Barriers to health care services in migrants and potential strategies to improve accessibility: A qualitative analysis

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Abstract

Background: While migrants in Taiwan are entitled to universal health care, barriers to health care services exist. We aimed to explore challenges encountered by migrants when accessing health care services and potential strategies to overcome these barriers.

Methods: Invitations to participate in the study were sent to all hospitals, 12 migrant organizations, one language school, and one language service company in Taiwan, and convenience sampling was used to recruit study participants. Focus group interviews were held with 111 migrants, clinicians, migrant organization coordinators, and representatives from the medical institutions, language school and language service company. Interviews were audio-recorded and transcribed verbatim. Data were analyzed using a thematic approach.

Results: The study participants acknowledged that the current support system for migrants in the health care sector is inadequate. Barriers to health care services were noted in three areas - language and information, sociocultural and economic, and policy and resources. Potential strategies to overcome these barriers included the provision of on-site or distant interpreting services, provision of multilingual instruction notes and forms, and establishing a multilingual medical assistance hotline.

Conclusion: While migrants benefit from the current support and welfare system, our study found substantial gaps that need to be filled including a lack of professional medical interpreters and training programs, a lack of legal framework for medical interpreting, and inadequacy in the dispersal of information on existing resources that may facilitate the integration of migrants into society and the health care system. Overcoming these barriers may improve migrants' access to health services.

Keywords: Accessibility; Health care; Migrant; Taiwan

1. INTRODUCTION

Globally, there are an estimated 258 million international migrants, and their health is an issue of growing importance.[1] In Taiwan, there were approximately 720 000 international migrants (54.5% women) in 2017.[2] The proportion of migrants to the general population in Taiwan (3.0%) is higher than in neighboring Korea (2.3%), Japan (1.8%), and China (0.1%).[2–4]

While a previous study showed that the great majority of migrants in Taiwan (91.9%) are covered by the country's universal National Health Insurance (NHI) program, barriers to health services exist.[5] In a study from the UK where universal health services are available, registration with general practitioners and the use of acute services differed according to the country of origin of the migrants.[6] In Europe, barriers to accessing health care services in newly arrived migrants (and refugees) have been reported, and the diversity and lack of integration of health care provision across countries further complicates the problem.[7]

Language and cultural barriers are two major obstacles commonly associated with the lack of integration of migrants into local communities and health care systems.[8,9] In Taiwan, the vast majority of migrants are from southeast Asia (93.5%), particularly Indonesia (33.2%), Vietnam (28.3%), and the Philippines (19.9%).[2] The proficiency of Mandarin, Taiwanese, and/or English in Southeast Asian migrants, which are common languages of communication in Taiwanese society and medical institutions, is generally low. These migrants may therefore have difficulties in delivering and understanding information when accessing health care services.[9,10] In addition, health-seeking behaviors in migrants may also be different to those of host country residents because of language barriers, cultural scripts, and health beliefs.[11] Consequently, migrants may not see a doctor when they have medical problems, resulting in a potential delay in disease diagnosis and worse health outcomes. Moreover,

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it has been reported that even in countries where interpreting services and translated materials are provided, the varying availability of interpreters and unsupportive socio-cultural values, such as migrants should assimilate and adapt by learning the host country language, may hinder the migrants from accessing health care services.[12]

There is, therefore, a need to create a friendly and supportive environment in which migrants are provided with comprehensible information and necessary aid such as interpreting services when accessing health care. It is important that migrants receive adequate education about the importance of health management and seek appropriate health services. It is, however, unclear what aspects of assistance are most needed from the perspective of migrants as well as those of health care providers. Gaining an understanding of current practices and the perspectives of relevant stakeholders can be important in developing effective interventions.[13] Therefore, the purpose of the current study was to examine challenges encountered by migrants when accessing health services in Taiwan, and identify feasible approaches that can be taken to improve accessibility to health care and communication with medical personnel so that migrants have equitable access to health care to reduce the disparity with local Taiwanese residents. We collected the opinions of migrants, clinicians, coordinators of migrant organizations, and representatives from medical institutions, a language school, and a language company.

2. METHODS

2.1. Design

The qualitative data in this study were obtained through three focus group interviews.[14,15] Each group was composed of migrant representatives, clinicians, coordinators of migrant organizations, and representatives from medical institutions. One of the focus group interviews also included representatives from a language school and a language service company. The focus group discussions covered topics about barriers to accessibility to health care services in migrants and potential strategies to overcome these barriers.

2.2. Recruitment and data collection

We invited relevant stakeholders for discussions on the issue of migrant accessibility to health services in Taiwan. Information about the study and focus group interviews was distributed via email to all hospitals in Taiwan (n = 493), 12 well-known migrant organizations, one language school, and one language service company, which have been working with several hospitals to develop interpreting and translation services. The email invited migrants, individuals, and representatives from these institutions who had experience in helping migrants to gain access to health care services. Convenience sampling was used to recruit study participants to maximize the number of study participants and to increase the width of discussion. All of the representatives sent by the invited institutions were included in the study, including three migrant representatives and four coordinators from six migrant organizations, three clinicians and 99 representatives from 46 medical institutions, one language school representative and one language service company representative, all of whom provided written informed consent to participate in this study. Ethical approval was obtained from the Institutional Review Board of Taipei Veterans General Hospital (2018-05-011CC).

Open-ended questions were used by the facilitator (W.-C.L.) to explore the participants' views and opinions about barriers perceived when accessing health services, existing support systems and suggestions for improvement, and proposals for potential strategies to overcome these barriers. Interview questions, supplementary material (1) were developed based on a review of the literature and consultations with practitioners including an internal medicine physician and a family medicine physician. The same facilitator (W.-C.L.) attended all three focus group interviews. All interviews were audio-recorded and transcribed verbatim.

2.3. Data analysis

Data were inductively analyzed using a thematic content analysis approach.[16] One author (A.S.K.) coded the transcripts manually to identify comments and suggestions with similar themes and produced a list of core codes. A list of potential themes was developed by combining the coded data and was subsequently refined by two authors (A.S.K. and W.-C.L.). Relevant data were then entered under particular themes. Initial interpretations of the data were carried out by A.S.K. and discussed with W.-C.L., who reversed the themes back to the original transcripts and challenged the interpretations. A.S.K. and W.-C.L. discussed interpretations of the data with all coauthors, and any disparities were resolved by consensus.

3. RESULTS

The data are presented under four main headings: (1) language and informational barriers, (2) sociocultural and economic barriers, (3) policy and resource barriers, and (4) potential strategies to improve accessibility to health services. The roles of the study participants are provided alongside each quote in the Tables.

3.1. Language and informational barriers

The study participants reported three main language and informational barriers: (1) difficulty understanding Mandarin in the context of medicine, (2) struggles with reading and writing Mandarin, and (3) a lack of interpreting services, especially those involving medical terms (Table 1).

Both health service providers and users (migrants) reported that migrants may understand Mandarin used in daily conversations but not conversations in Mandarin with medical terms (Table 1: Quote 1, 12, and 13). Migrant organization coordinators reported that some migrants were not able to understand medical information given by their doctors and/or reiterate their doctor's advice, although they had a literal understanding of the conversation with their doctors (Table 1: Quote 2, 5, 9, and 11). In addition, some doctors issued English diagnosis certificates to the migrants (instead of certificates in Mandarin, which are usually issued to local Taiwanese), which complicated the interpreting work and processing of information by local interpreters (Table 1: Quote 10).

Although many coordinators of migrant associations and clinicians acknowledged that migrants generally had adequate Mandarin listening and speaking abilities, they reported that many migrants were not able to read or write Mandarin. These language skills are especially important in the settings of medical institutions where understanding written information and providing written medical informed consent is often required (Table 1: Quote 4 and 8).

Although volunteer interpreting services were available in some medical institutions, three problems were identified: (1) they were either available at the front desk only, (2) they were not able to interpret medical terms inside a clinic, and (3) the quality of interpreting was questionable (Table 1: Quote 7, 8, and 13). In some cases, migrants, particularly married migrants, relied on interpreting carried out by their relatives or spouse, and they lacked this support when the marriage ended (Table 1: Quote 14 and 15). Without medical interpreting, some migrants had difficulty describing and/or understanding their illnesses (Table 1: Quote 6 and 9).

Table 1

Language and informational barriers

Quote 1	"They may understand Mandarin, but medical terms may be too difficult for them" (Clinician).
Quote 2	"Semantic understanding of a conversation with the doctor is much more difficult than literal understanding of the conversation" (Migrant organization coordinator).
Quote 3	"Volunteer interpreter may be fine with interpreting daily conversations, but not conversations containing medical terms, which require particular training" (Migrant organization coordinator).
Quote 4	"Migrants may acquire listening and speaking skills for Mandarin after settling down, but acquiring reading and writing skills is difficult, especially providing written informed consent" (Migrant organization coordinator).
Quote 5	"One time we asked a migrant about information given to her by her doctor, but she couldn't explain the medical advice clearly" (Migrant organization coordinator).
Quote 6	"A migrant once shared with us that she thinks her doctor couldn't understand her well because of her poor Mandarin" (Migrant organization coordinator).
Quote 7	"Existing interpreting services by volunteers at the hospital front desk is inadequate, instant interpreting services inside the clinic are needed" (Migrant organization coordinator).
Quote 8	"The majority of volunteer interpreters are settled married migrants and they have good Mandarin listening and speaking skills but not reading and writing skills, which are important abilities for understanding and explaining the content of medical consent forms. Sometimes they have difficulty interpreting medical terms into the language of origin country." (Vietnamese migrant).
Quote 9	"A Thai migrant once told us that he/she is receiving chemotherapy but unaware of the severity of the illness" (Migrant organization coordinator).
Quote 10	"I helped a migrant to interpret his/her English diagnosis certificate using translation software but I couldn't explain to him/her what is a renal pelvis, and I wondered why the diagnosis certificate was written in English in the first place" (Migrant organization coordinator).
Quote 11	"Some settled married migrants have a good command of Mandarin, but understanding medical terms is a different aspect" (Migrant organization coordinator).
Quote 12	"Understanding and explaining medical terms to migrants in languages of their country of origin could be difficult itself" (Vietnamese migrant).
Quote 13	"I find it difficult to understand and to explain clearly to patients who are migrants. Even when they come with an interpreter, I am not sure if my medical advice is interpreted accurately because interpreting conversations containing medical terms can be very different from interpreting daily conversation." (Clinician).
Quote 14	"A married migrant told me she had no idea which doctor to go to for her neuralgic pain after her divorce" (Migrant organization coordinator).
Quote 15	"A divorced migrant once asked me for a favor to sign a medical consent form in Mandarin on her behalf because she had no other family members in Taiwan except her underage child" (Migrant organization coordinator).

3.2. Sociocultural and economic barriers

Table 2 shows the three major sociocultural and economic barriers reported by the participants: (1) differences in healthcare system, (2) differences in health-related behaviors, and (3) high medical cost.

Because the health care system in Taiwan is different from those in their countries of origin, some migrants had difficulty in identifying a suitable doctor as well as making an appointment by phone or through an online platform, which are common in Taiwan (Table 2: Quote 1, 3, and 4). In addition, universal health care may not be available in their home country, so migrants may not know their rights with regards to accessing health services in Taiwan (Table 2: Quote 11). Moreover, migrants may be unfamiliar with making an informed decision (Table 2: Quote 1 and 4).

Health-related behaviors of some migrants were influenced by local practices and their family from their countries of origin, in that they tended to use symptomatic-relief medications rather than seeing a doctor when unwell (Table 2: Quote 2, 5, 6, 7, and 8). This behavior resulted in a potential delay in disease diagnosis and a worse prognosis in some migrants (Table 2: Quote 7 and 8). High medical cost (copayment under the NHI program) also prevented some migrants from visiting emergency rooms or outpatient clinics, especially specialty clinics at large medical centers (Table 2: Quote 5, 9, and 10).

3.3. Policy and resource barriers

The study participants reported three major barriers resulting from a lack of institutional policy and resource support: (1) a lack of funding to support interpreting services and help needed

Table 2

Sociocultural and economic barriers

Quote 1	"Migrants have difficulties identifying an appropriate specialty and doctor for their medical problems and making an appointment especially through electronic devices when a walk-in option is unavailable. Besides, they often couldn't make an informed decision because they have never experienced it before." (Migrant organization coordinator).
Quote 2	"Migrants tend to buy over-the-counter symptomatic relief medications rather than seeing a doctor when they are unwell" (Migrant organization coordinator).
Quote 3	"Migrants are unfamiliar with making an appointment for clinic visits and checking up-to-date information on the institution website" (Migrant organization coordinator).
Quote 4	"The main problem is the difference in healthcare systems, we are used to going to the nearest clinic or district public health center first when we are unwell and then get referred if necessary" (Vietnamese migrant).
Quote 5	"Migrants have different health-seeking behaviors and tend not to see a doctor when they are unwell because of medical fees" (Malaysian migrant).
Quote 6	"Health-seeking behavior of migrants is usually influenced by families and practices in their country of origin and is different from that in Taiwan" (Migrant organization coordinator).
Quote 7	"A Vietnamese migrant did not go to see a doctor for his/her kidney disorder and relied on medications brought from Vietnam and his/her condition worsened" (Vietnamese migrant).
Quote 8	"Migrants tend not to see a doctor unless the disease goes uncontrolled. A Filipino migrant did not go to see a doctor initially for his/her suspected lung neoplasms because he/she didn't want his/her work to be interrupted and he/she was diagnosed with terminal stage cancer subsequently when he/she finally went to a doctor" (Migrant organization coordinator).
Quote 9	"Migrants tend to choose a local clinic or public health center over hospitals due to lower fees and shorter queues" (Medical institution representative).
Quote 10	"Migrant workers come to Taiwan to earn a living, so local clinics with lower medical fees are their first choice" (Clinician).
Quote 11	"Universal health care may not be available in their home country, so they may not understand the purposes of paying health surcharges and their rights" (Clinician).

by migrants, (2) legal issues associated with inaccurate interpreting, and (3) medical personnel lacking cross-cultural communication skills.

Clinicians suggested that while instant interpreting services are needed in outpatient and emergency departments, such migrant-friendly services are currently limited due to many factors, including a lack of funding and/or disproportionate demand for interpreting services in local clinics (Table 3: Quote 1, 6, and 10). Migrants tended to visit primary care physician offices or outpatient clinics at community-level hospitals where interpreting services are too costly to be affordable (Table 3: Quote 6). On the contrary, although some medical centers had set up special clinics (with interpreting services) for migrants, they would not run them on a daily basis because the volume of migrant patients was too low to be economically viable (Table 3: Quote 6 and 9).

While volunteer interpreters at some hospitals currently help with interpretation at the front desk, they are generally unwilling to help with interpretation inside a clinic because of the responsibilities and legal issues associated with inaccurate interpreting (Table 3: Quote 2 and 3). Without a proper legal and policy framework, it is currently unclear whether the interpreter, institution who hires the interpreter, or clinician whose original advice is passed on to the patient through the interpreter is legally responsible for inaccurate interpreting (Table 3: Quote 7).

Moreover, the clinicians and coordinators of migrant organizations suggested that current medical staff lack cross-cultural communication skills, and that this should be improved with the increasing demand for health services by migrants (Table 3: Quote 4 and 8).

3.4. Potential strategies to improve accessibility to health services

The study participants suggested potential strategies to improve accessibility to health services that generally corresponded to the three major types of barriers discussed above. To overcome language and informational barriers, the clinicians suggested introducing medical interpreting services in outpatient clinics, either through having on-site interpreters or via computer software or mobile applications (Table 4: Quote 1, 3, 4). In emergency settings such as those in emergency departments where instant and reliable interpreting is needed, the clinicians suggested that on-site interpreters are irreplaceable (Table 4: Quote 11). Because the demand for medical interpreting is increasing, the language school representatives suggested that existing language schools could introduce medical English components into their interpreting courses and conduct proficiency tests to certify qualified "medical interpreters" (Table 4: Quote 8 and 9). A clinician suggested that to lower entry barriers, learning interpretation through online courses may be a good starting point (Table 4: Quote 10). The migrants also suggested that listing common symptoms and disease names in their native languages could be a convenient and effective method to improve communication with medical personnel (Table 4: Quote 7). To overcome sociocultural barriers, it was suggested that a nationwide multilingual medical hotline could be set up to help migrants with finding appropriate medical services as well as making an appointment with doctors (Table 4: Quote 2). No suggestions were made regarding overcoming economic barriers. To overcome policy and resource barriers, the coordinators of the migrant organizations suggested that the government should lead a program to train and certify professional interpreters and create an interpreter resource library so that medical institutions can find appropriate interpreters who match their needs. To achieve a balance between supply and demand, it was suggested that neighboring medical institutions could share the cost of hiring a medical interpreter (Table 4: Quote 6). A clinician also suggested that while a professional medical interpreter is needed inside a clinic, interpreting work at the front desk could be carried out by volunteer interpreters (Table 4: Quote 4).

4. DISCUSSION

In this study, we interviewed migrants, coordinators of migrant organizations, clinicians, and representatives from medical institutions, a language school, and a language service company to ascertain their opinions on challenges faced by migrants when accessing health care services in Taiwan and strategies for improvement. The study participants generally acknowledged that the current support system for migrants in the health care sector in Taiwan is inadequate. Despite being included in the country's universal health care system, migrants in Taiwan face three main barriers to health care: language and information, sociocultural and economic, and policy and resources. The insufficiency of the current support system was discussed and several feasible improvements were suggested, including the provision of on-site and distant instant interpreting services and multilingual consent forms/instruction notes/health education leaflets, training and certification of professional medical interpreters, establishing a medical interpreter resource library, and setting up a nationwide multilingual medical assistance hotline.

The increasing number of international and internal migrants has created huge pressure on local health care systems in relation

Table 3

Policy and resource barriers

Quote 1	"Instant interpreting services during outpatient visits are currently unavailable because of a lack of funding" (Migrant organization coordinator).
Quote 2	"Volunteer interpreters cannot currently help with interpreting conversations between patients and doctors inside a clinic because of the responsibilities and legal issues associated with inaccurate interpreting" (Clinician).
Quote 3	"Volunteer interpreters are currently not able to provide interpreting services during outpatient visits because of responsibilities and legal issues associated with inaccurate interpreting" (Migrant organization coordinator).
Quote 4	"Medical staff lack intercultural communication and training" (Migrant organization coordinator).
Quote 5	"Some agents for migrant workers do not have a neutral stance and may lead migrants into making particular decisions through biased interpreting" (Migrant organization coordinator).
Quote 6	"Currently, only four hospitals offer migrant outpatient services. There is an imbalance between demand and supply because migrants usually visit local clinics which cannot afford interpreting services." (Clinician).
Quote 7	"Who should bear the responsibility for medical interpreting, the doctor in charge, interpreter, or the volunteer who helps?" (Migrant organization coordinator).
Quote 8	"The number of outpatient visit by migrants is increasing and there is a need for improving their communication with medical staff" (Clinician).
Quote 9	"Our hospital provides outpatient services for migrants but not on a daily basis" (Medical institution representative).
Quote 10	"Instant medical interpreting services, which are desperately needed at emergency departments, is current lacking" (Language school representative).

Table 4

Potential strategies to improve accessibility to health services

Quote 1	"Develop online instant interpreting services which are provided by professional interpreters" (Clinician).
Quote 2	"Set up a nationwide migrant hotline to help migrants book an appointment at local medical institutions" (Migrant organization coordinator).
Quote 3	"Instant interpreting services through computer/mobile applications or online platforms are needed, and it will be good if interpreters of both sexes are available because conversations may contain sex-specific content" (Clinician).
Quote 4	"Interpreters are needed at hospital front desks to cover general affairs and inside clinics for interpreting conversations between migrants and medical staff" (Clinician).
Quote 5	"The government could train interpreters and provide professional certification if they pass particular proficiency tests. Qualified interpreters can be listed on a certain human resource library so that medical institutions can find qualified interpreters." (Migrant organization coordinator).
Quote 6	"Because the number of migrant patients visiting a particular hospital is relatively small, perhaps 4 to 5 neighboring medical institutions can share the cost of an interpreter" (Migrant organization coordinator).
Quote 7	"I have been to a clinic where common diseases are listed and translated into Vietnamese. The clinic has also created a book that lists common symptoms and advice associated with each disease in Vietnamese, which is really convenient." (Vietnamese migrant).
Quote 8	"Language schools could run some courses and proficiency tests to train interpreters" (Language school representative).
Quote 9	"Existing translation and interpreting courses at universities may introduce medical English modules so that students are more exposed to the course of diseases, disease pathology, and medical ethics" (Language school representative).
Quote 10	"Online interpreter learning courses may be a good starting point so that more people can enter the field and take proficiency tests." (Clinician).
Quote 11	"Real person interpreting services are needed in emergency departments and they cannot be replaced by online services or software." (Clinician).

to the increasing demand for health care services and increasing need to accommodate social diversity among health care users.[17,18] In Taiwan, labor migrants and spouses constitute the two largest migrant groups, and the great majority of them are from Southeast Asia, a region with great linguistic and cultural diversity.[2,19] Recognizing the need to create a more friendly and supportive health care environment for migrants, the Ministry of Health and Welfare launched the "Multi-language Translation for Healthcare Service Initiative" in 2016.[20] Under this initiative, approximately 225 medical instructions and consent forms commonly used in medical institutions have been translated into 20 foreign languages including English, Japanese, Vietnamese, Indonesian, and Thai. In addition, the Handbook of Taiwan's National Health Insurance and health education leaflets have been translated into five languages, an online service platform has been set up to coordinate the demand and supply of volunteer interpreting services, and online instant interpreting services have been piloted. Furthermore, special clinics for migrants have been piloted, and health care websites containing health education and health care information in foreign languages have been introduced.[20] Despite the introduction of these measures, our study identified several major problems, which are not covered by the planned interventions, including a lack of professional medical interpreters and training programs, a lack of a legal framework that defines and protects medical interpreting, and inadequacy in the dispersal of information about existing resources that may facilitate the integration of migrants into Taiwanese society and the health care system.

Both the providers and users of health services acknowledged that understanding conversations containing medical information or medical terms is difficult, and that having good proficiency in a local language (ie, Mandarin or Taiwanese) was a prerequisite. A study in the US reported that Hispanic patients were less likely to participate in decision making when they had poor English ability.[21] Language barriers can impair communication between patients (migrants) and medical staff and contribute to poorer patient assessment, misdiagnosis, and/or delayed treatment,[22] especially in emergency settings such as those in emergency departments or intensive care units where instant responses are generally required.[23] Migrants often rely on family members to interpret for them, particularly spouses for married migrants, and unprofessional interpreting may be inaccurate or omit some information that is important for medical decision making.[11] Moreover, married migrants may lose their family interpreters if the marriage ends. While one of the best solutions is to have on-site medical interpreters, the cost-performance ratio for every medical institution to hire on-site professional interpreters is low because the number of outpatient visits by migrants is relatively low. One possible solution is to set up special clinics for migrants with medical interpreting services at certain medical institutions across the country. Currently, special clinics for migrants are being piloted at Taipei Veterans General Hospital (north Taiwan), Changhua Cristian Hospital (central/west Taiwan), Hualien Tzu Chi Hospital (east Taiwan), and Kaohsiung Medical University Hospital (south Taiwan).[20] Neighboring medical institutions including local clinics can refer patients to these particular institutions if they encounter communication problems with migrants, or when existing translated handbooks, medical instructions, or consent forms (approximately 225 forms in 20 foreign languages) do not meet the needs of migrant patients. Alternatively, medical institutions may adopt the use of distant real-time interpreting services through computer and mobile applications, which are currently being piloted at Taipei Veterans General Hospital, National Cheng-Kung University Hospital, Hualien Tzu Chi Hospital, and Far Eastern Memorial Hospital.[20] The use of distant interpreting services or online machine translation services (eg, Google Translate) may be useful for nonemergency medical consultations,[22] and may effectively reduce the cost and demand for on-site interpreters. Furthermore, a nationwide multilingual medical helpline could be set up to help migrants identify appropriate medical services, book medical appointments, and send migrants to particular hospitals according to their medical and language needs.

With the increasing number of migrants and demand for health care services, the demand for professional interpreters is likely to increase.[9,10] While volunteer interpreters can help with general affairs at the front desk, professional interpreters are needed inside clinics and emergency departments.[23] Collaboration is needed between medical institutions, medical schools, and language schools/centers to train and certify professional medical interpreters to accommodate the increasing need. A human resource library containing information on interpreters according to the level of profession should also be created so that medical institutions can identify suitable interpreters according to their needs. The introduction of professionally trained interpreters to medical institutions is likely to improve communication between doctors and migrant patients and reduce inaccuracy in medical interpreting.[9,10,13] Nevertheless, new laws and legal frameworks are needed so that the roles and

responsibilities of medical interpreters are clearly defined and their work is protected.

All migrants who come to Taiwan legally are covered by the NHI universal health care program; however, many migrants do not understand their rights in accessing health services, resulting in a potential delay in disease diagnosis and treatment. Some migrants may be bound by practices or health-seeking behaviors from their home country,[11] while some may not able to afford the small copayments for an outpatient visit (about USD 3 and 18 for local clinics and hospital-based specialist clinics, respectively). To help migrants overcome economic barriers, the "Development Funds for Immigrants" has subsidized up to 100% of the premium for national insurance and medical fees for migrants from households with low and semi-low incomes since July 1, 2011.[24] Information about subsidies and the Taiwanese health care system, health services, and NHI should be included in the orientation for migrants who have just arrived in Taiwan as part of the services run by local government departments of social welfare. Migrants can also call the "Information for Foreigners" toll-free number, which is available in seven different languages including Mandarin, English, Japanese, Vietnamese, Indonesian, Thai, and Cambodian, to learn more about life in Taiwan including social and welfare.[25] A better dispersal of information may help migrants to integrate into the society more quickly.

The main strength of this study is the use of qualitative methods to generate in-depth views of migrants and health care providers as well as those of relevant stakeholders with regards to challenges encountered by migrants when accessing health care services, which would not otherwise be captured by quantitative research. Multiple strategies that could potentially overcome barriers to health services were also suggested. The study participants included individuals from multiple disciplines who have experience in helping migrants to improve health care accessibility. The diversity of the study participants allowed us to explore perspectives of individuals with different roles in the health care system, and may help to develop effective interventions to tackle some of the common problems. The main limitation of the present study is the small number of migrants recruited (2.7% of the study participants), and none of them were Indonesian or Filipino, who are among the top three migrant groups in Taiwan. Nonetheless, we believe that lack of Indonesian and Filipino migrants would not influence the study results, because we did not aim to examine and resolve problems related to migrants of specific backgrounds and/or nationalities but focus on issues that are generally encountered by migrants in Taiwan. Invitations to participate in the study were sent to migrant organizations, which were then passed on to migrants and may explain the low representation of migrants in our study. On the contrary, the presence of coordinators of migrant organizations may have reduced the depth but increased the breadth of discussion, because they brought up multiple issues encountered by numerous migrants who sought help at their organizations and not just problems that occurred to an individual. Another limitation of the current study is that we may have missed some important existing barriers to health services, which were not perceived by our study participants due to the relatively limited sampling frame. The current study was well represented by hospital representatives and the perspectives of migrants were sufficiently complemented by those of coordinators of migrant organizations. Thus, the results on barriers perceived by migrants and potential strategies to overcome such barriers may be generalizable to other hospitals in Taiwan. Further studies with a larger number of migrants from different countries (not only Southeast Asian) and health service providers from local clinics may improve the representativeness and generalizability of the study results.

In conclusion, we identified three barriers to health care services: (1) language and information, (2) sociocultural and economic, and (3) policy and resources. While migrants benefit from the current support and welfare system, we found substantial gaps that need to be filled, including a lack of professional medical interpreters and training programs, a lack of legal framework for medical interpreting, and inadequacy in the dispersal of information on existing resources that may facilitate the integration of migrants into society and the health care system. Overcoming these barriers may improve migrants' access to health services. These findings may be generalizable to other hospitals in Taiwan.

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