

**Effective Communication Barriers in Clinical Teaching among Malaysian Medical Students in Zagazig Faculty of Medicine (Egypt)**

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**Abstract**

**Introduction:** effective communication in a clinical environment plays a vital role in patient assessment and treatment. The aim of this study was to understand the experiences of Malaysian medical students concerning communication barriers during clinical practice. The goal was to provide answers for three important research questions, i.e., 1) Are communication barriers an impediment to Malaysian students during clinical teaching? 2) What is the nature of the language barriers that the students encounter? and 3) What are the best ways of reducing these barriers during clinical teaching?

**Methods:** The qualitative method was used to conduct the research, and open-ended questionnaires were used to collect the data. The study was conducted on 95 fourth-, fifth-, and sixth-year students, 80% of whom completed the study.

**Results:** Medical students from Malaysia who have limited knowledge of the Arabic language experience some difficulties in communicating with staff members, patients, and nurses during their clinical practices.

**Conclusion:** Successful orientation of students to the language used in the clinical environment will help the students overcome the communication barriers they encounter during their clinical practices.

**Keywords:** communication barriers, clinical environment, medical students, Malaysia, Arabic language

**1. Introduction**

Egypt has long been considered as a very attractive country to foreign students for several reasons, e.g., the diversity of educational institutions, educational systems and curricula; a very pleasant environment; and its great historical background. Zagazig Faculty of Medicine is an Egyptian college that offers medical degree programs in English. About 5% of the student population is Malaysian students (Cultural Affairs and Student Mission Section - Ministry of Higher Education, 2010) (1). A steady flow of foreign students have chosen to study medicine in Egypt over the past few decades (2). The traditional undergraduate medical program is composed of two phases, i.e., the pre-clinical phase and the clinical phase. Clinical practice hours enable students to integrate theoretical training into practice. Clinical training is the most effective way to learn communication in medical school. Effective communication involves the patients, clinical staff (tutors/mentors), and other paramedical staff (3). In the clinical training at Zagazig Faculty of Medicine, the Arabic language is used to communicate with the patients/nurses, while English is used in theoretical teaching. This creates a significant challenge for Malaysian students who have inadequate proficiency in the Arabic language. In prior years, researchers have conducted studies related to the experiences of foreign students in clinical practice (3-6), and they observed that the students had both positive and negative experiences (3). The studies indicated that one of the major problems the students encountered was their poor proficiency in the language of the country in which they chose to study and obtain their clinical practice (7, 8).

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Research findings from the U.S., UK, and Australia indicated the same results (9-11). These researchers noted that the clinical experiences of non-native speakers created significant challenges for them, including finding suitable methods for coping with the difficulties and getting to the point that they felt accepted by their peers. The literature indicates that communication skills are vitally important for doctors in establishing effective relationships with their patients. The physicians must be able to provide information effectively to patients and their families so they can understand both the severity of their medical problems and the treatments that will be required (12). There is a significant amount of information in the literature concerning foreign students' experiences during clinical studies, but few such studies have been conducted in Egypt concerning the experiences of foreign medical students during their clinical placements. Thus, the aim of this research was to investigate the experiences of Malaysian students in the clinical environment in Zagazig Faculty of Medicine (Egypt), identify their problems and issues, and identify approaches for improving the situations they face. To those ends, answers were sought for the following questions:

- 1) Do Malaysian students encounter communication difficulties during their clinical placement?
- 2) If so, what is the nature of those difficulties?
- 3) What are the best ways of minimizing the difficulties for these students during their clinical placement?

## **2. Material and Methods**

### *2.1. Research Design*

The qualitative research method was used, including the constructive interpretative approach. We systematically collected and analyzed in-depth information, attitudes, behaviors, and opinions of Malaysian students in their clinical years.

### *2.2. Questionnaire (Arcada University of Applied Sciences, Finland)*

We reviewed the literature concerning the experiences of international students, and we used the information and data acquired to develop the questionnaire that was used in the study. The questionnaire addressed the following areas: 1) communication between mentors, the nursing staff, and the students; 2) communication between the students and their patients; 3) the attitudes toward foreign students in the clinical environment and the level of acceptance they experienced; 4) clinical guidance by supervisors; and 5) educational and practical activities in the clinic.

### *2.3. Sample selection*

The participants in the study represented a random sample of Malaysian medical students in Faculty of Medicine-Zagazig University. The students in the sample consisted of fourth-, fifth-, and sixth-year Malaysian students enrolled in the Bachelor's degree program. The selection of students who had undergone some clinical placements and constraining factors was purposeful, since the first-year students had just made the transition into the University and had no clinical practice. The undergraduate curriculum in this traditional medical school is divided in two phases, i.e., the pre-clinical curriculum and the clinical phase.

### *2.4. Data Collection and analysis*

A questionnaire with open-ended questions was used to collect data. The study was explained to each of the participants before they were given the questionnaire in an effort to enhance the return rate. The questionnaire had two parts, i.e., Part I, which gathered the students' background information, and Part II in which data were acquired concerning the students' experiences during their clinical practices. Seventy-six of the 95 participants (80%) returned their completed questionnaires. Quantitative descriptive statistics were used to analyze Part I of the questionnaire to describe and synthesize averages and percentages. Qualitative content analysis was used to analyze the data collected in Part 2 (13). The researchers read the students' answers to the open-ended questions thoroughly in order to understand as completely as possible what the participants had written. Interpretative data analysis was performed, and the themes that emerged were "Communication," "Clinical guidance and feedback," and "Clinical teaching environment,"

### *2.5. Ethical consideration*

Ethical approval was obtained from the Faculty of Medicine (Zagazig University). Informed consent was obtained from all of the participants. The descriptions of the study's purpose and data processing were communicated to them, and they were told that they were not obligated to participate. Protecting the identity and confidentiality of the participants was maintained in that the questionnaires were not numbered and they did not include the names of the participants.

### **3. Results**

#### *3.1. General findings*

The age range of the participants was 21-25, with 36 males and 40 females responding. Among the participants, 69.7% had undergone one clinical practices period (4th year students), 17.1% had undergone two clinical periods (5th year students), and 13.2% had undergone three clinical periods (6th year students). The data from the questionnaire were analyzed and classified into the following themes and categories: "Communication" and its barriers, "Clinical guidance and feedback," and "Clinical teaching environment."

#### *3.2. Communication" and its barriers*

Malay was the mother tongue of all participants, but 50% of the participants spoke fluent English. The other 50% of the respondents stated that they had an average to satisfactory level of English language skills. The majority of the participants stated that they didn't speak Arabic. Seven percent of the participants had a basic level of Arabic language skills. Communication barriers due to their limited language skills were experienced by the students who were not proficient in either English or Arabic. The students mentioned difficulties in communicating with patients/nurses/staff members (mentors). Communication barriers were experienced by the majority of the students (56.6%, 43 students) because of their level of understanding of the Arabic language. The participants indicated that talking with patients was more difficult than talking with mentors because most of the patients were from villages and were illiterate. Some of the participants had difficulty understanding the medical terms or finding the right words to use in the clinical situation. Some of the participants found the Egyptian accent of English to be different from their own accent. One student said, "The way our mentor speaks English took a bit of time for me to become easily understood."

#### *3.3. Clinical Guidance and feedback*

The majority of the students (85.5%, 65 students) indicated that their communication with their mentors was very good, and, if they misunderstood information in Arabic, it was either translated into English or another method was used to explain. One student stated that "explanation and repetition from mentor made communication with patients easy through translation." Their mentors' encouragement and support gave them the opportunity to improve their skills during the clinical practice. Other positive experiences as stated by students included a sense of appreciation, acceptance, and becoming a member of team.

#### *3.4. Clinical Teaching Environment*

Clinical environment was always stressful for most of the students (89.5%, 68 students) with no time to try to speak slowly. A student stated that "I didn't have any chance to talk to the patient by myself, all the patient condition was explained by the doctors". Another student said that "I can't take patient history by myself, I can't speak Arabic and the patient can't speak English, the patient was non cooperative". Some students experienced loss of important information during talking patient's history which affected their learning experience. They could not take data from the patients or sometimes misunderstood what was said by their teaching staff. A student stated that "if I needed something, I could not get it for the patient even after thorough explanation by our staff, some issues remain vague". Another student said that "even reviewing the patient history could not be helpful to get the missed information; history taking is conducted in Arabic". Students' reaction of the clinical experience was influencing by ways of dealing with situation during their placement. The inability to effectively communicate can lead feeling of unease, discomfort, feeling of rejection, frustration and isolation was experienced by some participants due to their limited language skill which made the student feel they were being avoided. "During practice, I need to be effective, I found my colleagues who are good in English more effective with our staff and they rather isolate me".

#### *3.5. Students' recommendations*

The students provided some recommendations for overcoming these communication barriers:

- 1) Using standardized patients was mentioned by 72.15% (57 students). "Students said that patients should be trained before clinical class," and another student stated that "patients better to know medical terms in English."
- 2) A dictionary of medical terms in Arabic and English was mentioned by 49.37% (39 students). A student said "Arabic important medical terms translated in English", and other students said "We need medical dictionary contain terms used patients history."
- 3) An Arabic orientation course before clinical placements was mentioned by 26.58% (21 students), and some students stated "Specify lecture to explain terms in Arabic before commencing each clinical placement".

Statistical comparison between these improvement suggestions by Chi square test revealed a very high significant difference ( $\chi^2=32.25$ ,  $p<0.001$ ).

#### 4. Discussion

The body of research on the nature and extent of problems faced by foreign students in Egypt is still insufficient. Research efforts were either from the perspective of teaching staff members or on behalf of policy making bodies (Cultural Affairs and Student Mission Section- Ministry of Higher education, 2010) (1). Foreign students face many problems, such as cultural differences, differences in teaching and learning styles, and communication barriers (14). Teaching in the clinical environment is defined as teaching and learning focused on patients' health problems. The clinical environment is one in which students learn skills, such as taking histories, conducting physical examinations, communicating with patients, and professionalism, i.e., the things that a real doctor must be able to do (15). For effective patient care, students should integrate each patient's biological, psychosocial, and cultural background. To reach this, a physician must use communication skills, biomedical knowledge, and clinical judgment to perform clinical reasoning (16).

Most of the Malaysian students experienced a communication barrier because of their limited language skills in Arabic, which is different from their mother tongue. Communication with their mentor/tutor staff seems easier than with patients. Moreover, the clinical environment was always stressful with no time to try to speak slowly. Speaking in a language different from the mother tongue is often cited by foreign students as the most anxiety-producing experience; they experienced feelings of fear and frustration as well as difficulties in interacting with the nursing staff (17). So teaching staff (tutor/ mentor) should keep their English language in the clinical environment as simple as possible, avoiding the use of idioms, slang, and ambiguous vocabularies (18). Dogra et al. (19) described twelve tips to help guide medical schools, educators and healthcare institutions in developing comprehensive cultural diversity educational programs. Among these tips were embedding cultural diversity and human rights issues into teaching practice. Also, they mentioned that tutors should provide a safe learning environment that allows both students and teachers to feel free to express their critical views and opinions. Similar to previous studies that addressed learning environment for students lacking domestic language proficiency, students' behaviors varied: some chose to withdraw and to stay in the placement for the credits, only, whereas others kept on trying to make contact with staff and patients with considerable persistence (3, 4).

International students tend to be passive recipients of knowledge that is transmitted during the lectures. The use of interactive methods of learning and teaching especially within small group help teachers discover weak points (20). Clinical instructors have important roles in facilitating the learning experience in the clinical environment. Their understanding can be communicated by using teaching scripts to convey their accumulated experience on various health-related topics, thereby enabling students to view medical problems in a larger context (18). A major barrier experienced by students during their study is their lack of basic skills in understanding and speaking Arabic. Another barrier is the different accents among the people speaking English. Students had problems understanding medical terms in Arabic when taking patients' histories and updating their records. In exploring the students' perceptions of their difficulties during clinical practice, linguistic problems have been suggested as a major obstacle, and similar findings have been made in various research studies, including studies in Australia (21), the USA (7), and Finland (3).

The use of slang, having a strong accent, and using complicated terminology without explanation contribute to the students' poor comprehension. Language barriers are evident in diverse clinical situations, including giving and receiving instructions and understanding information in reports (21). It has been recommended by the academic staff at the University of Queensland that foreign students be made aware of the differences between educational systems and approaches to learning in various environments. Also, training courses were suggested to help international students to learn to deal with these adjustments more easily (e.g., language skills) (20).

Positive experience was also noted by the students, with the majority of students describing the communication between them and their mentors as very good. They stated that if they did not understand information in Arabic, it was translated to English or another method was used to explain. Students felt support and sufficient guidance from the mentor and improved their language proficiency (5). Although students should be encouraged to take responsibility for their learning, Samuelowicz (20) recommended that academic staff should facilitate learning of international students through management of the learning context and efforts to change students' perception of learning. The students provided some recommendations to overcome these communication barriers, including using

standardized patients (SPs), a dictionary of medical terms in Arabic and English, and an Arabic orientation course before clinical placements. It has been known for a long time that an orientation period for diverse healthcare students in a clinical environment is very important (22); familiarizing students with patients, staff members, and facilities of the placement can help them with their diverse daily activities in the clinical environment. Several models exist for preceptorship in health professionals' education (6, 23, 24). However, Saarikoski et al. (6) concluded all types of preceptorships were significant and that students should have the essential language competence to ensure appropriate interpersonal relationship/learning within the clinical environment. Although, using standardized patients (SPs) is costly and requires faculty effort, the literature supports that the use of SPs is generally helpful and allows students to enjoy the experience. Exposing students to SPs can help them manage their feelings of anxiety and increase their ability to manage anxiety in the clinical setting (25).

## 5. Conclusions

Poor command of the clinical environment language can lead to positive or negative experiences and insufficient learning outcome which may cause challenges for the students. The staff members and clinical supervisors should encourage student to focus on their positive experiences which could help contribute to learning the language. Arabic medical dictionary, standardized patients, and successful orientation course can contribute to a significant role in facilitating clinical experiences. Intensive language courses in Arabic language before commencing clinical placement can be effective in limiting communication barrier that student might experience during their placements. Although the sample of the study was small, it could be used towards the development of Malaysian medical undergraduate program in Zagazig Faculty of Medicine.

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## Conflict of Interest:

There is no conflict of interest to be declared.

## Authors' contributions:

All authors contributed to this project and article equally. All authors read and approved the final manuscript.

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