Letter to Editor

Gaps in Curricula of Medical Schools: Some Neglected Topics

Awad Mohamed Ahmed[1], Hatem Mohamed[2]

1. Professor of Medicine, College of Medicine, Najran University, Kingdom of Saudi Arabia
2. Faculty of Health and Life Science, De Montfort University, Leicester LE1 9BH, UK

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Corresponding author: Dr.Awad Mohamed Ahmed, College of Medicine, Najran University, Kingdom of Saudi Arabia.
E mail: awad.sd@gmail.com , Tel: 00966507317281

Abstract

In this paper we discuss that some important teaching topics are usually missing in curricula of medical schools. Examples taken were medical humanities, religious practices of importance to health and disease, euthanasia and domestic violence. The rationale of introducing these topics to undergraduate curricula and possible barriers were discussed. the is supplemented with two tables contain suggested components for sample lectures in Ramadan fasting as a religious practice of significant impact on health, and another sample lecture on domestic violence. Curricular reforms are needed to include these 'neglected' topics in curricula, and also to establish training programmes for doctors in the internship periods. The national bodies responsible of organizing and accrediting schools and programmes should ensure including the 'neglected' topics in curricula of medical and allied programmes.

Keywords: medical education, curricular reforms, medical humanities, euthanasia, religious practices, domestic violence

الملخص

في هذه الورقة يناقش المؤلفون مسالة اهمال تدريس بعض الموضوعات التدريسية في كليات الطب. من امثلة هذه الموضوعات المهملة الانسانيات الطبية و العنف الاسري و تاثير بعض الشعائر الدينية مثل صوم رمضان على الصحة و القتل الرحيم. الورقة تناقش مبررات ادخال هذه الموضوعات لمناهج الكليات الطبية، كما تقدم مقترحات هيكلية لمحاضرات في بعض تلك الموضوعات. هناك حوجة ماسة لاجتراح تغييرات منهجية في كليات الطب للتعامل الايجابي بما يختص بتدريس تلك الموضوعات المهملة.

كلمات مفتاحية: التعليم الطبي، النسانيات الطبية، العنف الاسري، القتل الرحيم

Introduction

It is noticed that some topics are either not included in curricula of medical schools, or not properly taught, despite their significant importance to health and disease. The result is that generations of doctors feel unprepared or incompetent to handle some health problems. Examples of such topics include euthanasia, domestic violence, medical humanities and impact of some religious practices on health (e.g. Ramadan fasting) on health and disease. This may lead to hindrance of providing therapeutic and preventive care to these problems. Even more, lack of screening of a problem like domestic violence leads to its escalation and sustainability of victims' abuse.[1] Some studies indicated the importance of doctors' teaching in modulating unhealthy

lifestyles.[2]

The barriers usually stated for ignorance of these topics include time constrains in an overwhelmed curricula, the negative view of some curriculum designers toward these topics as 'irrelevant' or even outside the scope of medical education, lack of training or interest of teachers in such topics and tendency to defer these topics to the internship period.[3]

Curricular reforms are needed to include the 'neglected' topics, and also to establish training programmes for doctors in the internship periods. The medical councils (or national bodies that organize medical education and practice) should encourage medical schools to perform the relevant curricular education and reforms. Development of capacity of teachers to handle the new topics is useful to fill the gaps.

Medical Humanities

Medical humanities are a set of human and social sciences, and arts that have applications relevant to medical practice, including cultural studies, philosophy, religion, literature, history, theology, anthropology, health laws, ethics, visual arts, and psychology.[4] The term 'humanities' is used interchangeably to include also social sciences such as sociology and anthropology. By now medical humanities are well integrated in curricula of medical schools in North America, Europe and Australia for more than four decades. Even more, some universities has started postgraduate programmes in medical humanities.[5]

Medical educators who advocate inclusion of humanities in curricula provide convincing reasons. Students (future doctors) should be sensitive and have an open attitude to issues such as gender differences, sexual orientation, and cultural diversity.[6] Some skills that are useful for better practice are usually learned from study of humanities including observation (arts), critical thinking (philosophy), empathy, analysis, initiation and leading simple negotiations (literature), deep knowledge of human experiences, and acceptance and understanding the differences and ambiguity (cultural studies).[7] Impact of culture on health, illness and self-reactions to body is well established. There is an increasing recognition of apparently social problems such as domestic violence as 'public health concerns' and their investigations need some knowledge of humanities tools.[4] Teaching on cultural diversity should focus on initiating and improving the communication between doctors and patients, and not as a way to avoid legal consequences of miscommunication and misunderstanding.[8]

In fact, a simple act such as providing a Muslim patient a special meal to break his religious fasting may send a good message of respecting the religious differences. [9] Students are better reminded that the 'normal' that is decided by a dominating group in a society, may mean oppression for other groups in the same nation.[6] Religious studies (a good symbol of human diversity) promote the student's knowledge of the impact of the patient's spirituality on his views on health and disease issues. Some religious practices, e.g. fasting may have effects on health and need some

effort to exert caution to avoid any harm on health. At times, there is a need to assess how students' beliefs may affect his future medical practice.[10] Of course it is illogical to seek biological explanation of disease from religions, but we focus on impact of religious beliefs, and practices on health care. For example, alcohol is strictly prohibited in the Islamic religion; there is a question on how a Muslim doctor can advise a non-Muslim patient on this issue.

One of the humanities that have a significant importance is philosophy. Study of philosophy sharpens the thinking skills needed for analysis of concepts, critique of ideas and sound reasoning.[11] These skills are useful in both medical study and practice. For example, philosophy helps in understanding the concepts of health and disease, and help to better reading and interpreting the patients' experiences and their views on health and disease, in the light of their sociocultural status. It is better that philosophy is taught integrated into the relevant items and themes in the curricula e.g. as philosophical points in the problem based learning topics, and not as traditional lectures on its classical abstract questions of philosophy such as epistemology or metaphysics.[11]

There are barriers of inclusion of medical humanities into curricula of medical schools in many parts in the world. The most important barrier is the negative view of some students and educators on medical humanities that they may take them away from the study of 'real medicine', or that it make no difference when doing their practice.[12] They believe that doctors are required only to be clinically competent. There is lack of staff training, or even familiarity with terms of humanities. The over-reliance on technologies alone may leads to diversion from "human" skills in practice.[8]

Some solutions can be applied to initiate and promote the status of teaching humanities in medical schools. Students should be encouraged to accept multiculturalism as a positive value. They will then enjoy learning about, and tackling patients of diverse cultures. Thus, eliminates a source of misunderstanding and secure good health care. A good course design may change the negative attitudes of students toward humanities teaching, with a flexible teaching and assessment methods. The resisting staff can be assured by that teaching of humanities would be just an 'adjunct', and not at the expense of the core of medical study. The curricular designers are required to focus on evidence-based materials rather than opinions. There is a need to develop postgraduate programmes (in liaison with relevant programmes of humanities and social sciences in other schools of the university) to train a generation of teachers with interest and good capabilities to introduce themes of humanities in their teaching.[9] The accrediting bodies of higher education institutions should encourage the medical schools to include new topics on their curriculum including humanities.

Impact of Religious Practices on Health: Ramadan Fasting As an Example

As an example of applicability of religious studies in medical practice, we will take Ramadan fating as an example. Ramadan fasting is one of the five pillars of the Islamic religion, where the adult Muslim is required to abstain from foods, drinks, medications, smoking and sex from dawn to sunset for one month every year.[13] The children, the sick, the pregnant and lactating ladies and the travelers are exempted from fasting, but many of them insist to fast including, sometimes, the fragile elderly. Ramadan as a month constitutes 8.5% of the total age of the Muslim. Ramadan has effects on the health status of persons with acute and chronic diseases.[13] Although, from the religious point of view, the decision to fast is individual, but the role of the doctor is to advise the patients (especially with chronic diseases) on any potential risks due to fasting so as to make it a safe practice. To provide an informed advice, the doctors should be aware to the basic facts on Ramadan, both religious, and its impact on health and disease.

There is an increasing interest of the academia and medical profession with health-related aspects of Ramadan fasting. Up to December 2016, the PubMed had revealed around 700 articles on impact of Ramadan on chronic diseases.[14] The EPIDAR (epidemiology of diabetes and Ramada) study on impact of Ramadan on diabetic patients involved 11,173 Type 2 and 1070 Type 1 diabetic patients during Ramadan.[15]

Despite the interest of research centers in Ramadan studies, but the situation in medical schools is different. Ramadan fasting is almost not covered in medical schools curricula, even in Muslim countries, despite its profound impact on health and diseases. The rationale strongly exists for inclusion of Ramadan fasting in both undergraduate curricula and training programmes of continuing medical education. Travelling around the world is easier nowadays so that many Muslims may attend Ramadan in a non-Muslim country; at the same time there are many Muslim communities in non-Muslim countries, some of them are sick and may need medical consultations regarding safety of Ramadan fasting. So the non-Muslim health personnel may benefit from a teaching stuff on Ramadan. In some Muslim countries such as the Gulf countries, a considerable portion of the health personnel are non-Muslim, that they deal with Muslims patients who may need consultations regarding Ramadan fasting. So they need to have some knowledge about religious and health related issues associated with Ramadan fasting.

Table 1 contains points suggested for a sample two hour lecture on Ramadan fasting for undergraduate medical students.

Table 1 Previous studies

Suggested points for a sample lecture on Ramadan fasting for undergraduate students

Basic facts on Ramadan	Who are required to fast, and who are exempted from fasting; Duration of Ramadan, duration of fasting hours per day.
Physiology of Ramadan fasting:	Hydration status, changes in glucose, lipids, uric acid, urea, creatinine, sodium, potassium, haematology, gastrointestinal functions…etc
Ramadan and the sick:	Impact of fasting on selected common disease, e.g. diabetes, dyslipidaemia; the informed decision of not to fast for persons with some diseases such as renal failure; disease that may need some precautions on fasting; minor tolerated symptoms such as mild headache due to deprivation of caffeine or nicotine.
Guidelines for a safe fasting:	Decision of safety of fasting; ill persons reminded of the religious allowance not to fast, patients with chronic diseases should consult their doctor shortly before Ramadan to decide on safety of their fasting, and what precautions needed in case of fasting; dietary requirement for both the healthy and ill person.

Euthanasia

Euthanasia is rooted back to the Hippocrates age (borne 460 before the Christ) who stated in his Oath that giving deadly drugs to patients is forbidden. There are deficiencies in undergraduate teaching on euthanasia; some medical schools do not include it in their curriculum, and some focus only on teaching factual theoretical knowledge and concepts of bioethics including euthanasia. This teaching format may not be as appropriate, as methods like case-based teaching or debate initiation for this issue which has no a yes/no response to many of its problems.

performed by the first author (AMA) had confirmed the desire of undergraduate students to engage in the current international debate on the issue of euthanasia.[16,17,18] One of these studies was performed among final year medical students in the oldest Sudanese medical school, with a response rate of nearly three quarters of the participants who were divided between opponents majority and supporter minority for euthanasia. The opponents stated reasons such as religious beliefs, fear of misuse if legislated and unethicality of this act. [16]

Those who supported euthanasia stated reasons such as saving dying patients intractable sufferings, and respecting persons' autonomy and dignity. [16] It is needless to say that the current opposition of students to euthanasia should not preclude its inclusion as a teaching topic. The situation may change in a coming day.

As a sensitive and ambiguous issue, teaching of euthanasia need some requirements. It should be taught from a neutral stand, away from the personal views of teachers. Clear definitions of relevant terms should be used, avoiding confusing terminologies.[19] Innovative teaching formats that encourage interaction, problem solving and debate initiation are more useful than the traditional lectures that cover the knowledge domain only. The student (future doctor) must learn a rational approach to handle euthanasia as an issue 'full' of uncertainties and ambiguities that he or she must be tolerant to.[20] Even the assessment methods may need to be modified to suit a debatable issue like euthanasia that has no yes/no responses to many of its aspects.

Domestic Violence

Domestic violence (DV) is an overwhelming public health problem throughout the world. One in ten women in North America is battered by her intimate partner.[21] In Turkey, the prevalence of DV is ranged between 34 and 58.7%.[22] A study done by the first author in Sudan revealed a DV incidence of 41.6%.[23]

Not a few doctors bear the belief that DV is not a health problem. But why DV is a health problem? Domestic violence results in a wide range of health problems,
organic, mental and sexual.[24] Up to 1-2 out of ten women attending emergency departments may have problems rooted to.[25] Also some apparently unexplained problems such as chronic pains, fatigue, headache, anxiety or sleeping disorders may be due to DV.[24] Biological effects of pregnancy, drug addiction, problem alcohol drinking may increase the risk of violence in families.

Health care of abused victims suffers many deficits. Health carers believe that DV is a rare, purely social problem, and thus, case identification is not their role. [21] A survey done in Sudan indicated the low knowledge and preparedness of health personnel to manage DV cases.[26] What is worse is that some health personnel may share the same negative societal values against the abused women (deserve to be punished by husbands).[22] The low (or even no) place of DV in curricula results in suboptimal capabilities of graduating doctors to deal with the abused women. Some studies had reported that health professionals including doctors are not well prepared to meet the requirements of care of abused women, and even do not know what simple questions to ask to identify the possibly abused woman.[27] Sixty per cent of the Canadian health professionals in one study reported that they never received education on DV.[27] A survey in 116 North American medical schools revealed that 53% of them did not offer training in DV. Ten years later, another survey revealed that 40% of them do not offer training on DV.[27] Even

in the few schools that offer training in DV there are some shortcomings.[27] The content of the teaching material is incomplete, time dedicated is scanty and instruction methods are inappropriate.[27] In many schools there is an interdepartmental competition for instruction time (and what is relevant and irrelevant from their own point of view), leaving DV and some other topics such as medical humanities "marginalized" in schools' curricula.

Domestic violence is rarely (if ever) included in medical schools' curriculum in many parts in the world, so the doctors and other health personnel are not taught or trained to identify, support or refer DV victims.[28] Training of medical students on DV enhances the preparedness and confidence on dealing with DV cases.[27] The unprepared doctor may harm victims by minimizing their sufferings and increasing their sensation of entrapment.[26] It should be made clear to the curriculum designers that the health care professionals are obliged to care the victims of DV like other patients. An easy and time saving way to face the 'traditional minds' in schools is to incorporate DV in the problem based 'scenarios' in the relevant body systems. There is a need for studies to investigate the knowledge and attitude of doctors on DV as a step toward designing an appropriate course for both under- and postgraduate studies.[22] Some educators advocate that teaching of DV adopt a case finding or diagnostic approach, that is similar to the core curriculum of clinical medicine, and this may enable doctors to deal with a large sectors of victims that suffer health sequelae of DV in silence, and usually 'misdiagnosed' by inexperienced doctors. Table 2 shows suggested components of a sample lecture on DV for undergraduate student, suitable for medical and other allied health disciplines

Table 2
Suggested points for a sample lecture on domestic violence for undergraduate students

•Definition of domestic violence
•Why domestic violence is a health problem
•Who batters who in domestic violence
•Causes, risk factors and immediate triggers of violent events in domestic violence
•Patterns of domestic violence
•Possible responses of the abused wife
•Health sequelae of domestic violence
•Major lines of management of domestic violence cases
•Steps in prevention of domestic violence
•What is expected of scientific research

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