

Impact of language on learning in Saudi Arabia's health sciences schools

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ABSTRACT

Language of instructions and communication between faculty staff and students are the fundamentals of understanding of knowledge and skills in health sciences schools. There is a consensus that language barrier is one of the major obstacles towards deep learning and innovation among health school students. Health Science students struggle especially during their first years to overcome the language barrier. There are several ways to overcome in order to deliver information to students in an easy, conceptual and understandable way.

Keywords: *Communication, language barrier, health sciences school, deep learning*

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Introduction

Language is considered the key for better understanding and good social communications as well as an excellent tool to deliver science and knowledge. Health care services and medical schools are part of the cultural environment and indeed are affected by language. There is a general consensus that Language barrier is one of the major obstacles toward deep learning and innovation among health sciences school students. A controversy exists regarding mother-tongue language and international languages such as English in the curriculum of health sciences schools. This issue has advantages and disadvantages.

It is well recognized among linguistics that human beings, using mother-tongue language, can easily express their emotions and feelings. Food and Agriculture Organization of the United Nations (FAO) has clearly emphasized that the mother-tongue language of children is bound to intellectual development. Their intelligence develops if they are taught in their mother tongue language.¹ In addition, United Nations Educational, Scientific and Cultural Organization (UNESCO) has stated in its 2008 newsletter: "Learning in the mother tongue has cognitive and emotional value."² Overall, the importance of children's mother tongue for their personal and educational development is well established.^{3,4}

Students as part of that, can easily deal with their mother tongue language and move toward complete recognition and understanding. They can perform better when using their mother-tongue language even if they are successful at using foreign language.

Teaching staff in Saudi Arabian health sciences schools notices that students struggle to overcome the language barrier especially during their first years. Evidence-based research studies conducted in Arab countries like Saudi Arabia, Sudan and Jordan observed that using mother-tongue language during education would improve the overall students' performance.⁵⁻⁹ An interesting study that examined medical students, interns and residents, proved that candidates reading speed in Arabic is increased by 43% and comprehension by 15% in comparison to English. As a result, their academic attainment may increase. In addition, they also found that the medical terminology represents only 3.3% of the total content of 10 medical books. Students were willing to use Arabic language rather than English language in their medical education⁹. Another study suggested that using Arabic, as native language, during the deliverance of information to students can enhance deep recognition and memorization of knowledge.¹⁰ In addition, Gulbrandsen et al found that

Doctors best retain medical information when reading it in their mother tongue.¹¹

On the other hand, using a foreign language to understand lectures, read books, and present knowledge during seminars is difficult for students who speak in different language. Some studies found that using English as the language of medical instruction (in non-English language countries) was affecting students' knowledge accumulation and academic duties^{12,13} and creating a gap in communications between non-native English students and patients.¹⁴

Students can be a way from linguistic dualism, thinking in one language and studying in different language, by using their mother language in the curriculum. Teaching curriculum of health sciences schools in some developed Countries like: Scandinavia, Germany, Austria and Japan are through their native languages and this has not constrained their contributions to the world health care arena as per World Health Organization (WHO) efficiency ranking.^{15,16}

If you take a deep look at the education curriculum in Saudi Arabia and the rest of the Arab world at the level of general education years (pre university years), you would notice that forms of communications, books, and teaching were completely in Arabic. This excludes the English subject, which is usually not enough to deliver the conceptual understanding of the topic. In addition to that, English is not used officially outside school in the region. All of a sudden after graduation from secondary school, English becomes the only tool for communication in health sciences schools. Although the ministry of education is trying effortlessly to encourage a greater use of English through pre university programs, the outcome has failed to meet expectations. Because of that, students with poor preparations of English language become astonished and frustrated and end up completely confused, threatened, demotivated, and lost in translation. This can affect student's knowledge, learning outcomes, performance and achievement, especially during their first years and consequently affecting their GPA. Only a minority can overcome this huge shift and the rest have to double their effort in order to exceed. This is another difficulty [using English], which adds to the difficulty of the scientific subject itself. A lot of effort is exerted from students who do not speak English as native language just to understand lectures, medical books, and seminars. A study conducted in Egypt showed that translation of English terms to Arabic is exerted by 44.8% of the students for better understanding and Arabic is the preferable language for communication and history-

taking from patients among 70.6% of students in their clinical study years.¹⁷

The rationale of Arabization in Arabic countries, moving toward Arabic as mother tongue language for medical sciences has been widely discussed in Arabic literature. Introducing Arabization in health schools, delivering lectures and seminars in Arabic while maintaining medical terminologies in English, can improve students understanding, and reduce their effort and time, while maintaining a reasonable English level as the leading language of health schools all over the world today. This has been the case in Japan, Germany, France, Scandinavia and some other European countries.^{15,16} Students need about twice the time learning in English as compared to their mother language as some researchers have stated.^{19,20} A study conducted in university of Gezira in Sudan found that students gained and did better when studying in their own language, Arabic.⁶ Other studies have also observed the effect of language on performance of medical students when they were taught in their mother tongue. Undergraduate students in the United Arab Emirates, Saudi Arabia, and other countries communicate better using their mother tongue (Arabic) than in English.²¹⁻²³ On the other hand, among decision makers, English is more preferable as the language of teaching because of the advantages that can be gained.¹⁸ Increase in anxiety and worries for health professionals when dealing with patients with a different language are present as found by different studies.²¹⁻²³ Furthermore, it is also well established that using Arabic would decrease the misunderstanding between physicians and patients using Arabic as native language. Studies conducted in Saudi Arabia and Lebanon showed that most of the staff and medical students feel more confident using Arabic language with the patients during history taking despite having their medical education in a foreign language.^{24,25} For the disadvantages of using native language rather than English as international language, postgraduate studies will be extremely tough for undergraduate students who studied in their native language to continue their postgraduate studies in international schools. Studying medicine is itself a difficult task. Studying medicine abroad with poor English performance can further burden students. Limitations in the cultural interactions due to language barrier are well established among non-native language students. International communication will be affected as well because English is the international language among health care environment. Good interaction and communication between students and non-native language staff will be

better established by using international language. In addition, one of the existing obstacle toward Arabization is the lack of resources and literatures. It is agreed that Arabic resources are insufficient and are not updated recently which surely affects the performance of students negatively.

Table 1. How to minimize the language obstacles for non-native English students during their medical school career

- Intensive English courses for the students who are planning to continue their career in health professions during their pre university years.
- Well revised, concentrated and intensified English courses during first year of the university that can fulfill the gap between pre-secondary and post-secondary education.
- Encouraging self-learning of English by the students to enhance their language accumulation.
- Encouraging students to read from English textbooks and resources rather than short notes during their university years.
- Encouraging faculty staff to translate difficult words and terminology to the students during lectures for better understanding and spending some time to correct their English even though it is not their duty.
- Students practice English during lectures, seminars, and discussion sessions.
- Medical books must be in a simple English language to facilitate non-native English students.

Conclusion

Teaching health students in Arabic language as a mother tongue versus English as an international language seems to be a debatable issue. Controversy between what decision makers prefer and what student's prefer is of value. Advantages and disadvantages should be weighed in order to choose the appropriate decision. It is suggested to provide an intensive English language courses for health sciences students who are planning to continue their career in health professions during their pre university years.

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