Difficulties of social networks building in international medical students: a qualitative study

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Abstract
Background: The number of international medical students studying in China has largely increased over the past decades. However, few studies have addressed the difficulties that the international medical students face and there is a dearth of information on understanding the difficulties these students confront during their social integration in host countries. Therefore, the aim of this study was to investigate the international medical students’ difficulties to build social networks during their studying overseas. Methods: This study was designed primarily with the aim of enhancing understanding of the International Bachelor of Medicine and Bachelor of Surgery (MBBS) students’ difficulties in social networks building. 26 MBBS students from year-3 and year-4 were asked by the question: what are the difficulties to establish the social networks you face? Thematic analysis was conducted by MAXQDA. Results: The result of the individual interviews revealed that language barriers, (lack of) communication skills, personality factors, intercultural differences and study pressure were key factors that hindered the MBBS students’ adaptation to the Chinese culture and social networks building in China. Conclusions: This study reveals several potential coping strategies which could promote the social inclusion and cultural integration of the MBBS students, including providing interactive language training programs, organizing diverse programs enhancing intercultural communication, maintaining strong support networks and endeavoring the MBBS students to actively engage themselves in their learning and living environments. In conclusion, the provision of interactive learning environments, diverse social network opportunities and, moreover, maintaining social support and nurturing cultural integration, would greatly promote social integration and benefit international medical students.

Introduction
The number of internationally mobile students worldwide is rapidly increasing in the past decades, with an almost four-fold increase from 1990 (1.3 million) to 2018 (5.0 million) [1]. Of which, the number of international students pursuing a Bachelor of Medicine and Bachelor of Surgery (MBBS) has considerably increased over the past years globally, and in India alone, more than 60,000 students take up MBBS every year [2]. China has now become the most favored country for studying MBBS programs in Asia. The number of MBBS students staying in China has increased from 29,000 to 39,000 from 2012 to 2015, which is more than a 10% increase annually [3]. Although there are a
large number of MBBS students at Chinese medical faculties, many questions concerning this interesting group remain unanswered. Few studies have addressed the difficulties that the international medical students face and there is a dearth of information on understanding the difficulties these students confront during their learning and social integration.

The MBBS programs last for six years, and it consists of basic education (five years) and a one-year long internship for practice in hospitals. Although the medium of the programs is in English, many Chinese medical schools require MBBS students to pass the Chinese language proficiency test (HSK test) at a certain degree before graduation [4]. The requirement of the Chinese language proficiency is considered to be benefit for MBBS students to communicate with patients in the clinics, develop their social connections with locals and promote their successful integration into local culture during their stay in China.

International medical students with a non-Chinese background face diverse challenges as a result of the language and cultural barriers. Existing research results showed that international medical students report more stress symptoms, achieve poorer results in written, oral, and practical exams and show extended study duration as well as higher dropout rates [5-7]. Moreover, international medical students were documented to have reduced quality of life as well as the loss of social contacts [8]. They may suffer from a lack of social support, alienation as well as homesickness during they undergo an overwhelming life and cultural transition in the host countries [9-11]. However, little is known about international medical students’ difficulties to build social networks during their studying overseas. A better understanding of the MBBS students group could be beneficial to improve the quality of the programs, promote social integration, and identify further research areas. Therefore, the aim of this study was to investigate the MBBS students’ difficulties of social networks building during their medical study abroad.

Methods

Study context

This study was carried out in Yangzhou University, Yangzhou city, Jiangsu Province, China. Yangzhou University is one of the 49 universities with the qualifications to enroll MBBS students in China. Yangzhou University started to enroll the MBBS students since 2006, with approximately 60 students every year. The language of the MBBS programs is in English. Chinese language are obligated to learn. In order to obtain the degree, HSK test (HSK-level 4) was required.

Study participants

In-depth interviews with the year-3 and year-4 MBBS students were conducted. The study
participation is totally voluntary in order to encourage the students to fully express their true opinions.

Data collection

The main question on the topic was asked in English: what are the difficulties to establish the social networks you face? To counteract potential biases due to social pressure inhibiting students to express their opinions openly, the investigator carefully clarified the purpose of the study and the meaning of the questions, especially emphasized that the answers of individuals will be treated anonymously and the value of true opinions and views.

Data management and analysis

The transcripts were analyzed via qualitative content analysis. Data analysis was conducted by applying a mix of deductive coding (based on the questionnaires) and inductive coding (to ensure no codes were missed) assisted by the software MAXQDA 12.1.1. Themes were then identified and developed. The themes were related to the difficulties of social networks building. The assignment of respective codes to specific themes was conducted by two independent analysts (LGY and LYP) and subsequently discussed to reach consensus and, if required, adjusted. Coding, development, and refinement of the themes were done by two authors (LGY and LYP).

Ethics

Study participation for international students was voluntary. All students were adequately informed about the purpose of the study and granted anonymity and confidentiality regarding their data. Ethics approval was granted by the ethic committee of the Medical College of Yangzhou university.

Results

Characteristics of the study participants

A total of 26 participants were interviewed for the study. Ten students were in the third year, and 16 students were in the fourth year. Twelve students are female, and 14 students are male. Most of the students were from India (22/26), while the rest were from a variety of countries including Indonesia (1/26) and Bangladeshi (3/26).

Difficulties of the social networks building

Regarding the difficulties of social networks building among the MBBS students, five themes were identified.
Theme 1: “language barriers”

The most frequently mentioned difficulty regarding social networks building is language barrier. MBBS students generally mentioned that local Chinese people are friendly and they also want to build social connections with the local Chinese people, however, they felt it is difficult because the existence of the language barrier.

* I think language differences are the main difficulty. For example, Chinese people are so friendly with us, they also want to make friends with us. But we can’t talk to them properly due to the language differences between us.

  - #15

* We are foreign students and we can not speak Chinese like the locals. It takes more time (for us) to understand this language. For this reason, we are unable to talk in Chinese language with the local Chinese.

  - #26

* The only difficulty I experienced here is the language barrier, despite Chinese people are so friendly and they help you a lot.

  - #13

Theme 2: “Lack of communication skills”

Another aspect emerged among MBBS students was that they may face difficulties during building social connections due to the lack of communication skills. They concerned that they do not have sufficient communication skills to build social networks.

* For me, the difficult I face to establish social network is a lack of communication skills.

  - #24

* Communication skills are one of difficulties in establishing a strong social network.

  - #04

Theme 3: “Personality aspects”

Some of the MBBS students concerned that their personalities such as shyness and introversion hamper their social networks building, and “good characters” are needed to establish social networks. Students mentioned that studying medicine is a good way to “confront these personalities”, because doctors are required to communicate well with patients.
The most difficult thing is my shyness, I usually feel fear of publics, but I am trying to overcome that. I think during establishing social networks we need good characters and ideas.

-The most difficult thing is my shyness, I usually feel fear of publics, but I am trying to overcome that. I think during establishing social networks we need good characters and ideas.

The difficulties are that I usually feel awkward and anxious to talk with strangers....... I am introverted, and moreover (I am) fear of rejection.

Theme 4: “Experiencing intercultural differences”
Concerning difficulties to build social networks, some MBBS students stated that they may face difficulties due to intercultural differences. Students stated that the culture differences between the host country (China) and their country of origin, such as different food and different habits, hinder the social networks building.

We have different language and different food (with local people); thus it is difficult to build social networks with local people.

Besides Chinese language difficulties, the differences in culture are also difficulties in making social networks.

Theme 5: “Study pressure”
In addition to the difficulties reported before, MBBS students also discussed that as medial students they “need a lot of time to study”. Therefore, they stated that they are afraid “being more social may affect the medical studies”.

As a medical student, we need a lot of time to study. so, now being more social may affect our studies. Apart from that I don’t feel any difficulties to establish the social networks.

Discussion
This study, to our knowledge, is the first to provide an understanding of the MBBS students’ difficulties to build social networks during their study abroad. The findings revealed that language barriers, (lack of) communication skills, personality factors, intercultural differences and study pressure were key factors that hindered the MBBS students’ adaptation to the Chinese culture and social networks building in China. The findings provided important evidence and beneficial for the improvement of the quality of the programs and to promote the cultural inclusion and social integration of the international medical students.
The most visible difficulties to build social networks in host countries reported from the MBBS students are language barriers. In fact, host language proficiency is considered an important variable in determining successful cross-cultural adaptation [13]. Previous studies have reported that competence in the host country’s language is at the center of the acculturation process and successful communication is necessary to feelings of psychological well-being and satisfaction in life [6]. The MBBS students concerned about not being able to socialize adequately with local Chinese due to the deficiencies of Chinese language. In China, the majority of the medical schools require MBBS students to pass the Chinese language proficiency test at a certain level to obtain the final degree. The Chinese language proficiency was required in order to increase the quality of the clinical practices and also to promote the social integration. Therefore, developing diverse and interactive language training programs for international medical students according to their academic and non-academic needs could be an important strategy to improve the students’ language learning and social integration.

MBBS students reported that the lack of communication skills hampers the social integration. International students are expected to develop new ways of thinking, learning and communication skills through intercultural learning experiences. Interestingly, the lack of communication skills was also reported by clinical supervisors as difficulties in international medial students in clinical placements [14]. In clinical placements, effective interpersonal and communication skills are associated with improved health outcomes, and ineffective communication skills are associated with malpractice claims and suits and medication errors [15, 16]. Therefore, this confirms the need for medical educators to face communication difficulties that these students confront and therefore equip them with the required skills.

On the other hand, internal factors related to personalities were reported by the MBBS students as difficulties. For example, students who were naturally shy or introverted may have more problems in the process of social integration. To cope with this, student-led approaches may include multiple types of wellbeing activities, for instance, social and supportive networking activities [17]. There is also evidence to show that medical students prefer to approach peers for support rather than seeking help from health professionals or faculty members [18]. Therefore, student peer support programs may work as feasible interventions to decrease loneliness and depression and promote social integration.

In addition to internal factors discussed before, external difficulties refer to the factors that the students were not yet adept in local cultural scripts. Problems referred to sociocultural difference
were frequently reported as difficulties in international students during their stay in a foreign country [13]. Previous qualitative study also reported that international medical students feel difficulties in forming intercultural friendships, especially interactions outside of the academic setting [19]. Due to the intercultural difference the international medical students may afraid that locals might own a very reserved attitude towards foreigners and therefore have a fear of being excluded or marginalized [20]. Considering the challenges of adaptation and intercultural relations are increasing, it is important for medical institutions who enroll MBBS students to understand the nature of the pressures these students experience, outside as well as within the academic environment, and to support them in managing these transitions. For example, diverse intercultural programs and peer pairing programs which could enhance the link between international and local students and promote the cultural integration of international students should be considered [21-23].

Medical students, and especially international medical students, have been shown to experience more psychological distress than the general student population [24]. In this study study pressure was reported by MBBS students as one factor hinders the social connections building. Medical education is inherently stressful and demanding, and many studies have suggested that medical education itself contributes to student distress [25, 26]. While some stress may enhance academic performance, high levels of stress among medical students are associated with depression, burnout, and somatic complaints [27-29]. Therefore, it also reflected the necessity of the inclusion of well-being curriculum in a medical curriculum which could improve doctors’ well-being, communication skills, and reflective [30, 31]. Moreover, the study tandem program with other students may provide students a combined opportunity of learning and making social connections. For example, a structured tandem program to reduce stress and foster social integration of international medical students has been introduced at the Medical Faculty of Tuebingen in Germany [32]. The tandem programs at medical schools may function as a promising curricular intervention towards improving integration of international students and enhancing intercultural in both international and national medical students [32].

Strengths and limitations of the study

To our knowledge, this study is the first to provide an understanding of the MBBS students’ difficulties to build social networks during their studying abroad. It can also be considered a strength of the study that all interviews were conducted by one researcher who was not involved in any process of administrative management of the MBBS students. This has likely decreased the pressure on the students to give positive answers and thus less biased answers. The study is limited by the participants of only year-3 and year-4 international medical students. Obtaining the opinions from the
year-5 and the year-6 international students may elicit different types of difficulties in social networks building as they have been stayed in host country for longer years. Moreover, the views of the academic staff and domestic students could have been captured to understand their challenges and possible difficulties to build social networks with international medical students from their perspectives.

Conclusions

The present study is, to the best of our knowledge, the first to investigate the international medical (MBBS) students’ difficulties to build social networks during their study abroad. This study confirms that international medical students have to deal with issues such as cultural adaptation, language barriers, (lack of) communication skills, and study pressure. It also reveals the potential coping strategies which could promote the social integration of the MBBS students. These strategies include providing interactive language training programs for international medical students according to their academic and non-academic needs, organizing diverse programs enhancing intercultural communication, maintaining strong support networks and endeavoring the MBBS students to actively engage themselves in their learning and living environments. Medical educators need to face communication difficulties that these students confront and therefore equip them with the required skills. In conclusion, the provision of interactive learning environments and social networks opportunities and, moreover, maintaining social support and nurturing cultural integration, would greatly promote the social integration of the international medical students during their study abroad.

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Declarations

Contributors:

LGY and LYP were responsible for the initial study concept. LGY, LYP, LJY and YBC all contributed to the study design. LYP, LJY and WXH carried out the data collection. LGY and LYP conducted the thematic analysis. LYP drafted the initial paper with input from all authors. LGY edited the initial paper. WZB and CQ made critical revision of the paper. The remaining authors critically reviewed it and made revisions. All authors read and approved the final paper.

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Conflicts of interest:

The authors have declared that no competing interests exist.

Ethics, consent and permissions:

Study participation for international students was voluntary. All students were adequately informed about the purpose of the study and granted anonymity and confidentiality regarding their data. Ethics approval was granted by the ethic committee of the Medical College of Yangzhou university.
Consent to publish:
   Not applicable.

Declaration:
   The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.