I conducted the z test by entering the assumed data on difference between two independent proportions (0.50 and 0.37) for the association of language skills with depressive symptoms. The calculated minimum sample size was 456. However, I recruited more participants considering the possibility of missing data and non-response to the self-administered questionnaire due to the sensitiveness of questions on topic such as mental health problems. In total, I distributed questionnaires to a total of 981 potential participants.

2.4 Measurements

Outcome variable

Perceived access and unrealized access to health care

I measured it by two binary variables. I measured perceived access to health care among the migrants by asking if they currently have proper access to a doctor/health worker. I measured unrealized access to health care by asking if in the past year, they needed to see a doctor/health worker for an illness but did not. Both items have been previously used to examine access to health care among the migrants in Central Asia [8].

Independent variables

I categorized the independent variables into three major determinants of access to health care; predisposing, enabling and need factors [43]. I selected those variables based upon the findings of my preliminary study among the Nepalese migrants in Japan, conceptual framework, and previous published studies on access to health care among the global migrants [4, 24, 30, 43].

Predisposing factors

I asked questions on socio-demographic characteristics such as sex, age, marital status, ethnicity, and educational level obtained in Nepal before migration. I also asked them questions on their visa/legal status and length of stay in Japan. I measured the age of the migrants in years as a continuous variable. I grouped marital status into either married or unmarried. I categorized the ethnicity into three groups; Brahmin/Chhetri/Thakuri, Janajati, and Dalit. Brahmin, Chhetri and Thakuri are regarded as relatively well off ethnicities. Dalit is considered as an underprivileged ethnicity and Janajati is an indigenous ethnicity [58]. I categorized the educational level obtained in Nepal before migration in three groups; less than higher secondary, higher secondary and bachelors degree or more.

I measured their length of stay in Japan in years as a continuous variable. I categorized the visa/legal status in the following groups; student, skilled labor (cook),

dependent, designated activities (refugee applicant), engineer/specialist in humanities/international services, business manager, permanent resident/spouse or child of permanent resident and others.

Enabling factors

I assessed the enabling factors by asking questions about their employment status in Japan, payment of the health insurance premium and their need of a Japanese language interpreter during the visit to health facility. I categorized the employment status in Japan in the following groups; engaged in own business (self-employed), full-time employee, part-time employee, student (language school) and part-time employee, student (professional training college) and part-time employee, student (university) and part-time employee, and no job. I asked questions on frequency of payment of health insurance premium. I categorized it into regular and irregular payment (not paid for a year or more). I also asked questions on migrants' perceptions on benefits and cost of health insurance. I asked the need of a Japanese language interpreter during visit to health facility with a question with "Yes" or "No" response.

I measured perceived social support using the Multi-dimensional Scale of Perceived Social Support (MSPSS) [59]. It is a 12-item scale and items are scored from one (very strongly disagree) to seven (very strongly agree). The possible scores range

from 12 to 84. This scale has already been tested for its validity among Nepalese migrants [60]. Its Cronbach's alpha coefficient was 0.97 for this study.

Need factors

I measured the need factors by asking questions on self-rated health status and common mental health problems. I measured self-rated health status using a 5-point Likert scale (excellent, very good, good, fair, or poor). This single-item instrument has been used widely in previous studies and also among migrants in Central Asia [8].

I measured common mental health problems by assessing stress, depressive symptoms and anxiety among the migrants. I measured stress in the past month using the Perceived Stress Scale (PSS). It is a 10-item scale with scores ranging from zero (never) to four (very often). The possible scores range from zero to 40. This scale has already been tested for its validity and used among Nepalese population [61]. Its Cronbach's alpha coefficient was 0.85 for this study.

I measured depressive symptoms during last week using the Center for Epidemiologic Studies- Depression (CES-D) scale. It is a 20-item scale with scores ranging from zero (never or rarely or none of the time or less than 1 day) to three (mostly or all of the time [5-7] days). The possible scores range from zero to 60. A score of 16 or more indicates depressive symptoms. This scale has already been tested for its

validity and used among Nepalese population [61]. Its Cronbach's alpha coefficient was 0.87 for this study.

I measured anxiety in the past month using the Symptoms Checklist-90-R (SCL-90-R) Anxiety Subscale. It is a 10-item scale with scores ranging from zero (not at all) to four (extremely). The possible scores range from zero to 40. This scale has already been tested for its validity and used among Nepalese population [61]. Its Cronbach's alpha coefficient was 0.94 for this study.

2.5 Data collection

I translated the questionnaire from English to Nepali language. Two independent translators back-translated the Nepali version of the questionnaire into English. I finalized it after series of discussions with Nepali colleagues and expert researchers on Nepalese migrants.

I collected the data using the self-administered questionnaire in the Nepali language. I pretested it among 40 migrants and changed or rephrased a few questions based on the pretest results. I along with eight trained Nepali research assistants collected the data from April to July, 2016. We distributed questionnaires to a total of 981 potential participants who fit to the eligibility criteria of this study. We obtained a total of 765 filled questionnaires back. Among them, 26 did not have written informed

consent.

2.6 Data analysis

I included a total 659 migrants in the data analysis, as I excluded 106 questionnaires due to missing data. For handling the missing data, I excluded all those cases from all the analysis, which had missing data on any of the variables of interest (Listwise or case deletion).

I conducted descriptive statistics to analyze the general characteristics, migration characteristics, perceived access and unrealized access to health care among the migrants. I used logistic regression models to conduct two separate multivariable analyses. First, I used Model 1 to examine the factors associated with perceived access and unrealized access to health care among the migrants. Then, I selected the predisposing, enabling, and need factors significantly associated with perceived access or unrealized access to health care (key factors). I conducted the descriptive statistics by combining these three key factors. The combinations were based on the presence or absence of the factors which were positively associated with better perceived access or less unrealized access to health care in Model 1. Lastly, I used Model 2 to examine the association of factors when these three key factors are combined in such way. Such analysis by combining the factors may help to identify which factors are more

important than others.

I did not find any multicollinearity among the predictor variables. I set the statistical significance at $p<0.05$. I conducted all the analyses using STATA software, version 13.

2.7 Ethical considerations

This study was reviewed and approved by the Research Ethics Committee of the Graduate School of Medicine of the University of Tokyo. I obtained written informed consent from the migrants on the designated informed consent form. They participated voluntarily. I did not ask for or record any migrant's name, only an identification code was used. I also ensured the migrants about the confidentiality of their information. I also obtained verbal or written permissions from the language schools, professional training colleges, Indo-Nepali restaurants and other job sites in the study area to recruit the migrants.

3. Results

3.1 Socio-demographic characteristics

Table 1 summarizes the socio-demographic characteristics of the migrants (N=659). They had a mean age of 28.2 years (SD 7.0). About 73% of them were men. About 47% of them were married. About 16% of them had obtained less than higher

secondary education in Nepal, 50.5% had higher secondary level, and 33.2 % had bachelors degree or above. In Nepal, higher secondary level is achieved after completing 12 years of education, also known as 10+2 standard. In Nepal, before coming to Japan, 48.9% of them were students, 20.5% were working in service sector, and 11.1% had their own business.

Table 1: Socio-demographic characteristics of the migrants

Variables	N=659	Mean	%	SD
Age (years)		28.2		7.0
Sex				
Male	479		72.7	
Female	180		27.3	
Ethnicity				
Brahmin/Chhetri/Thakuri	369		56.0	
Janajati	243		36.9	
Dalit	47		7.1	
Marital status				
Married	307		46.6	
Unmarried	352		53.4	
Educational level obtained in Nepal before migration				
Less than higher secondary	107		16.2	
Higher secondary	333		50.5	
Bachelors degree or above	219		33.2	
Occupation in Nepal before migration				
Business	73		11.1	
Agriculture	22		3.3	
Service	135		20.5	
Household (unpaid)	42		6.4	
Student	322		48.9	
Unemployed	39		5.9	
Others	26		4.0	

3.2 Migration related characteristics

Table 2 shows the migration related characteristics of the migrants (N=659). Their mean length of stay in Japan was 3.9 years (SD 3.7). About 57% of them had a student visa status, 9.6% as skilled labor (cook visa), and 14.6% as dependent. About 32% of them were students in professional training colleges and part-time employees, 19.9% were students in language schools and part-time employees, 18.5% were full-time employees, and 12.1% were part-time employees. The migrants had a mean MSPSS score of 57.0 (SD 23.7).

Table 2: Migration related characteristics of the migrants

Variables	N=659	Mean	%	SD
Length of stay in Japan (years)		3.9		3.7
Visa/legal status				
Skilled labor (Cook)	63		9.6	
Student	375		56.9	
Dependent	96		14.6	
Engineer / Specialist in Humanities / International Services	23		3.5	
Permanent resident/Spouse or child of permanent resident	21		3.2	
Designated activities (refugee applicant)	46		7.0	
Business manager	15		2.3	
Others	20		3.0	
Employment status in Japan				
Engaged in own business (self-employed)	42		6.4	
Full-time employee	122		18.5	
Part-time employee	80		12.1	
Student (language school) and part-time employee	131		19.9	
Student (professional training college) and part-time employee	209		31.7	
Student (university) and part-time employee	39		5.9	
No job	36		5.5	
Perceived social support score		57.0		23.7

3.3 Health and behavior related characteristics

Table 3 presents the health and behavior related characteristics of the migrants (N=659). About 51% of them self-rated their health status as poor or fair. About 35% of them had not paid the health insurance premium for a year or more. About 82% of them said that the health insurance is beneficial. About 61% of them said that the cost of health insurance is expensive. About 70% of them said that they needed a Japanese language interpreter during their visit to health facility.

Table 3: Health and behavior related characteristics of the migrants

Variables	N=659	%
Self-rated health status		
Good/very good/excellent	323	49.0
Poor/fair	336	51.0
Payment of the health insurance premium		
Regular	426	64.6
Irregular (Not paid for a year or more)	233	35.4
Do you think health insurance is beneficial to you?		
Yes	541	82.1
No	67	10.2
Don't know	51	7.7
Do you think the cost of health insurance is expensive to you?		
Yes	404	61.3
No	180	27.3
Don't know	75	11.4
Need of a Japanese language interpreter during visit to health facility		
Yes	462	70.1
No	197	29.9

3.4 Common mental health problems, perceived access and unrealized access to health care among the migrants

Table 4 shows the common mental health problems, perceived access and unrealized access to health care among the migrants (N=659). They had a mean stress score of 17.6 (SD 6.2) and a mean anxiety score of 4.3 (SD 6.7). About 24% of them had depressive symptoms (score ≥ 16). About 69% of the migrants did not perceive that they had better access to doctor/health worker in Japan. About 31% of them needed to see doctor/health worker in the past year, but did not.

Table 4: Common mental health problems, perceived access and unrealized access to health care among the migrants

Variables	N=659	Mean	%	SD
Stress score		17.6		6.2
Depressive symptoms score				
Yes (score ≥ 16)	160		24.3	
No (score <16)	499		75.7	
Anxiety score		4.3		6.7
Perceived better access to doctor/health worker				
Yes	202		30.7	
No	457		69.4	
In the past year, needed to see doctor/health worker, but did not				
Yes	205		31.1	
No	454		68.9	

3.5 Factors associated with perceived access and unrealized access to health care among the migrants (Model 1)

Table 5 presents the factors associated with perceived access and unrealized access to health care among the migrants (N=659). The following predisposing, enabling, and need factors were significantly associated with perceived access and unrealized access to health care in multivariable regression model (Model 1).

Predisposing factors

The migrants who had stayed in Japan longer were more likely to perceive better access to doctor/health worker (AOR=1.09, 95% CI 1.01-1.20).

Enabling factors

The migrants were more likely to perceive better access to doctor/health worker (AOR=1.80, 95% CI 1.19-2.75) when they did not need a Japanese language interpreter during visit to health facility compared to those who needed. They were also less likely not to see doctor/health worker when needed (AOR=0.35, 95% CI 0.21-0.57). The migrants were less likely to perceive better access to doctor/health worker (AOR=0.21, 95% CI 0.13-0.33) when they had not paid the health insurance premium for a year or more compared to those who paid regularly. They were also at the higher risk of not seeing the doctor/health worker when needed (AOR=4.04, 95%

CI 2.73-6.09).

Need factors

The migrants were less likely to perceive better access to doctor/health worker (AOR=0.61, 95% CI 0.42-0.90) when they self-rated their health status as poor or fair compared to those who self-rated as good or very good or excellent.

Table 5: Factors associated with perceived access and unrealized access to health care among the migrants (Model 1)

	Perceived better access to doctor/health worker (N=642)			Needed to see doctor/health worker, but did not (N=642)		
Variables	**AOR**	**95% CI**		**AOR**	**95% CI**	
Predisposing factors						
Age	1.02	0.98	1.06	0.99	0.95	1.03
Sex						
Male						
Female	1.01	0.64	1.61	0.81	0.51	1.28
Marital status						
Unmarried						
Married	1.20	0.73	1.61	0.96	0.56	1.62
Ethnicity						
Brahmin/Chhetri/Thakuri						
Janajati	0.77	0.51	1.16	1.01	0.67	1.54
Dalit	0.61	0.29	1.30	2.32	1.16	4.63
Educational level obtained in Nepal before migration						
Less than higher secondary						
Higher secondary	1.87	0.95	3.70	0.84	0.46	1.54
Bachelors degree or above	1.82	0.93	3.57	0.62	0.33	1.15
Length of stay in Japan (years)	1.09	**1.01**	**1.20**	0.95	0.87	1.02
Visa/legal status						
Student						
Skilled labor (cook) or dependent	1.08	0.36	3.03	0.85	0.30	2.50
Designated activities (refugee applicant)	1.10	0.29	4.14	0.64	0.18	2.22
Others	0.78	0.23	2.60	0.45	0.13	1.59
Enabling factors						
Employment status in Japan						
Full-time employee						
Part-time employee	1.17	0.53	2.60	0.99	0.49	2.03
Student and part-time employee	1.44	0.45	4.55	0.37	0.12	1.20
Others	0.99	0.48	2.05	1.04	0.50	2.20
Need of a Japanese language interpreter during visit to health facility						
Yes						

No	1.80	**1.19**	**2.75**	0.35	**0.21**	**0.57**
Payment of the health insurance premium						
Regular						
Irregular (Not paid for a year or more)	0.21	**0.13**	**0.33**	4.04	**2.73**	**6.09**
Perceived social support score	1.01	0.99	1.01	1.00	0.99	1.01
Need factors						
Self-rated health status						
Good/very good/excellent						
Poor/fair	0.61	**0.42**	**0.90**	0.99	0.67	1.46
Stress score	1.00	0.96	1.03	0.99	0.95	1.02
Depressive symptoms score	1.03	0.99	1.05	1.00	0.97	1.02
Anxiety score	0.98	0.94	1.01	1.01	0.98	1.04

3.6 Perceived access and unrealized access to health care among the migrants when the key predisposing, enabling and need factors are combined

Table 6 shows the descriptive statistics of the perceived access and unrealized access to health care among the migrants when the statistically significant factors were combined. I combined them based on the presence or absence of the factors which were positively associated with better perceived access or less unrealized access to health care in table 5 (Model 1). For predisposing factors, it was the "length of stay in Japan ≥4 yrs". I categorized this variable based on the mean length of stay of the migrants in Japan. For enabling factors, they were "not needing a Japanese language interpreter during visit to health facility" and "regular payment of the health insurance premium". For need factors, it was "self-rated health status as good or very good or excellent". There were eight possible combinations of key predisposing, enabling and need factors.

About 68% of the migrants perceived better access to doctor/health worker and only 5.4% of them needed to see doctor/health worker in the past year, but did not when they had all the three aforementioned key factors (N=37). It was 20.1% and 35.2% of them respectively, when they had none of these factors (N=199). More than 50% of them did not perceive better access to doctor/health worker when they had

either one or two of the three key factors. Furthermore, about 30-40% of them needed to see doctor/health worker in the past year, but did not when they had only one of the three key factors.

Table 6: Perceived access and unrealized access to health care among the migrants when the key predisposing, enabling and need factors are combined

Predisposing factors	Enabling factors	Need factors	Perceived better access to doctor/health worker				Needed to see doctor/health worker, but did not			
			Yes		No		Yes		No	
			n	%	n	%	n	%	n	%
Y[a]	Y	Y	25	67.6	12	32.4	2	5.4	35	94.6
Y	Y	N[b]	14	50.0	14	50.0	2	7.1	26	92.9
Y	N	Y	20	30.8	45	69.2	29	44.6	36	55.4
Y	N	N	22	26.8	60	73.2	30	36.6	52	63.4
N	Y	Y	21	47.7	23	52.3	7	15.9	37	84.1
N	Y	N	8	29.6	19	70.4	7	25.9	20	74.1
N	N	Y	52	29.4	125	70.6	58	32.8	119	67.2
N	N	N	40	20.1	159	79.9	70	35.2	129	64.8

[a] Presence of the factor which is positively associated with better perceived access or less unrealized access to health care in table 5 (Model 1).

[b] Absence of the factor which is positively associated with better perceived access or less unrealized access to health care in table 5 (Model 1).

For predisposing factors, it is "length of stay in Japan ≥4 yrs".

For enabling factors, they are "not needing a Japanese language interpreter during visit to health facility" and "regular payment of the health insurance premium".

For need factors, it is "self-rated health status as good or very good or excellent".

3.7 Factors associated with perceived access and unrealized access to health care among the migrants when the key predisposing, enabling and need factors are combined (Model 2)

Table 7 presents the factors associated with perceived access and unrealized access to health care among all the migrants (N=659), when the statistically significant factors in table 5 (Model 1) were combined. The migrants were more likely to perceive better access to doctor/health worker (AOR=8.32, 95% CI 3.48-20.51) when they had all the three aforementioned key factors, compared to those who had none of them. They were also less likely not to see doctor/health worker when needed (AOR=0.12, 95% CI 0.03-0.55). They were more likely to perceive better access to doctor/health worker (AOR=4.25, 95% CI 1.67-11.31) when they had key predisposing and enabling factors, compared to those who had none of them. They were also less likely not to see doctor/health worker when needed (AOR=0.17, 95% CI 0.04-0.81). Furthermore, they were more likely to perceive better access to doctor/health worker (AOR=3.23, 95% CI 1.57-6.63) when they had key enabling and need factors, compared to those who had none of them.

Table 7: Factors associated with perceived access and unrealized access to health care among the migrants when the key predisposing, enabling and need factors are combined (Model 2)

Variables			Perceived better access to doctor/health worker (N=659)			Needed to see doctor/health worker, but did not (N=659)		
			AOR	**95% CI**		**AOR**	**95% CI**	
Combination of the factors which are associated with perceived access and unrealized access to health care in table 5 (Model 1)								
Predisposing factors	***Enabling factors***	***Need factors***						
N[a]	N	N						
Y[b]	Y	Y	8.32	**3.48**	**20.51**	0.12	**0.03**	**0.55**
Y	Y	N	4.25	**1.67**	**11.31**	0.17	**0.04**	**0.81**
Y	N	Y	1.92	0.94	3.90	1.25	0.65	2.42
Y	N	N	1.83	0.90	3.73	0.68	0.36	1.31
N	Y	Y	3.23	**1.57**	**6.63**	0.47	0.19	1.15
N	Y	N	1.45	0.58	3.63	0.95	0.37	2.41
N	N	Y	1.58	0.96	2.60	0.90	0.57	1.43
Other predisposing factors								
Age			1.02	0.99	1.06	0.98	0.94	1.02
Sex								
Male								
Female			1.01	0.65	1.68	0.83	0.54	1.32
Marital status								
Unmarried								
Married			1.13	0.69	1.84	0.98	0.59	1.62
Ethnicity								
Brahmin/Chhetri/Thakuri								
Janajati			0.77	0.52	1.15	1.00	0.67	1.56
Dalit			0.71	0.34	1.49	1.99	1.02	3.92
Educational level obtained in Nepal before migration								
Less than higher secondary								
Higher secondary			1.85	0.96	3.54	0.74	0.42	1.31
Bachelors degree or above			2.01	1.05	3.83	0.48	0.27	0.87

Visa/legal status						
Student						
Skilled labor (cook) or dependent	0.87	0.29	2.63	1.04	0.37	2.91
Designated activities (refugee applicant)	0.99	0.27	3.67	0.78	0.23	2.64
Others	1.07	0.34	3.41	0.40	0.12	1.33
Other enabling factors						
Employment status in Japan						
Full-time employee						
Part-time employee	1.22	0.58	2.65	0.97	0.49	1.92
Student and part-time employee	1.89	0.69	6.00	0.30	0.10	0.92
Others	1.04	0.56	2.15	0.95	0.47	1.92
Perceived social support score	1.01	0.99	1.02	0.99	0.99	1.00
Other need factors						
Stress score	1.00	0.96	1.03	1.00	0.96	1.03
Depressive symptoms score	1.02	0.99	1.04	1.00	0.98	1.02
Anxiety score	0.97	0.94	1.01	1.01	0.98	1.04

[a] Absence of the factor which is positively associated with better perceived access or less unrealized access to health care in table 5 (Model 1).
[b] Presence of the factor which is positively associated with better perceived access or less unrealized access to health care in table 5 (Model 1).

For predisposing factors, it is "length of stay in Japan ≥4 yrs".

For enabling factors, they are "not needing a Japanese language interpreter during visit to health facility" and "regular payment of the health insurance premium".

For need factors, it is "self-rated health status as good or very good or excellent".

4. Discussions

Nepalese migrants had poor perceived access to health care in Japan. More than half of them did not perceive better access to a doctor or health worker. Moreover, about one third of the migrants needed to see a doctor or health worker in the past year, but did not (unrealized access). The migrants had better perceived access and less unrealized access to health care when they had three types of the key predisposing, enabling and need factors, compared to those who had none or either two of them. Moreover, they were more likely to have better perceived access and less unrealized access to health care when they had key enabling factors along with either of the key predisposing or need factors. So, the key enabling factors may be more important than key predisposing or need factors when combined with either of them.

This study showed that the combination of these key factors is more responsible to affect the perceived access and unrealized access to health care among the migrants. Among them, the key enabling factors may play the central role. Health insurance and Japanese language skill were the most important enabling factors to have better perceived access and less unrealized access to health care among the migrants in Japan. They were even more likely to have better perceived access and less unrealized access to health care if they also had stayed in Japan for longer period of

time and/or self-rated their health status as good or very good or excellent. Therefore, those who have less number of these key factors may need to increase those more, in particular, the key enabling factors.

In this study, more than two-thirds of the migrants felt the need of a Japanese language interpreter during visit to health facility in Japan. They were also less likely to have better perceived access and less unrealized access to health care. Moreover, about 35% of the migrants had not paid the health insurance premiums for a year or more. They were also less likely to have better access to health care in Japan. Enabling factors such as language skill and health insurance are quite modifiable as they mainly depend upon the individual or community resources. They are more mutable or modifiable variables compared to predisposing and need factors [62]. Mutable variables are more useful in promoting access to health care [62]. Interventions should primarily focus on these two enabling factors, in order to improve access to health care among the migrants. Availability of professional interpreter services can improve the access to health care among the migrants with poor local language skills [63]. This will reduce the miscommunication between health workers and patients, and encourage migrants to utilize the health services. Furthermore, being insured significantly increases the health service utilization and decreases the delay of health care [64-66].

This study showed that the migrants who did not pay the health insurance premium regularly were less likely to have better perceived access and less unrealized access to health care. In Japan, it is mandatory for all citizens and foreigners residing for a year or more, to enroll in one of the public health insurance schemes [67]. Nepalese migrants get enrolled in National Health Insurance (NHI) scheme when they first enter Japan. However, in this study more than one-third of the migrants did not pay the health insurance premium regularly afterwards. Failure to pay for many years results in heavy cost of back payments of premiums for the period they had not paid for. Thus, those migrants become reluctant to utilize the health services in Japan. This finding is comparable with a study among Latin American migrants in Japan [68].

The health insurance system in Nepal is very primitive in comparison to Japan. In Nepal, National Health Insurance Policy was made in 2013 [69]. The Government of Nepal formed the legal framework for a social health security scheme recently in 2015, which is yet to be implemented [69]. Out-of-pocket payment remains the major way of financing health care in Nepal [70]. Therefore, majority of Nepalese migrants who come to Japan were never exposed to health insurance culture before. They are not aware about the benefits of health insurance in providing the proper access to health care. Moreover, they perceive it as a financial burden and do not pay the health

insurance premium. In this study, more than half of the migrants perceived the health insurance cost to be expensive. About 18% of the migrants thought either the health insurance is not beneficial to them or they did not know about it. So, they may not visit the health facilities in Japan even if they are sick, to avoid the heavy cost of insurance premium back payments. The reasons for not paying the insurance premium regularly may be such perceptions of migrants on costs and benefits of the health insurance scheme. During the group discussions in preliminary study, some migrants even said that it is cheaper to go to Nepal for treatment of chronic diseases rather than paying the insurance premiums in Japan to utilize the health services. This reflects the lack of awareness among Nepalese migrants about the health insurance benefits. This also suggests that the availability of health insurance system may not be sufficient to improve the access to health care among migrants. Migrants should be also educated about the benefits of health insurance and encouraged to pay the health insurance premium regularly.

In addition to key enabling factors, the migrants were more likely to have better perceived access and less unrealized access to health care if they also had both or either of the key predisposing and need factors. Such key predisposing and need factors were longer length of stay in Japan and self-rated health status as good or very

good or excellent respectively. These are less modifiable variables than enabling factors. Modifying the length of stay is not a feasible short-term policy intervention to improve the access to health care among migrants. However, it may imply that interventions should focus more on newcomer migrants as they were less likely to have better perceived access to health care in this study.

Self-rated health status is an important perceived need factor for access to health care among migrants [43]. Those who perceive their health status as poor tend to visit the health facility frequently [66, 71]. In our study, we did not find any significant association between self-rated health status and unrealized access. However, Nepalese migrants who self rated their health status as poor or fair were less likely to perceive better access to health care compared to those who self rated as good or very good or excellent. There may be also the possibility of reverse causality. Those who did not perceive better access to health care might rate their health status as poor or fair because they did not have opportunity to utilize the health care services in Japan, when they felt sick. This implies that proper access to health care may improve their self-rated health status.

The findings of this study should be interpreted in line with the following limitations. Convenience sampling might have introduced selection bias and the

sample may not be representative of the Nepalese population in Japan. Such selection bias may have over or underestimated the association of the factors with perceived access and unrealized access to health care. However, I did not conduct sensitivity analysis to estimate the magnitude and direction of the selection bias. Migrants are a hard to reach population, so it may be unfeasible to get a representative sample. Methods such as convenience sampling provide the best opportunity to recruit a relevant sample [21]. I attempted to minimize such bias by collecting data in 10 different prefectures of Japan, where most Nepalese migrants are residing. Moreover, the included migrants had various visa statuses and the response rate was also fairly high.

Another important limitation is due to missing data. I excluded the missing data from the analysis by listwise or case deletion. It might have following implications in the study. First, the absence of data might have reduced the statistical power. However, data collection was maximized anticipating the missing data. Second, the lost data might have caused bias by over or underestimating the results. However, no systematic pattern was observed in the missing data. Multiple imputation of the missing data might have reflected the uncertainty associated with the estimation [72]. Third, the lost data might have reduced the representativeness of the sample.

I did not explore the system level and provider level factors which may also influence the perceived access and unrealized access to health care among Nepalese migrants in Japan [24]. The system level factors include system characteristics such as immigration policy and organizational barriers. The provider level factors include provider characteristics such as communication skills and cultural knowledge. I only asked questions to measure perceived access and unrealized access to health care. These may not be enough to capture all the aspects of access to health care among migrants.

I did not include the questions on working hours and income of the migrants in this study. I had included those questions during the pre-testing of the questionnaire. However, I found that the migrants were reluctant to answer such questions because most of the Nepalese students and dependents in Japan are working for more than legally allowed working limit of 28 hours per week. So, I excluded these questions from the main study. I also did not ask about any physical symptoms of diseases, they are currently suffering or under treatment. I only asked a question on their self rated general health status. Such information on disease symptoms may clarify more about their need to access the health services in Japan.

Despite these limitations, this study is important as it first examined the

association of the factors with perceived access and unrealized access to health care, when three major key factors are combined. The results of this analysis can help migrants globally to take individual and collective actions step by step. Furthermore, this is a pioneer study conducted on health issues of Nepalese migrants in Japan.

5. Conclusions and recommendations

Nepalese migrants in Japan were more likely to have better perceived access and less unrealized access to health care when they had all the three key predisposing, enabling and need factors, compared to those who had none or either two of them. Moreover, the key enabling factors had more important roles than key predisposing or need factors when combined with either of them. Such key enabling factors were language skill and health insurance.

Interventions should focus more on key enabling factors. It may include reducing the language barrier between the migrants and health workers, possibly by providing the professional interpreter service in health facility. Moreover, awareness and educational programs should be implemented to encourage the migrants to pay the health insurance premium regularly. The target population may be the newcomer migrants. Japanese government and Nepalese social organizations in various prefectures of Japan should take such initiatives to reduce the language barrier and

encourage the Nepalese migrants to pay the health insurance premium. Future studies should also examine the influence of system level and provider level factors on perceived access and unrealized access to health care among the migrants in Japan.

Acknowledgements

First of all I would like to express my sincere gratitude to Prof. Masamine Jimba, chair of the Department of Community and Global Health, The University of Tokyo for his continuous support throughout my studies here in Japan. It was the wonderful opportunity to study global health under his mentorship. I would also like to thank Dr. Akira Shibanuma , Dr. Junko Kiriya and all the other faculty members and secretaries of the department for their continuous inspiration.

I would also like to thank Dr. Masako Tanaka (Sophia University) and Dr. Takashi Sawada (Minatomachi Clinic) for their constructive suggestions on my research since the beginning of this project. I am also grateful to my colleagues Ms. Kanan Nakamura and Ms. Momoko Koyama for their help to obtain the ethical approval, and Dr. Dipendra Gautam for his assistance during the field work.

My special thanks go to Japanese Government Monbukagakusho Scholarship Program (MEXT) for covering my academic and living expenses during the doctoral studies in Japan. I am also grateful to Setsutaro Kobayashi Memorial Fund for providing the research grant to conduct this research.

My sincere gratitude is also owed to my research assistants of this project and the Nepalese community in Japan. I am truly indebted to all the participants of this

study for their valuable time and responses.

Finally, I would like to express great appreciation to my wonderful colleagues and family members for being supportive to me all the time.

References

1. Das-Munshi J, Leavey G, Stansfeld SA, Prince MJ. Migration, social mobility and common mental disorders: critical review of the literature and meta-analysis. Ethn Health. 2012;17(1-2):17-53.

2. UN. Trends in international migrant stock: The 2015 revision. Department of economic and social affairs, population division. USA: United Nations, 2015. Available from: http://www.un.org/en/development/desa/population/migration/data/estimates2/docs/MigrationStockDocumentation_2015.pdf. Accessed 23 July 2015.

3. Norredam ML, Nielsen AS, Krasnik A. Migrants' access to healthcare. Dan Med Bull. 2007;54(1):48-9.

4. Lindert J, Schouler-Ocak M, Heinz A, Priebe S. Mental health, health care utilisation of migrants in Europe. Eur Psychiatry. 2008;23 Suppl 1:14-20.

5. McGlade MS, Saha S, Dahlstrom ME. The Latina paradox: an opportunity for restructuring prenatal care delivery. Am J Public Health. 2004;94(12):2062-5.

6. McDonald JT, Kennedy S. Insights into the 'healthy immigrant effect': health status and health service use of immigrants to Canada. Soc Sci Med. 2004;59(8):1613-27.

7. Lee S. Racial variations in major depressive disorder onset among immigrant populations in the United States. J Ment Health. 2011;20(3):260-9.

8. Ismayilova L, Lee HN, Shaw S, El-Bassel N, Gilbert L, Terlikbayeva A, et al. Mental health and migration: depression, alcohol abuse, and access to health care among migrants in Central Asia. J Immigr Minor Health. 2014;16(6):1138-48.

9. Bhugra D. Migration and mental health. Acta Psychiatr Scand. 2004;109(4):243-58.

10. Burnett A, Peel M. Asylum seekers and refugees in Britain. The health of survivors of torture and organised violence. BMJ. 2001;322(7286):606-9.

11. Kristiansen M, Mygind A, Krasnik A. Health effects of migration. Dan Med Bull. 2007;54(1):46-7.

12. Thomas SL, Thomas SD. Displacement and health. Br Med Bull. 2004;69:115-27.

13. Helman C. Migration, globalization and health. In: Culture, Health and Illness.New York:Hodder Arnold; 2007. p. 319-33.

14. IOM. Access to health care in America. Committee on monitoring access to personal health care services. Washington DC, USA: Institute of Medicine, 1993.

15. Rogers A, Flowers J, Pencheon D. Improving access needs a whole systems approach. And will be important in averting crises in the millennium winter. BMJ. 1999;319(7214):866-7.

16. UN (1948) Universal Declaration of Human Rights. Article 25; §1.USA:United Nations.

17. Braveman P, Gruskin S. Defining equity in health. J Epidemiol Community Health. 2003;57(4):254-8.

18. Fiscella K, Shin P. The inverse care law: implications for healthcare of vulnerable populations. J Ambul Care Manage. 2005;28(4):304-12.

19. Ingleby D, Chimienti M, Hatziprokopiou P, Ormond M, De Freitas C. The role of health in integration. In: Social integration and mobility: education, housing and health. 2005;p.101-137.

20. Perez-Rodriguez MM, Baca-Garcia E, Quintero-Gutierrez FJ, Gonzalez G, Saiz-Gonzalez D, Botillo C, et al. Demand for psychiatric emergency services and immigration. Findings in a Spanish hospital during the year 2003. Eur J Public Health. 2006;16(4):383-7.

21. Selkirk M, Quayle E, Rothwell N. A systematic review of factors affecting migrant attitudes towards seeking psychological help. J Health Care Poor

Underserved. 2014;25(1):94-127.

22. Aarabi G, Reissmann DR, Seedorf U, Becher H, Heydecke G, Kofahl C. Oral health and access to dental care - a comparison of elderly migrants and non-migrants in Germany. Ethn Health. 2017:1-15.

23. Almeida LM, Caldas J, Ayres-de-Campos D, Salcedo-Barrientos D, Dias S. Maternal healthcare in migrants: a systematic review. Matern Child Health J. 2013;17(8):1346-54.

24. Scheppers E, van Dongen E, Dekker J, Geertzen J. Potential barriers to the use of health services among ethnic minorities: a review. Fam Pract. 2006;23(3):325-48.

25. Blondell SJ, Kitter B, Griffin MP, Durham J. Barriers and Facilitators to HIV Testing in Migrants in High-Income Countries: A Systematic Review. AIDS Behav. 2015;19(11):2012-24.

26. Suphanchaimat R, Kantamaturapoj K, Putthasri W, Prakongsai P. Challenges in the provision of healthcare services for migrants: a systematic review through providers' lens. BMC Health Serv Res. 2015;15:390.

27. de Vries SG, Cremers AL, Heuvelings CC, Greve PF, Visser BJ, Bélard S, et al. Barriers and facilitators to the uptake of tuberculosis diagnostic and treatment

services by hard-to-reach populations in countries of low and medium tuberculosis incidence: a systematic review of qualitative literature. Lancet Infect Dis. 2017.

28. Mehdiyar M, Andersson R, Hjelm K, Povlsen L. HIV-positive migrants' encounters with the Swedish health care system. Glob Health Action. 2016;9(1):31753.

29. Vedio A, Liu EZ, Lee AC, Salway S. Improving access to health care for chronic hepatitis B among migrant Chinese populations: A systematic mixed methods review of barriers and enablers. J Viral Hepat. 2017.

30. Agudelo-Suárez AA, Gil-González D, Vives-Cases C, Love JG, Wimpenny P, Ronda-Pérez E. A metasynthesis of qualitative studies regarding opinions and perceptions about barriers and determinants of health services' accessibility in economic migrants. BMC Health Serv Res. 2012;12:461.

31. Sou J, Goldenberg SM, Duff P, Nguyen P, Shoveller J, Shannon K. Recent im/migration to Canada linked to unmet health needs among sex workers in Vancouver, Canada: Findings of a longitudinal study. Health Care Women Int. 2017:1-15.

32. Hunter-Adams J, Rother HA. A Qualitative study of language barriers between

South African health care providers and cross-border migrants. BMC Health Serv Res. 2017;17(1):97.

33. Joshi S, Simkhada P, Prescott GJ. Health problems of Nepalese migrants working in three Gulf countries. BMC Int Health Hum Rights. 2011;11:3.

34. Gaur S, Saxena PC. Indian migrant workers in Lebanon and their access to health care. Asian Pac Migr J. 2004;3(1).

35. Parikh NS. Migrant health in Japan: Safety-net policies and advocates' policy solutions. APJ. 2010;12:3-10.

36. Sugie Y, Kodama T. Immigrant health issue in Japan- The global contexts and a local response to the issue. JIU Bull. 2010;22(8).

37. Sawada T. When seriously ill immigrants come to free medical consultations. In SHARE, international cooperation at the local level within Japan: 10 years in partnership with immigrants in Japan. Tokyo, Japan: SHARE, 2005.

38. Miyasaka LS, Canasiro S, Abe Y, Otsuka K, Tsuji K, Hayashi T, Andreoli SB, et al. Migration and mental health: Japanese Brazilians in Japan and in Brazil. J. Bras. Psiquiatr. 2007;56(1)

39. Lee CH, Min SK, Jeon WT, Kigawa M, Sugawara M. Mental health and quality of life of North Korean defectors living in Japan. Asian J Psychiatr. 2009;2(3):95-9.

40. MOLE. Labour Migration for Employment, A Status Report for Nepal: 2013/14. Department of Foreign Employment, Ministry of Labour and Employment, Government of Nepal, 2014.

41. MIC. Japan in figures. Tokyo, Japan: Statistics bureau, Ministry of Internal Affairs and Communication, 2015. Available from: http://www.e-stat.go.jp/SG1/estat/eStatTopPortalE.do. Accessed 16 June 2016.

42. Jahangir E, Irazola V, Rubinstein A. Need, enabling, predisposing, and behavioral determinants of access to preventative care in Argentina: analysis of the national survey of risk factors. PLoS One. 2012;7(9):e45053.

43. Babitsch B, Gohl D, von Lengerke T. Re-revisiting Andersen's Behavioral Model of Health Services Use: a systematic review of studies from 1998-2011. Psychosoc Med. 2012;9:Doc11.

44. Andersen RM, Davidson PL. Improving access to care in America: individual and contextual indicators. In: Andersen RM, Rice TH, Kominski EF, eds. Changing the U.S. health care system: key issues in health services, policy, and management. San Francisco, CA: Jossey-Bass; 2001. p. 3-30.

45. Norredam M, Krasnik A, Moller Sorensen T, Keiding N, Joost Michaelsen J, Sonne Nielsen A. Emergency room utilization in Copenhagen: a comparison of

immigrant groups and Danish-born residents. Scand J Public Health. 2004;32(1):53-9.

46. Norredam M, Nielsen SS, Krasnik A. Migrants' utilization of somatic healthcare services in Europe--a systematic review. Eur J Public Health. 2010;20(5):555-63.

47. Dias SF, Severo M, Barros H. Determinants of health care utilization by immigrants in Portugal. BMC Health Serv Res. 2008;8:207.

48. Leclere FB, Jensen L, Biddlecom AE. Health care utilization, family context, and adaptation among immigrants to the United States. J Health Soc Behav. 1994;35(4):370-84.

49. Cylus J, Papanicolas I. An analysis of perceived access to health care in Europe: How universal is universal coverage? Health Policy. 2015;119(9):1133-44.

50. Lasser KE, Himmelstein DU, Woolhandler S. Access to care, health status, and health disparities in the United States and Canada: results of a cross-national population-based survey. Am J Public Health. 2006;96(7):1300-7.

51. Baggett TP, O'Connell JJ, Singer DE, Rigotti NA. The unmet health care needs of homeless adults: a national study. Am J Public Health. 2010;100(7):1326-33.

52. Desai MM, Rosenheck RA. Unmet need for medical care among homeless adults with serious mental illness. Gen Hosp Psychiatry. 2005;27(6):418-25

53. Newacheck PW, Hughes DC, Hung YY, Wong S, Stoddard JJ. The unmet health needs of America's children. Pediatrics. 2000;105(4 Pt 2):989-97.

54. Chen J, Hou F. Unmet needs for health care. Health Rep. 2002;13(2):23-34.

55. Shi L, Stevens GD. Vulnerability and unmet health care needs. The influence of multiple risk factors. J Gen Intern Med. 2005;20(2):148-54.

56. Allin S, Grignon M, Le Grand J. Subjective unmet need and utilization of health care services in Canada: what are the equity implications? Soc Sci Med. 2010;70(3):465-72.

57. Kono K, Eskandarieh S, Obayashi Y, Arai A, Tamashiro H. Mental health and its associated variables among international students at a Japanese university: With special reference to their financial status. J Immigr Minor Health. 2015;17(6):1654-9.

58. MOHP. Health management information system, caste coding system. Department of Health Services, Ministry of Health and Population, Government of Nepal, 2010.

59. Canty-Mitchell J, Zimet GD. Psychometric properties of the Multidimensional Scale of Perceived Social Support in urban adolescents. Am J Community Psychol. 2000;28(3):391-400.

60. Tonsing K, Zimet GD, Tse S. Assessing social support among South Asians: the multidimensional scale of perceived social support. Asian J Psychiatr. 2012;5(2):164-8.

61. Eller LS, Mahat G. Psychological factors in Nepali former commercial sex workers with HIV. J Nurs Scholarsh. 2003;35(1):53-60.

62. Andersen RM. Revisiting the behavioral model and access to medical care: does it matter? J Health Soc Behav. 1995;36(1):1-10.

63. Jacobs EA, Lauderdale DS, Meltzer D, Shorey JM, Levinson W, Thisted RA. Impact of interpreter services on delivery of health care to limited-English-proficient patients. J Gen Intern Med. 2001;16(7):468-74.

64. Insaf TZ, Jurkowski JM, Alomar L. Sociocultural factors influencing delay in seeking routine health care among Latinas: a community-based participatory research study. Ethn Dis. 2010;20(2):148-54.

65. Andersen RM, Yu H, Wyn R, Davidson PL, Brown ER, Teleki S. Access to medical care for low-income persons: how do communities make a difference? Med Care Res Rev. 2002;59(4):384-411.

66. Broyles RW, McAuley WJ, Baird-Holmes D. The medically vulnerable: their health risks, health status, and use of physician care. J Health Care Poor

Underserved. 1999;10(2):186-200.

67. Ikegami N, Yoo BK, Hashimoto H, Matsumoto M, Ogata H, Babazono A, et al. Japanese universal health coverage: evolution, achievements, and challenges. Lancet. 2011;378(9796):1106-15. doi: 10.1016/S0140-6736(11)60828-3

68. Suguimoto SP, Ono-Kihara M, Feldman MD, Kihara M. Latin American immigrants have limited access to health insurance in Japan: a cross sectional study. BMC Public Health. 2012;12:238.

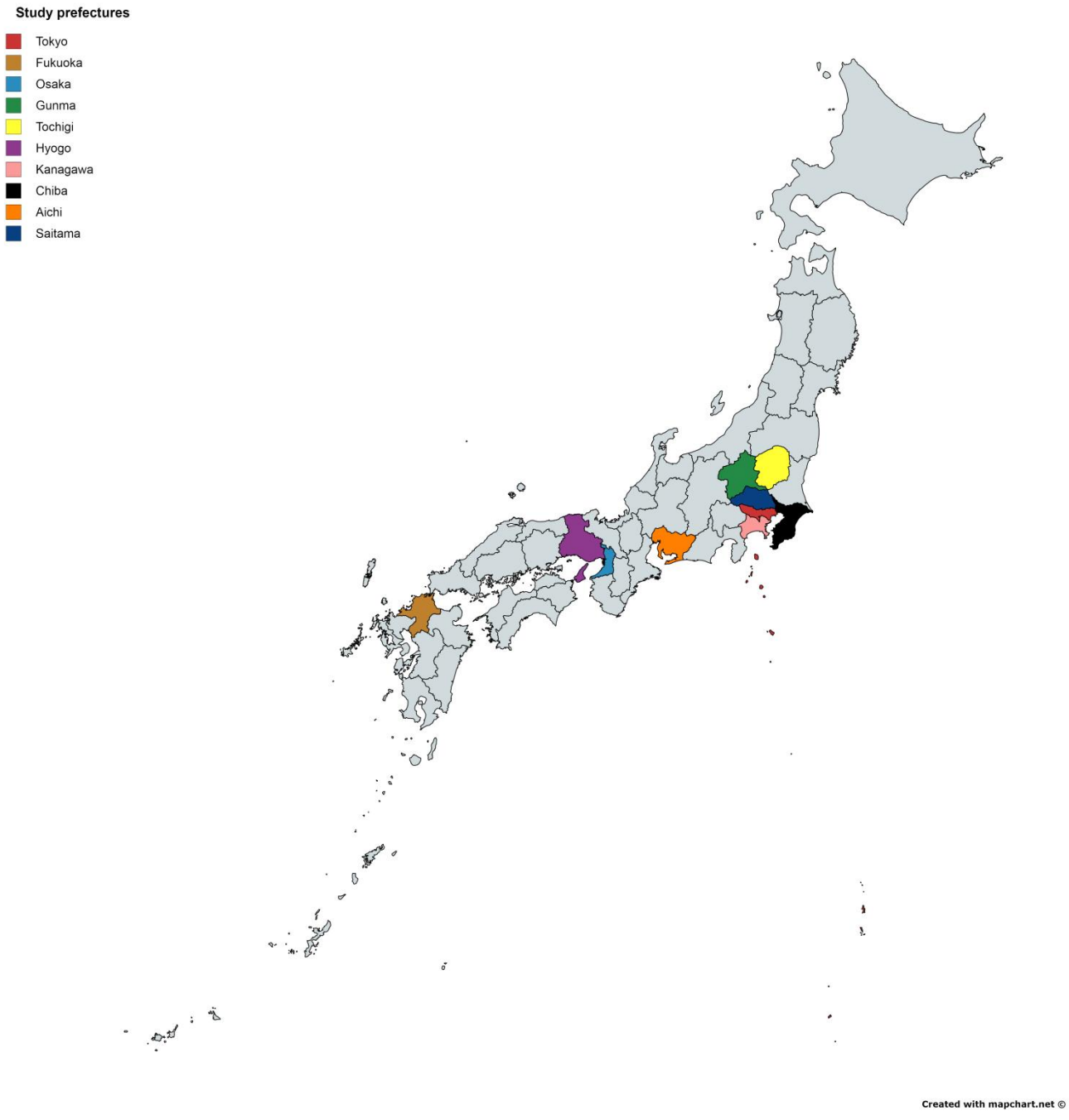
69. Mishra SR, Khanal P, Karki DK, Kallestrup P, Enemark U. National health insurance policy in Nepal: challenges for implementation. Glob Health Action. 2015;8:28763.

70. MOHP. Nepal Health Sector Programme Implementation Plan II (NHSP-IP 2), Kathmandu, Nepal: Government of Nepal, Ministry of Health and Population, 2010.

71. Dhingra, S. S., Zack, M., Strine, T., Pearson, W. S., & Balluz, L. (2010) Determining prevalence and correlates of psychiatric treatment with Andersen's behavioral model of health services use. Psych Serv. 61(5):524-528.

72. Kang H. The prevention and handling of the missing data. Korean J Anesthesiol. 2013;64(5):402-6.

Appendix 1: Map of Japan and study prefectures



Appendix 2: Research questionnaire (English)

Questionnaire

Respondent's ID No. | | | | | | | Date:

Please circle the appropriate answer, unless otherwise stated.

For example:

A. How do you rate your current general health status?

1. Excellent 2. Very good (3.) Good

4. Fair 5. Poor

1.0 General information

No.	Questions	Responses	Remarks
101	What is your age?	..... years	
102	Please choose your sex.	1. Male 2. Female 3. Third gender	
103	What is your caste/ethnicity?	.....	
104	Where is your birth place?	District.....	
105	What is your marital status?	1. Unmarried 2. Married 3. Others…. (specify)	
106	Do you have children staying in Nepal?	1. Yes 2. No If Yes, write the number of children.....	
107	Please choose the level of education you have completed in Nepal (only one)	1. Illiterate 2. Non- formal education 3. Primary level (Class 1-5) 4. Lower secondary level (Class 6-8) 5. Secondary level (Class 9-10) 6. S.L.C Pass 7. Higher secondary level (10+2) 8. Bachelors 9. Others ….(specify)	
108	What were you doing in Nepal before coming to Japan?	1. Business 2. Agriculture 3. Service 4. Household (unpaid)	

		5. Student 6. Unemployed 7. Others…… (specify)	
109	What is the name of the prefecture that you are residing recently?	……..	
110	How many years have you been in Japan in total?	.....years .....months	
111	What is your current visa/legal status in Japan?	1. Skilled labor (Cook visa) 2. Student 3. Dependent 4. Engineer/Specialist in Humanities/ International Services 5. Permanent resident 6. Spouse or child of permanent resident 7. Designated activities (Refugee applicant) 8. Business manager 9. Others..... (Mention)	
112	What is your current employment status in Japan?	1. Engaged in own business (self employed) 2. Full-time employee 3. Part-time employee 4. Student (language school) and part-time employee 5. Student (professional training college) and part-time employee 6. Student (university) and part-time employee 7. No job 8. Others..... (specify)	
113	What is the mobile number that you are using in Japan? We will use this number just to call you when we need to call you back with certain reason. If you feel uncomfortable to provide your number you can skip this.	…….. (mobile number)	

2.0 About your Japanese language skill

201. Please indicate your Japanese language skill. Please tick the correct response.	Poor/not at all	Fair	Good	Excellent
1. Japanese conversation	0	1	2	3
2. Reading Hiragana and Katakana	0	1	2	3
3. Writing Hiragana and Katakana	0	1	2	3
4. Reading Kanji	0	1	2	3
5. Writing Kanji	0	1	2	3
6. Reading Japanese books/ newspaper	0	1	2	3
7. Writing email/letters in Japanese	0	1	2	3

202. Do you need Japanese language interpreter when visiting a health facility in Japan?

1. Yes 2. No

3.0 Alcohol use

301 Do you drink alcohol or alcohol containing drinks?

1. Yes 2. No (if "No" go to question no.401)

302 Have you ever felt you should cut down on your drinking?

1. Yes 2. No

303 Have people annoyed you by criticizing your drinking?

1. Yes 2. No

304 Have you ever felt bad or guilty about your drinking?

1. Yes 2. No

305 Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (eye opener)?

1. Yes 2. No

4.0 Information on Health Insurance

401 Are you enrolled in any health insurance system in Japan?

1. Yes 2. No

402 Do you think health insurance is beneficial to you?

1. Yes 2. No 3. Do not know

403 Do you think the cost of health insurance is expensive for you?

1. Yes 2. No 3. Do not know

404 Do you pay the premium of the health insurance regularly?

1. Regular 2. Irregular (Not paid for a year or more)

5.0 Self-rated health status

501 How do you rate your current general health status?

1. Excellent 2. Very good 3. Good
4. Fair 5. Poor

502 How many hours per day you sleep usually?

No. of hours..... (specify)

6.0 Access to health care in Japan

601 Currently, do you have proper access to a doctor/health worker?

1. Yes 2. No

602 In the past year, did you need to see a doctor/health worker for a general illness/condition but you did not?

1. Yes 2. No

7.0 Experience of stress (Perceived Stress Scale/PSS-10)

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please indicate whether in the last month you felt this way						
		Never	Almost Never	Some times	Fairly Often	Very Often
1.	In the last month, how often have you been upset because of something that happened unexpectedly?	0	1	2	3	4
2.	In the last month, how often have you felt that you were unable to control the important things in your life?	0	1	2	3	4
3.	In the last month, how often have you felt nervous and "stressed"?	0	1	2	3	4
4.	In the last month, how often have you felt confident about your ability to handle your personal problems?	0	1	2	3	4
5.	In the last month, how often have you felt that things were going your way?	0	1	2	3	4

6.	In the last month, how often have you found that you could not cope with all the things that you had to do?	0	1	2	3	4
7.	In the last month, how often have you been able to control irritations in your life?	0	1	2	3	4
8.	In the last month, how often have you felt that you were on top of things?	0	1	2	3	4
9.	In the last month, how often have you been angered because of things that were outside of your control?	0	1	2	3	4
10.	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	0	1	2	3	4

8.0 Depressive symptoms (CES-D scale)

	Below is a list of some of the ways you may have felt or behaved. Please indicate how often you have felt this way during the past week. Respond to all items.	Rarely or none of the time (less than1 day)	Some or a little of the time (1-2 days)	Occasion ally or a moderate amount of time	All of the time (5-7 days)
1.	I was bothered by things that usually don't bother me.	0	1	2	3
2.	I did not feel like eating; my appetite was poor.	0	1	2	3
3.	I felt that I could not shake off the blues even with help from my family.	0	1	2	3
4.	I felt that I was just as good as other people.	0	1	2	3
5.	I had trouble keeping my mind on what I was doing.	0	1	2	3
6.	I felt depressed.	0	1	2	3
7.	I felt that everything I did was an effort.	0	1	2	3
8.	I felt hopeful about the future	0	1	2	3
9.	I thought my life had been a failure.	0	1	2	3
10.	I felt fearful.	0	1	2	3
11.	My sleep was restless.	0	1	2	3
12.	I was happy.	0	1	2	3
13.	I talked less than usual	0	1	2	3

14.	I felt lonely.	0	1	2	3
15.	People were unfriendly	0	1	2	3
16.	I enjoyed life.	0	1	2	3
17	I had crying spells.	0	1	2	3
18	I felt sad.	0	1	2	3
19	I felt that people disliked me.	0	1	2	3
20	I could not "get going."	0	1	2	3

9.0 Feeling of anxiety (Symptoms Checklist-90-R)

	Below is a list of problems and complaints that people sometimes have. Please read each one carefully and **enter the number** that best describes how much you were bothered by that problem during the last month	**Not at all**	**A little bit**	**Moderately**	**Quite a bit**	**Extremely**
1	Nervousness or shakiness inside	0	1	2	3	4
2	Trembling	0	1	2	3	4
3	Suddenly scared for no reasons	0	1	2	3	4
4	Heart pounding or racing	0	1	2	3	4
5	Feeling tensed or keyed up	0	1	2	3	4
6	Spells of terror or panic	0	1	2	3	4
7	Feeling so restless you couldn`t sit still	0	1	2	3	4
8	Feeling that familiar things are strange or unusual	0	1	2	3	4
9	Feeling pushed to get things done	0	1	2	3	4
10	Feeling fearful	0	1	2	3	4

10.0 Social support -Multidimensional Scale of Perceived Social Support (MSPSS)

	We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.	**Very Strongly Disagree**	**Strongly Disagree**	**Mildly Disagree**	**Neutral**	**Mildly Agree**	**Strongly Agree**	**Very Strongly Agree**
1	There is a special person who is	1	2	3	4	5	6	7

	around when I am in need.							
2	There is a special person with whom I can share my joys and sorrows	1	2	3	4	5	6	7
3	My family really tries to help me.	1	2	3	4	5	6	7
4	I get the emotional help and support I need from my family.	1	2	3	4	5	6	7
5	I have a special person who is a real source of comfort to me	1	2	3	4	5	6	7
6	My friends really try to help me.	1	2	3	4	5	6	7
7	I can count on my friends when things go wrong	1	2	3	4	5	6	7
8	I can talk about my problems with my family	1	2	3	4	5	6	7
9	I have friends with whom I can share my joys and sorrows	1	2	3	4	5	6	7
10	There is a special person in my life that cares about my feelings.	1	2	3	4	5	6	7
11	My family is willing to help me make decisions.	1	2	3	4	5	6	7
12	I can talk about my problems with my friends	1	2	3	4	5	6	7

11.0 Quality of Life: WHOQOL-BREF

Thinking about last two weeks in the past, how well you feel about your standards, hopes, pleasures and concerns, please the one that you think most appropriate. In each question, assess your feelings, and tell about the number on the scale that gives the best answer for you.

	Very poor	Poor	Neither poor nor good	Good	Very good
1. How do you rate your quality of life?	1	2	3	4	5

	Very dissatisfied	Dissatisfied	Neither dissatisfied nor satisfied	Satisfied	Very satisfied
2. How satisfied are you with your health	1	2	3	4	5

The following questions ask about how you have experienced certain things in last two weeks	Not at all	A little	A moderate amount	Very much	Very Very much
3. To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
4. How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
5. How much do you enjoy your life?	1	2	3	4	5
6. To what extent do you feel your life to be meaningful?	1	2	3	4	5
7. How well are you able to concentrate?	1	2	3	4	5
8. How safe do you feel in your daily life?	1	2	3	4	5
9. How healthy is your physical environment?	1	2	3	4	5

The following questions ask about how completely you experience or were able to do certain things in the last two weeks.	Not at all	A little	Moderately	Mostly	Completely
10. Do you have enough energy for everyday life?	1	2	3	4	5
11. Are you able to accept your bodily appearance	1	2	3	4	5
12. Have you enough money to meet your needs?	1	2	3	4	5
13. How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
14. To what extent do you have the opportunity for leisure activities?	1	2	3	4	5
15. How capable you are to cope with your own problems?	1	2	3	4	5

The following questions ask you how **good or satisfied** you have felt about various aspects of your life over the last two weeks	Very dissatisfied	Dissatisfied	Never Satisfied nor Dissatisfied	Satisfied	Very satisfied
16. How satisfied are you with your sleep?	1	2	3	4	5
17. How satisfied with your ability to perform your daily living activities?	1	2	3	4	5
18. How satisfied are you with your capacity for work?	1	2	3	4	5
19. How satisfied are you with yourself?	1	2	3	4	5
20. How satisfied are you with your personal relationship?	1	2	3	4	5
21. How satisfied are you with your sex life?	1	2	3	4	5
22. How satisfied are you with the support you get from your friends?	1	2	3	4	5
23. How satisfied are you with the conditions of living place?	1	2	3	4	5
24. How satisfied are you with your access to health services?	1	2	3	4	5
25. How satisfied are you with your transport?	1	2	3	4	5
	Never	Seldom	Quite often	Very often	Always
26. How often do you have negative feelings such as blue mood, despair, anxiety, depression	1	2	3	4	5

THANK YOU

Appendix 3: Research questionnaire (Nepali)

<u>प्रश्नपत्र</u>

आइ डि नं ☐☐☐☐☐☐ मिति:

कृपया सबै प्रश्नहरुको उत्तर दिनु होला। तपाईंलाई सबैभन्दा उपयुक्त लाग्ने उत्तरको नम्बरमा गोलो चिन्ह लगाउनुहोला। "लेख्नुहोस "अथवा "खुलाउनुहोस" लेखिएको ठाउँमा चाहिं आफ्नो उत्तर प्रस्ट रुपमा लेख्नुहोला।

उदाहरणको लागि:

प्रश्न: तपाईंलाई आफ्नो स्वास्थ्य अवस्था कस्तो छ जस्तो लाग्छ ?

उत्तरहरु: 1. असाध्यै राम्रो 2. धेरै राम्रो (3.) राम्रो

4. ठिकै 5. नराम्रो

1.0 सामान्य जानकारी

101	तपाईं कति वर्षको हुनुभयो ? ..... (लेख्नुहोस)
102	लिङ्ग ? 1. पुरुष 2. महिला 3. तेस्रो लिंगी
103	तपाईंको जात के हो? ..... (लेख्नुहोस)
104	तपाईंको जन्मस्थान कहाँ हो? (लेख्नुहोस) जिल्ला .....
105	तपाईंको बैवाहिक स्थिति? 1. अबिबाहित 2. विवाहित 3. अन्य .....(खुलाउनुहोस)
106	नेपालमा तपाईंको बाल बच्चाहरु छन्? 1. छ , कति जना ?.....संख्या खुलाउनुहोस 2. छैन
107	तपाईंले नेपालमा पुरा गर्नु भएको पढाई ? (कुनै एक मात्र) 1. अशिक्षित 2. अनौपचारिक शिक्षा 3. प्राथमिक बिद्यालय (कक्षा १-५) 4. निम्न माध्यमिक बिद्यालय (कक्षा ६-८) 5. माध्यमिक बिद्यालय (कक्षा ९ -१०) 6. एस. एल. सी पास 7. उच्च माध्यमिक शिक्षा 8. स्नातक तह 9. अन्य ..... (खुलाउनुहोस)
108	जापान आउनु भन्दा अगाडी नेपालमा के गर्नु हुन्थ्यो? 1. व्यापार /व्यवसाय 2. कृषि 3. जागिर 4. घरायसी काम (बेतलबी) 5. बिद्यार्थी 6. बेरोजगार 7. अन्य.....(खुलाउनुहोस)
109	अहिले कुन प्रिफ़ेक्चर/केनमा बस्नु हुन्छ? (जस्तै- टोक्यो, साइतामा, ओसाका आदि) ..... (लेख्नुहोस)
110	तपाईं जापान बस्नुभएको जम्मा कति वर्ष भयो ? .....बर्ष/महिना (खुलाउनुहोस)

111	हाल जापानमा तपाईंको भिसा कस्तो खालको हो? 1. सिपयुक्त कामदार (कुक भिसा) 2. विद्यार्थी 3. डिपेन्डेन्ट भिसा 4. इन्जिनीयर भिसा 5. स्थायी बासिन्दा/ एजुकेन 6. एजुकेनको परिवार/सन्तान 7. शरणार्थी भिसाको लागि आवेदन दिएको 8. बिजिनेस भिसा 9. अन्य ..... (खुलाउनुहोस)
112	हाल जापानमा के गरिरहनु भएको छ? 1. आफ्नै बिजिनेस छ 2. फुलटाइम रोजगारी 3. पार्टटाइम रोजगारी (आरुबाइतो) 4. बिध्यार्थी (जापानी भाषा स्कूलमा) र पार्टटाइम रोजगारी 5.बिध्यार्थी (सेन्मोन गाक्कोउमा) र पार्टटाइम रोजगारी 6. बिध्यार्थी(विश्वबिध्यालयमा) र पार्टटाइम रोजगारी 7. बेरोजगार 8. अन्य .....(खुलाउनुहोस)
113	तपाईंको जापानको मोबाइल फोन नम्बर लेख्नुहोस्। यो नम्बर तपाईंलाई यदि अन्य कुरा सोध्न परेमा मात्र प्रयोग गरिनेछ। यदि तपाईंलाई अप्ठ्यारो लाग्छ भने नम्बर नदिंदा पनि हुन्छ। .....(फोन नम्बर)

2.0 भाषा क्षमता सम्बन्धि जानकारी

201	हाल तपाईंको जापानी भाषा क्षमता कस्तो छ ? तपाईंलाइ उपयुक्त लाग्ने उत्तरको नम्बरमा गोलो चिन्ह लगाउनु होला।	पटक्कै छैन/नराम्रो	ठिकै	राम्रो	एकदमै राम्रो
1	जापानी भाषामा बार्तालाप	0	1	2	3
2	हिरागाना र काताकाना पढ्न	0	1	2	3
3	हिरागाना र काताकाना लेख्न	0	1	2	3
4	खान्जी पढ्न	0	1	2	3
5	खान्जी लेख्न	0	1	2	3
6	जापानी भाषाको किताब/पत्रपत्रिका पढ्न	0	1	2	3
7	जापानी भाषामा इमेल /चिट्ठी लेख्न	0	1	2	3

202	तपाईंलाइ हस्पिटल जाँदा जापानी भाषा अनुवादकको आवस्यकता पर्छ? 1. पर्छ 2. पर्दैन

3.0 रक्सी सेवन सम्बन्धि जानकारी

301	तपाईं रक्सी वा रक्सी भएको पेय पदार्थ पिउनु हुन्छ? 1. पिउँछु 2. पिउँदिन (सिधै प्रश्न नं. 401 मा जानुहोस्)
302	तपाईंलाइ कहिल्यै आफ्नो रक्सी सेवन घटाउनुपर्छ भन्ने लाग्यो? 1. लाग्यो 2. लागेन
303	तपाईंले रक्सी सेवन गरेकोले कहिल्यै अरुले आलोचना गरेका छन्? 1. छन् 2. छैनन्
304	आफुले रक्सी सेवन गरेकाले कहिल्यै नराम्रो लागेको छ? 1. छ 2. छैन

305	तपाईले कहिल्यै आफुलाई सम्हाल्न/ठिक महशुस गर्न अथवा ह्यांगओभर हटाउन विहानै रक्सी सेवन गर्नुपरेको छ? 1. छ 2. छैन

4.0 स्वास्थ्य बिमा सम्बन्धि जानकारी

401	जापानमा कुनै प्रकारको स्वास्थ्य बिमा (होक्केन) गर्नु भएको छ? 1. छ 2. छैन
402	तपाईंलाइ स्वास्थ बिमा फाईदाजनक छ जस्तो लाग्छ? 1. लाग्छ 2. लाग्दैन 3. थाहा छैन
403	तपाईंलाइ स्वास्थ्य बिमाको लागि तिर्ने रकम महँगो छ जस्तो लाग्छ? 1. लाग्छ 2. लाग्दैन 3. थाहा छैन
404	तपाईंले नियमित रुपमा स्वास्थ्य बिमाको रकम तिर्नुहुन्छ? 1. नियमित तिर्छु 2. अनियमित (एक बर्ष वा सो भन्दा बढी देखि नतिरेको)

5.0 जापानमा आफ्नो स्वास्थ्य अवस्थाबारे जानकारी

501	तपाईंलाई हालको आफ्नो स्वास्थ्य अवस्था कस्तो छ जस्तो लाग्छ ? 1. असाध्यै राम्रो 2. धेरै राम्रो 3. राम्रो 4. ठिकै 5. नराम्रो
502	तपाईं एक दिनमा प्राय कति घण्टा सुत्नु हुन्छ? .....घण्टा (खुलाउनुहोस)

6.0 जापानमा स्वास्थ्य सेवाको पहुँच सम्बन्धि जानकारी

601	अहिलेको अवस्थामा जापानमा तपाईंको डाक्टर/ स्वास्थकर्मीसँग पहुँच छ? (जस्तै जापानमा बिरामी पर्दा सजिलै गरि उपचार पाउन सक्नु) 1. छ 2. छैन
602	बितेको १२ महिनामा बिरामी हुँदा डाक्टर /स्वास्थ्यकर्मीलाइ देखाउनुपर्ने अवस्था हुँदा हुँदै पनि, के तपाईंले उनीहरुलाइ भेट्नु भएको थिएन ? 1. भेटेको थिएँ 2. भेटेको थिईन

7.0 तनाव (stress) को अनुभव सम्बन्धि जानकारी

	तलका प्रश्नहरुमा तपाईंले <u>गत महिनामा</u> महशुस गरेका तथा तपाईंको सोचाईहरुको बारेमा सोधिएको छ। तपाईंलाइ उपयुक्त लाग्ने उत्तरको नम्बरमा गोलो चिन्ह लगाउनु होला।	**हुँदै भएन**	**लगभग कहिल्यै पनि भएन**	**अलि अलि**	**लगभग प्रायजसो**	**धेरै भयो**
1	गत महिना, तपाईंले नसोचेको अवस्था सिर्जना हुँदा कत्तिको खिन्न/उदास हुनुभयो?	0	1	2	3	4
2	गत महिना, तपाईंलाइ आफ्नो जीबनका महत्वपुर्ण कुराहरुलाई नियन्त्रण गर्न सकिन जस्तो महशुस कत्तिको भयो?	0	1	2	3	4

3	गत महिना, तपाईंले कत्तिको तनावको महशुश गर्नुभयो?	0	1	2	3	4
4	गत महिना, तपाईंले आफ्नो व्यक्तिगत समस्याहरुलाई हल गर्न कत्तिको निर्धक्क भएको महशुस गर्नुभयो?	0	1	2	3	4
5	गत महिना, तपाईंलाइ सबै काम/कुराहरु राम्रोसंग नै भइरहेको छ जस्तो कत्तिको महशुस गर्नुभयो?	0	1	2	3	4
6	गत महिना, तपाईंले समस्याहरु आफुले सामना गर्न नसकेको प्राय कत्तिको पाउनुभयो?	0	1	2	3	4
7	गत महिना, तपाईंले आफ्नो जिबनमा भएको चिडचिडापनलाई (Irritation) कत्तिको नियन्त्रण गर्न सक्नुभयो?	0	1	2	3	4
8	गत महिना, तपाईंले आफ्नो काम/कुराहरु सबै कन्ट्रोलमा भएको/ व्यवस्थित भएको महशुस कत्तिको गर्नुभयो?	0	1	2	3	4
9	गत महिना, तपाईंले आफ्नो काम/कुराहरु नियन्त्रण/कन्ट्रोल भन्दा बाहिर भएकोले कत्तिको रिसाउनुभयो?	0	1	2	3	4
10	गत महिना, तपाईंले कठिनाईहरु समाधान गर्नै नसकिने गरि थुप्रिएको कत्तिको महशुस गर्नु भयो?	0	1	2	3	4

8.0 दुखिपन/निराशापन वा दिक्दारीपन (Depressive symptoms) को महशुस सम्बन्धि जानकारी

	तल दिईएका कुराहरु तपाईंले महशुस गर्नु भएको हुनसक्छ। <u>बितेको एक हप्तामा</u> तपाईंले यस्तो खालको कुराहरु प्राय कति महशुस गर्नु भयो ? तपाईंलाइ उपयुक्त लाग्ने उत्तरको नम्बरमा गोलो चिन्ह लगाउनु होला।	कहिल्यै पनि भएन अथवा १ दिन भन्दा कम	अलिकति भयो (१ -२ दिन सम्म)	त्यस्तो प्राय भयो तर संधै भएन	प्रत्येक समय भयो (५ - ७ दिन सम्म भयो)
1	मलाई ती कुराहरुहरुले चिन्तित बनाए, जुन कुराहरुले अरु बेला प्राय मलाई चिन्तित बनाउँदैन थिए।	0	1	2	3
2	मलाई खान मन लागेन। (खानामा अरुचि)	0	1	2	3
3	मलाई आफ्नो परिवारको सहयोग लिएर पनि मेरो निराशा हटाउन सक्दिन जस्तो महशुस भयो।	0	1	2	3
4	म अरु व्यक्ति जस्तै ठिक छु भन्ने महशुस भयो।	0	1	2	3
5	मलाई आफुले गरिरहेको कुनै पनि काममा ध्यान दिन गाह्रो भयो।	0	1	2	3
6	मैले निराशपना महशुस गरें।	0	1	2	3
7	मलाई जुनसुकै काम गर्न पनि गाह्रो महशुस भयो (सजिलो ठानिएका काम हरु पनि)।	0	1	2	3
8	मैले आफ्नो भविस्य प्रति आशावादी भएको महशुस गरें।	0	1	2	3
9	मैले मेरो जिन्दगि असफल भएको महशुस गरें।	0	1	2	3

10	मैले डर /त्रास महशुस गरें।	0	1	2	3
11	म राम्रोसंग निदाउन सकिन।	0	1	2	3
12	म खुशी थिएँ।	0	1	2	3
13	मैले प्राय अरु बेलामा बोल्ने भन्दा कम बोलें।	0	1	2	3
14	मैले एक्लो महशुस गरें।	0	1	2	3
15	मसंग मान्छेहरुले मित्रवत् व्यवहार गरेनन्।	0	1	2	3
16	मैले रमाइलो संगै बिताएँ।	0	1	2	3
17	म रोएँ।	0	1	2	3
18	म दुखि भएँ।	0	1	2	3
19	मलाई मान्छेहरुले मन पराउँदैनन् जस्तो लाग्यो।	0	1	2	3
20	मैले यो समस्यासंग सामना गरेर अघि बढ्नु पर्छ भन्ने महशुस भएन।	0	1	2	3

9.0 चिन्ताको महशुस (Anxiety) सम्बन्धि जानकारी

1005	बितेको १ महिनामा तपाईलाइ निम्न समस्याहरुले कत्तिको चिन्तित बनाए? तपाईलाई उपयुक्त लागेको उत्तरको नम्बरमा गोलो चिन्न लगाउनुहोस्।	**कत्ति पनि भएन**	**अलिकति /केही**	**ठिकै मात्रामा**	**धेरै**	**असाध्यै धेरै**
1	नर्भस हुनु	0	1	2	3	4
2	जिउ काम्नु	0	1	2	3	4
3	एक्कासी कुनै कारण बिना डर लाग्नु	0	1	2	3	4
4	मुटु छिटो छिटो धड्किनु	0	1	2	3	4
5	चिन्तित हुनु	0	1	2	3	4
6	एक्कासी धेरै डर र चिन्ता लाग्नु	0	1	2	3	4
7	छट्पटी भएर एक ठाउँमा बस्न नसक्नु	0	1	2	3	4
8	चिनजानको कुराहरु पनि अनौठो र अस्वाभाविक लाग्नु	0	1	2	3	4
9	कुनै पनि काम कर परेर गर्नुपरेको जस्तो महशुस हुनु	0	1	2	3	4
10	भयभित हुनु	0	1	2	3	4

10.0 सामाजिक सहारा सम्बन्धि जानकारी

1101	तल लेखिएका कुराहरु बारेमा तपाईं कत्तिको सहमत हुनुहुन्छ अथवा हुनुहुँदैन? तपाईलाइ उपयुक्त लाग्ने उत्तरको नम्बरमा गोलो चिन्ह लगाउनु होला।	**एकदमै सहमत छैन**	**सहमत छैन**	**अलिकति सहमत छैन**	**तटस्थ (सहमत/ असहमत बराबर)**	**अलिकति सहमत छु**	**सहमत छु**	**एकदमै सहमत छु**
1	मलाई आवस्यकता भएको बेलामा मलाई साथ दिने/सहयोग गर्ने कोहि व्यक्ति छ।	1	2	3	4	5	6	7
2	मेरो सुख र दुख साट्न सक्ने कोहि	1	2	3	4	5	6	7

	व्यक्ति छ।							
3	मेरो परिवारले मलाई साँच्चै सहयोग गर्न खोज्छ।	1	2	3	4	5	6	7
4	मलाई मेरो परिवारबाट आवस्यक भावनात्मक सहयोग प्राप्त भएको छ।	1	2	3	4	5	6	7
5	मलाई सहज महसुस गराउन सक्ने कोहि व्यक्ति छ।	1	2	3	4	5	6	7
6	मेरो साथीहरुले मलाई साँच्चै सहयोग गर्न खोज्छन्।	1	2	3	4	5	6	7
7	मलाई समस्या पर्दा म साथीहरुको भर पर्न सक्छु।	1	2	3	4	5	6	7
8	मेरो समस्याहरुको बारेमा म आफ्नो परिवारसंग कुरा गर्न सक्छु।	1	2	3	4	5	6	7
9	मैले आफ्नो सुख दुख साट्न सक्ने साथीहरु छन्।	1	2	3	4	5	6	7
10	मेरो भावनाहरु बुझ्न कोसिस गर्ने कोहि व्यक्ति छ।	1	2	3	4	5	6	7
11	मेरो परिवारले मलाइ कुनै पनि निर्णय लिनको लागि मद्दत गर्न खोज्छ।	1	2	3	4	5	6	7
12	म मेरो साथिहरुसंग आफ्नो समस्याहरुको बारेमा कुरा गर्न सक्छु।	1	2	3	4	5	6	7

11.0 स्वास्थ्यसंग सम्बन्धित जीवनको गुणस्तरबारे प्रश्नावली

बितेको दुइहप्ताबारे सोच्दा तपाईंलाई निम्न प्रश्नहरुबारे कस्तो महशुस गर्नुभएको छ ? हरेक प्रश्नहरुमा आफुलाई सबैभन्दा बढी लागेको उत्तरको नम्बरमा गोलो चिन्ह लगाउनु होला।

		धेरै खराब	खराब	नत खराब नत राम्रो	राम्रो	धेरै राम्रो
1	तपाईंले आफ्नो जीवनस्तर कस्तो ठान्नुहुन्छ ?	1	2	3	4	5

		धेरै सन्तुष्ट	असन्तुष्ट	नत सन्तुष्ट नत असन्तुष्ट	सन्तुष्ट	धेरै असन्तुष्ट
2	तपाईं आफ्नो स्वास्थ्यको बारेमा कत्तिको सन्तुष्ट हुनुहुन्छ?	1	2	3	4	5

निम्न प्रश्नहरुमा बितेको दुई हप्तामा तपाईंले केहि कुराहरुको अनुभव कसरी गर्नुभयो भन्ने बारेमा सोधिनेछ।

		कत्ति पनि छैन	अलिकति /केही	ठिक्कै मात्रामा	धेरै	असाध्यै धेरै

3	कति हदसम्म तपाईंको शारीरिक दुखाइले तपाईंले गर्न खोज्नुभएको कुरा गर्नमा अवरोध पुर्याउँछ ?	1	2	3	4	5
4	तपाईंलाई आफ्नो दैनिक जीवन सहज तरिकाले चलाउन कत्तिको स्वास्थ्य उपचारको आवस्यकता छ ?	1	2	3	4	5
5	तपाईंले आफ्नो जीवन कत्तिको रमाइलो संग बिताएको जस्तो लाग्छ ?	1	2	3	4	5
6	तपाईं कति हदसम्म आफ्नो जीबन अर्थपूर्ण भएको पाउनुहुन्छ?	1	2	3	4	5
7	तपाईंलाई कुनै काम गर्दा कत्तिको ध्यान केन्द्रित गर्न सक्नुहुन्छ ?	1	2	3	4	5
8	दैनिक जीवनमा आँफुलाई कत्तिको सुरक्षित पाउनुहुन्छ ?	1	2	3	4	5
9	तपाईंको बाह्य (भौतिक) बाताबरण कत्तिको स्वस्थकर छ ?	1	2	3	4	5

निम्न प्रश्नहरुमा <u>बितेको दुइ हप्तामा</u> तपाईंले कत्तिको पूर्णरुपमा अनुभव गर्नुभएको वा तपाईंले निश्चित कुराहरु गर्न सक्षम हुनुभएको बारेमा सोधिनेछन्।

		कत्ति पनि छैन	**केहि मात्रामा**	**मध्यम/ सामान्य**	**धेरै मात्रामा**	**अधिकतम**
10	के तपाईंसंग दैनिक जीवन जिउनको लागि पर्याप्त शक्ति छ ?	1	2	3	4	5
11	तपाईं आफ्नो शारीरिक स्वरूप स्वीकार गर्न सक्नुहुन्छ ?	1	2	3	4	5
12	तपाईंसंग आफ्नो आबश्यकता पुरा गर्न पर्याप्त पैसा छ?	1	2	3	4	5
13	तपाईंलाई दैनिक जीवनमा आवश्यक पर्ने सूचनाहरु कत्तिको उपलब्ध हुन्छन् ?	1	2	3	4	5
14	कति हदसम्म तपाईंलाई फुर्सतमा गरिने गतिबिधिहरु गर्न अवसर मिल्छ ?	1	2	3	4	5
15	तपाईं आफ्नो समस्याहरुको समाधान गर्न कत्तिको सक्षम हुनहुन्छ?	1	2	3	4	5

निम्न प्रश्नहरुमा <u>बितेको २ हप्तामा</u> तपाईंले आफ्नो जीवनका विभिन्न पक्षहरुमा कत्तिको राम्रो वा सन्तुष्ट महशुस गर्नुहुन्छ भन्ने बारेमा सोधिने छन्।

		एकदमै असन्तुष्ट	**असन्तुष्ट**	**बराबर**	**सन्तुष्ट**	**एकदमै सन्तुष्ट**
16	तपाईं आफ्नो निद्राको बारेमा कत्तिको सन्तुष्ट हुनुहुन्छ?	1	2	3	4	5
17	तपाईं आफ्नो दैनिक जीवनको गतिबिधिको बारेमा कत्तिको सन्तुष्ट हुनहुन्छ ?	1	2	3	4	5
18	तपाईं आफ्नो कार्य क्षमताबारे कत्तिको सन्तुष्ट हुनुहुन्छ?	1	2	3	4	5
19	तपाईं आफुसंग कत्तिको सन्तुष्ट हुनुहुन्छ ?	1	2	3	4	5
20	तपाईं आफ्नो व्यक्तिगत सम्बन्धहरुको बारेमा कत्तिको	1	2	3	4	5

	सन्तुष्ट हुनहुन्छ ?					
21	तपाईं आफ्नो यौन जीवनको बारेमा कत्तिको सन्तुष्ट हुनुहुन्छ ?	1	2	3	4	5
22	तपाईं आफ्नो साथीहरुबाट पाएको सहयोगबाट कत्तिको सन्तुष्ट हुनुहुन्छ ?	1	2	3	4	5
23	तपाईं आफु बस्ने ठाउँ/ निवासको अवस्थाको बारेमा कत्तिको सन्तुष्ट हुनुहुन्छ ?	1	2	3	4	5
24	तपाईं आफ्नो स्वास्थ्य सेवाको पहुँचको बारेमा कत्तिको सन्तुष्ट हुनुहुन्छ ?	1	2	3	4	5
25	तपाईं उपलब्ध यातायात सुबिधाको बारेमा कत्तिको सन्तुष्ट हुनुहुन्छ ?	1	2	3	4	5

		कहिल्यै पनि भएन	**बिरलै**	**प्राय जसो**	**धेरै जसो**	**सधैंनै**
26	तपाईंले <u>बितेको २ हप्तामा</u> कत्तिको नकारात्मक भावनाहरु (जस्तै: खिन्नता, मनोदशा, चिन्ता, निराशापन इत्यादी) महशुस गर्नु भयो ?	1	2	3	4	5

********** **तपाईंलाई धेरै धेरै धन्यवाद छ।** **********

Appendix 4 : Information sheet for participants (English)

Research title: Access to health care and common mental disorders among Nepalese migrants in Japan

Introduction:

This document explains the details of the above written study, in which we are requesting your co-operation as a voluntary participant. Therefore, please read the following information carefully so that you are fully aware of the research process. Here may be some words in this text with which you may be unfamiliar. If so, please feel free to ask about such words or anything else that may be unclear to you.

Objective of the study:

The objectives of this study will be:

- To examine the factors associated with access to health care and common mental disorders among Nepalese migrants in Japan.
- To assess the association of access to health care and common mental disorders with quality of life among Nepalese migrants in Japan.

Research Methods:

If you decide to participate in this study, we will request roughly 30 minutes of your time today. During that time, you have to fill answers to some personal questions in a questionnaire form. The questions will be about yourself and your background, including basic socio-demographic characteristics, access to health care in Japan, language ability, general health status, mental health status, working condition and living condition in Japan.

We will not record your name on the questionnaire. In place of your name, we will assign one identification code number to each participant. Therefore, please be assured of the confidentiality of information you may provide. You will be also given some stationery worth of 150 JPY as reward for your assistance. You may be also asked to introduce your Nepalese friends or co-workers, so that we can also ask them to participate in this study.

Possible risks:

Some of the questions that we ask may cause you discomfort or hesitate to answer.

You can skip freely to questions or you may withdraw from participation in the entire study at any time.

Confidentiality:

All the information collected during the study will remain confidential. Data will be kept securely and will be made available only to concerned persons. Your identification will not appear in any of the reports we write or publish for the purpose of study.

Withdraw from participating in the research

You are free to decide yourself whether or not to participate in the study. If you feel any discomfort and hesitant during the course of interview, you are free to withdraw at any time.

Voluntary agreement:

If you understand fully what this study involves and agree to participate, you are welcome to join as a participant. If you do not wish to participate, you are free to decline and need not to provide information.

After reading and fully understanding the contents of this sheet, you are free to offer your decision regarding participation in this study. If you decide to participate, you may indicate your consent by putting your signature on the attached consent form.

If you have further questions, please contact the following persons:

Mr. Prakash Shakya or Professor Masamine Jimba
Department of Community and Global Health,
School of International Health,
Graduate School of Medicine, The University of Tokyo,
7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan.
Tel: +81-3-5841-3689
E-mail: canvas_76@yahoo.com

Appendix 5: Information sheet for participants (Nepali)

सहभागीका लागि जानकारी पत्र

अनुसंधानको विषय :

"जापानमा बसोबास गरिरहनुभएका नेपालीहरुको स्वास्थ्य सेवाको पहुँच तथा मानसिक स्वास्थ्य"

अनुसंधानको बारेमा छोटो विवरण

यस पत्रले माथि उल्लेखित अनुसन्धानको बारेमा जानकारी गराउनेछ | हामी यस अनुसन्धानमा तपाईंको सहयोगको अपेक्षा गर्दै , स्वेच्छाले सहभागी हुन विनम्र अनुरोध गर्दछौं | तसर्थ, यो पत्र राम्रोसंग पढेर यस अनुसन्धानको प्रक्रियाबारे जानकार हुन अनुरोध गर्दछौं | यदी यस अनुसन्धान सम्बन्धि कुनै जिज्ञासा भएमा कृपया तल उल्लेखित व्यक्तिहरुलाई सम्पर्क गर्नुहोला |

यस अनुसन्धानका उदेश्यहरु :

उदेश्यहरु यस प्रकार छन्:

१) जापानमा बसोबास गरिरहनुभएका नेपालीहरुको स्वास्थ्य सेवाको पहुँच तथा मानसिक स्वास्थ्य संग सम्बन्ध राख्ने तत्वहरु पत्ता लगाउन

२) जापानमा बसोबास गरिरहनुभएका नेपालीहरुको स्वास्थ्य सेवाको पहुँच तथा मानसिक स्वास्थ्यको, जीवनको गुणस्तर संग सम्बन्ध अध्ययन गर्न

अनुसन्धान प्रक्रिया :

यदी तपाईं सहभागिताका लागि मन्जुर हुनुहुन्छ भने, हामी तपाइंलाई आफ्नो ३०-३५ मिनेट समय प्रदान गर्न अनुरोध गर्दछौं | यस अन्तर्गत तपाईंले एउटा प्रश्नावली मा सोधिएका केहि व्यक्तिगत प्रश्नहरुको उत्तर भर्नुपर्ने हुन्छ | यी प्रश्नहरु तपाईंको सामाजिक आर्थिक पृष्ठभूमि ,बैदेशिक रोजगार, भाषा क्षमता, स्वास्थ्य सेवाको पहुँच, मानसिक स्वास्थ्य आदि बारे हुनेछन|

यस अनुसन्धानको शिलशिलामा तपाईंको नाम कहीं कतै उल्लेख हुने छैन, प्रश्न पत्रमा कोड नम्बर मात्र प्रयोग गरिने छन् | तपाईंले दिनुभएका सूचना तथा जवाफहरुको गोपनियता लागि हामी तपाईंहरुलाई विश्वस्त गराउँछौं |

सहभागिताबाट हुन सक्ने फाइदा र बेफाइदाहरु :

यस अनुसन्धानको शिलशिलामा सोधिने केहि प्रश्नहरुहरुले तपाईलाई केहि असजिलो महसुस गराउँन सक्नेछ | तर तपाईले दिनु हुने जवाफ र सूचनाहरुले हामीलाई यस विषयलाई अझ राम्रोसंग बुझ्न र भविष्यमा यस विषय अन्तर्गत विभिन्न प्रभावकारी स्वास्थ्य कार्यक्रम निर्माण गर्न मद्दत गर्ने छ | तपाईले कुनै पनि प्रश्नको जवाफ दिन नचाहेको अथवा भाग लिन नचाहेको खण्डमा कुनै पनि समयमा आफूखुशी यस अनुसन्धानबाट आफ्नो सहभागिता फिर्ता लिन सक्नुहुनेछ| सहभागिताको लागि तपाईले उपहार स्वरूप केहि शैक्षिक सामग्री पाउनु हुनेछ |

गोपनीयता :

यस अनुसन्धानको शिलशिलामा संकलन गरिने तथ्य तथा सूचनाहरु गोप्य रहनेछन् | यस अनुसन्धान संग सम्बन्धित व्यक्तिहरुले मात्र यी तथ्य र सूचनाहरु हेर्न र प्रयोग गर्न सक्नेछन् | तपाईंको नाम कहीं कतै उल्लेख हुने छैन, प्रश्न पत्रमा कोड नम्बर मात्र प्रयोग गरिने छन् | तसर्थ भबिष्यमा प्रकाशित कुनै पनि रिपोर्ट र लेखहरुमा तपाईंको नाम कहीं कतै उल्लेख उल्लेख हुने छैन |

सहभागिता फिर्ता लिने :

यस अनुसन्धानमा तपाईंको सहभागिता नितान्त आफूखुशी हुनेछ | तपाईले कुनै पनि समयमा आफूखुशी यस अनुसन्धानबाट कुनै सजाय वा जरिवाना बिना आफ्नो सहभागिता फिर्ता लिन सक्नुहुनेछ |

आफूखुशी मन्जुरीनामा दिने :

यदी तपाईंले माथि उल्लेख गरिएका सबै कुराहरु राम्रोसंग बुझ्नु भएको र सहभागी हुन चाहनु भएको खण्डमा तपाईंले यस अनुसन्धानमा भाग लिन सक्नु हुनेछ र उल्लेखित ठाउंमा आफ्नो सहि गरीदिनुहुन अनुरोध गर्दछौं | यदी तपाईं

माथि उल्लेखित कुराहरुसंग सहमत हुनुहुन्न भने तपाईंले हामीलाई कुनै जानकारी दिनुपर्नेछैन र कुनै पनि ठाउंमा आफ्नो सहि गर्नुपर्नेछैन |

केहि जिज्ञासा भएमा सम्पर्कको लागि :

डा. प्रकाश शाक्य

टोक्यो विश्वविध्यालय

७-३-१ होङ्गो, बुन्क्यो वार्ड, टोक्यो ११३-००३३, जापान

टेलिफोन: ८१-०८०-३७३३९९४८ , इमेल: canvas_76@yahoo.com

Appendix 6: Informed consent form for participants (English)

To: The Dean of the Graduate School of Medicine, The University of Tokyo

Research title: "**Access to health care and common mental disorders among Nepalese migrants in Japan".**
I have agreed to participate in this research entitled: "**Access to health care and common mental disorders among Nepalese migrants in Japan "** as a participant.

I understand that I have to fill up the answers to some personal questions in a questionnaire form. The questions will be about my background including basic socio-demographic characteristics, access to health care in Japan, language ability, general health status, mental health status, working condition and living condition in Japan. I may be also asked to introduce my Nepalese friends or co-workers.

I give this consent voluntarily after receiving full explanation from the study team about confidentiality to protect my privacy including possible risks. I understand that the data obtained in this study will be used in a manner consistent with the strict maintenance of confidentiality and personal rights

Finally, I know that I can withdraw my consent and discontinue my participation at any time without facing any penalty.

Signature……...

Name of the person who obtained consent…….
Date: .....

Appendix 7: Informed consent form for participants (Nepali)

सहभागिताका लागि मन्जुरीनामा

डिन, ग्र्याजुएट स्कूल अफ मेडिसिन , टोक्यो विश्वविध्यालय, जापान

अनुसन्धानको विषय: "जापानमा बसोबास गरिरहनुभएका नेपालीहरुको स्वास्थ्य सेवाको पहुँच तथा मानसिक स्वास्थ्य"

प्रमुख सोधकर्ता: डा. प्रकाश शाक्य (टोक्यो विश्वविध्यालय),

प्रा. डा. मासामिने जिम्बा (टोक्यो विश्वविध्यालय)

म यस अनुसन्धानको उदेश्यहरु राम्रोसंग पढेर र बुझेर, सहभागिताकोलागि मन्जुर छु ।

तल दिइएका बुंदाहरु मैले राम्रोसंग बुझेको छु :

१. यस अध्ययनका उदेश्यहरु र अनुसन्धान प्रक्रिया

२. यस अध्ययनका प्रश्नपत्रमा उल्लेखित विषय वस्तुहरु

३. मलाई कुनै हानी/ नोक्सानी हुने छैन।

४. मैले उत्तर दिन नचाहेको कुनै पनि प्रश्नको उत्तर नदिए पनि हुन्छ।

५. मैले यसबाट कुनै पनि बेला कुनै नोक्सानी बिना आफ्नो सहभागिता फिर्ता लिन सक्नेछु।

६. मैले दिएका सूचना तथा जवाफहरु गोपनीय तरिकाबाट प्रयोग गरिने छन् र मेरो नाम कुनै पनि रिपोर्ट तथा लेखहरुमा प्रकाशित हुने छैनन्।

मिति: 2016/ मिति: 2016/

मन्जुरी दिनेको हस्ताक्षर ..... मन्जुरीपत्र पाउँनेको हस्ताक्षर .....

Appendix 8: Ethical approval from The University of Tokyo

倫　理　委　員　会
審 査 結 果 通 知 書

2016年03月28日

申請者（研究責任者）
国際地域保健学
教授
神馬 征峰　殿

倫理委員会の設置者
東京大学大学院医学系研究科・医学部長
宮園　浩平
（公印省略）

審査番号　11102
研究課題　在日ネパール人の保健医療アクセスとメンタルヘルスの関連

上記研究計画を2016年03月28日の委員会で審査し下記のとおり判定しました。
ここに通知します。

判　定

○承認する	条件付きで承認する
変更を勧告する	承認しない
該当しない	