

INTEGRATING SOCIAL SCIENCES AND HUMANITIES IN MEDICAL EDUCATION: A CASE FROM PAKISTAN

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Abstract

Relationship between medical education and social sciences and humanities is an emerging field within health and medical sciences. How social sciences and humanities (SSH) consider their role in professional education in general and medical sciences in particular is yet to be explored jointly and systematically. This paper presents, as a case, how a private institution in Karachi, Pakistan, has consciously and systematically integrated SSH in its undergraduate and graduate education programs. SSH in this institution is grouped into two initiatives – Bioethics, and Humanities and Social Sciences. The paper describes what has been achieved over the last twenty years, including the challenges faced and overcome. It will explain how it became possible for the institution to go beyond the traditional practices of focusing only on medical sciences. Finally, the challenges faced in building partnerships between medical and social sciences will be discussed. Following an introduction that outlines the vision and mission of the institution that provided the space for integrating SSH in its medical education program, both at the undergraduate and graduate levels, the paper describes the content, pedagogical approaches, challenges and the way forward for (1) teaching of humanities and social sciences, (2) bioethics and (3) behavioural sciences in the undergraduate medical curriculum; and (4) social sciences in the Masters program of Community Health Sciences Department.

Keywords: Social sciences and humanities (SSH), Ethics, Medical Education

Introduction

Aga Khan University (AKU) is a private university with a mission to serve the developing world. It has eleven campuses spread across eight countries and three continents. This paper focuses on experiences at the Medical College, which was established in 1983 as a part of the Aga Khan University's Faculty of Health Sciences in Karachi, Pakistan. AKU's Medical College strives to train health professionals who will be leaders in the field, equipped with the necessary knowledge and skills required to address the healthcare needs of Pakistan and other developing countries.

A good health professional is more than just a competent nurse, good diagnostician, skilled surgeon or gifted scientist. In addition to technical knowledge and skills, a good health professional must also be equipped with the knowledge, skills and attitudes to critically analyze situations, reason morally when presented with ethical dilemmas and work in culturally diverse environments. These concerns were part of the discourses on medical education in UK and the US. For the development of holistic medical/health professionals with both technical and humane judgment skills, humanities and social sciences were marked

as the need of medical education in UK (Macnaughton, 2000). The North American model of a pre-requisite of completion of a four year undergraduate liberal arts degree prior to enrollment in a four year medical school is well-established. This discourse was active by the time the AKU Medical College enrolled its first cohort of students in the five year undergraduate medical program in 1983.

The regulatory body of medical education in Pakistan, Pakistan Medical and Dental Council (PMDC) required the inclusion of Islamic and Pakistan Studies in the medical curriculum, AKU began to fulfill these requirements under the guidance of its Chancellor and Board of Trustees, and its founding administrators and faculty. The institution thus benefited from wisdom and cumulative years of diverse experience of its founding fathers that helped to chart an unprecedented course in Pakistan and more importantly, as the first private medical college in Pakistan. This was a bold and creative exercise to implement a unique vision of an international Islamic university committed to excellence in teaching and research, and leadership development. Thus, the idea of broader education for the Faculty of Health Sciences was very much a part of the future vision of the University.

The broad based thinking was rolled out with, the School of Nursing programs developed in partnership with McMaster University. It contained social science courses in the curriculum with an aim to develop an appreciation of art, music and anthropology, among other subjects. The medical college followed the making of the nursing schools, and carried with it intensive discussions around the duration of the course as well as its non-clinical contents. The debate was whether the medical education should be preceded by one or two years of humanities and social sciences studies, or whether these subjects should be integrated within the five year curriculum of the medical college. The final decision on this matter resembled the 7-year joint pre-medical and liberal arts degree offered at several American universities.

Today, the Medical College includes, in its undergraduate and graduate curriculums, ethics, behavioral sciences and social sciences. The Residency program of this institution has also integrated a bioethics program for all its residence. Bioethics is most soundly established as the institution has three active bioethics related groups, namely, Ethical Review Committee, Hospital Ethics Committee and Bioethics Group. Together they strive to inculcate and uphold an institution-wide culture of ethical and professional practice.

Humanities and Social Sciences in the undergraduate medical curriculum

The regulatory body of medical education in Pakistan requires the inclusion of 50 hours of Islamic Studies and Pakistan Studies (IPS) in the five-year medical curriculum. No student could be awarded a degree without having passed this course. Initially the marks of this course were included in the students' final aggregate when they graduated. Over time this criterion was discontinued, however IPS has continued to remain a compulsory passing course. At AKU, this component is taught over the first year of medical college. It was placed under the overall title of Humanities and Social Sciences (HASS).

Initially, topics of humanities were randomly added to the already set format of the IPS course which ran throughout the entire academic year, with a four week elective at the end of the first year. In 2011, a concentrated 2-week HASS was implemented and in the following year, 2011-2012, a 5-week HASS module was implemented before the medical studies began, followed by 6-week modules in 2012-2013 and 2013-2014. These extended modules have given the students the opportunity to explore diverse areas of learning.

Courses Offered

All students are required to take two subjects (Religions of Pakistan and Pakistan Studies: Partition to the Present: Heartbreak, Hardships and Hope) and choose three electives

from 16 courses offered: English Literature, Urdu Literature, Languages (Spanish, Chinese Arabic or Persian), History of Mathematics, Introduction to Social Science, Introduction to Philosophy, Introduction to Law, Introduction to Media Studies, Introduction to Documentary Film-making, Music, Theatre, Photography, Fine Arts, Hollywood on Morality, Creative Writing – Non-Fiction, Art, Politics and the Performing Body

Pedagogy and Assessment

No pedagogy is prescribed, but interactive/participatory approaches to teaching is encouraged. Thus, the faculty is at liberty to use any pedagogy and assessment style s/he considers most effective. Assessments include end of the course exam, in-course quizzes, short write-ups, extended essays, project work or class presentations. At the end of the HASS course, the faculty is invited to discuss pedagogical and assessment issues, and discuss the students' feedback that is shared.

Challenges

The overall feedback from the students and the faculty has been encouraging, but some challenges have been identified around three domains -- faculty, venues, and students' attitude. As almost all of the faculty come from outside AKU, their availability for the coming year cannot be ensured. Being already committed elsewhere, the time and days they can give to HASS is not always negotiable and thus preparing class schedules become difficult. With rapidly expanding educational programs and related activities, it is not possible to fix physical spaces for the electives. Though the issues get resolved every year, the challenge remains. Being constructed as a science college, AKU does not have rooms which are conducive for some humanities courses, for example, Arts and music. The average age of the students is 17 years, and given the dominant understanding of medical education has only clinical subjects, students have difficulties in understanding why HASS has to be studied as it is not "hard science". Although the subjects are mandatory and attendance is taken, students know that these studies do not impact their aggregate marks at the end of the professional exams. Their resistance to HASS is thus often reflected in their non-serious attitude.

Way Forward

Over the last three years, a marked positive change in the students' reaction to the HASS module has been noticed. Not only do they enjoy the courses, but have begun to understand the impact it could have on them as more humane and socially-equipped medical practitioners. It has been decided to continue with the current practice, and to look for extending the courses through out the remaining years of medical education. How this is to be done remains to be tested.

Bioethics in the undergraduate medical curriculum

Medical practice goes hand-in-hand with ethical dilemmas that arise amidst scarcity of resources and futility of care. Realizing that there persists a concern for addressing disregard of ethical behavior in the healthcare sector, the bioethics curriculum strives to introduce bioethics to the medical students through a diverse range of contents and pedagogies. A new curriculum was made and implemented in 2011 to a class of 100 students.

Content

In the first two years, the content is a mixture of moral philosophy and applied clinical ethics. Topics include: reasoning about moral dilemmas through reflexivity and logic; the four principles of bioethics; major ethical theories; history of bioethics; the role of the doctor;

consent and confidentiality; truth-telling; ethics of behavior; the ethics of organ trade; conflict of interest; priority setting and rights of patients and vulnerable groups.

Pedagogy

The overall goal of the Aga Khan University's bioethics curriculum is to produce students who can reason and articulate their positions when faced with ethical dilemmas in their lives as medical professionals. Case studies and problem solving exercises are used to optimise students' engagement with the topics under discussion. Worksheets are also used in which students write down their responses to specific questions, and then share them with the larger class.

Challenges

A major challenge in implementing the bioethics curriculum has been finding faculty who are available to plan the teaching content and deliver lectures. Since the Aga Khan University does not have a Bioethics department, this task has been taken up by a voluntary group of interested doctors and educationists who are also member of the Bioeths Group and constitute a sub group called: Bioethics Teaching Group , which meets routinely to plan lectures and workshops for students. Another challenge is to organize tutorials for the bioethics sessions.

There have been concerns that ethics cannot be adequately assessed through a 5-minute OSCE station that is competing in content with other equally time-consuming themes such as communication skills and the behavioral sciences. Assessment continues to pose a challenge and the Bioethics Teaching Group continues to resolve this. Furthermore, while the continuous assessment form is a valuable assessment tool, monitoring ethics can take a backseat when several other clinical attributes are also being assessed. Finally, perhaps the biggest challenge is embedded in the need to create an overall culture of ethical responsibility and accountability within all medical professionals that students interact with on a daily basis.

Way forward

Thsoe teaching bioethics continue to be active in the Bioethics Group where collective thinking and planning guides the working of the group. Organizational ethics is a continuing theme of this group and provides a valuable base for strengthening bioethics teaching at AKU.

Behavioural Sciences in the undergraduate medical curriulum

The need to integrate Behavioural Sciences (BS) in medical training is well recognized. This is based on the fact that a simple disease-based model does not adequately explain the difficulties in the diagnosis and management of many medical disorders. There is strong evidence to link biological, behavioral, psychological and social variables to health and illness (Humayun & Herbert, 2011).

BS has been taught at AKU for several years now and is one of the subjects covered in the longitudinal themes that cut across disciplines and year of study. Its objectives are: (a) introduce students to the limitations of narrow biological approach to health and disease; (b) help students understand the bio-psychosocial model of health and illness; (c) students to become aware of areas of psychology that are relevant to medicine.

Contents

Behavioural Sciences are taught over the five years, and include: (a) Introduction to Behavioral Sciences; (b) Life Span Development, which include: Early Childhood, Middle Childhood, Adolescence and Adulthood, Aging ; (c) other topics: Family Functioning and Dynamics, Psychological Reactions to Stress, Introduction to Behavioral Neurology, States of

Consciousness, Intelligence, Motivation and Emotion, Aggression and Violence, Learning and Memory, Behavioral Effects of Alcoholism, Human Sexuality.

In addition, particular emphasis is paid on the teaching of communication skills as a longitudinal theme, including intervention styles and dealing with difficult patients.

Pedagogy

BS is taught through interactive large-class format (LCF) sessions, tutorials, workshops, videos, role playing, patient interviewing and BS content linked to problem-based learning (PBL) cases. Bioethics, communication skills, professionalism and behavioral sciences are integrated in interactive workshops, in which students present real-life cases followed by a panel discussion.

Challenges and way forward

Although Behavioural Science is being taught in the undergraduate medical curriculum the content needs to be sequenced properly. Some additional topics need to be taught and existing topics need to be strengthened. Concepts have to increase in complexity over the years in keeping with the 'spiral' nature of the curriculum. BS needs to be further integrated of with other longitudinal themes and components such as humanities and social sciences (HASS) and bioethics and redundancies removes. Role modeling by faculty remains one of the biggest challenges - what students learn in behavioral sciences has to be practiced by their teachers on the ward floor and clinics.

Social Sciences in the Masters program

The field of social sciences encompasses a wide range of topics from which post-graduate medical education can pick and choose. Selection would not be easy, but possible if purpose of integration is clearly articulated. Epidemiology and biostatistics, for example, are well recognized areas of Master's program worldwide. However, what aspect of social sciences should be known to students of epidemiology and biostatistics (Epi-Bio) can be debated. A Masters level course for Epi-Bio students was developed around three concepts considered relevant at our institution: ethics, equity and rights.

Content

The two credit course on ethics, equity and rights in health, includes introduction to some ethical theories, western and Islamic sources of understanding ethics, linking ethics with health systems and how these are differently shaped by the development paradigms of the countries (thus drawing attention to the capitalist and socialist approaches to health and developemnt). Notions of justice as fairness and how rights are understood through the various UN instruments are also an integral part of the course.

Pedagogy

Students are required to write summaries of the reading assignments and lead the discussion in classes. Presentaitons are made by faculty and grup work is used. Films and videos are also used to generate discussions.

Challenges

A typical physician in a developing country like Pakistan is trained in diagnosis and treatment of diseases. Study of ideas like ethics, equity, and rights requires reading material which is very different from the readings required in medical education. This difficulty is compounded by poor reading habits, whereby newspapers are not read, nor is there a habit of reading literature, history, philosophy, sociology and anthropology. Furthermore, how social

sciences are relevant does not make sense to the physicians aspiring to learn epidemiology and biostatistics. The pedagogy needed for these two disciplines is different and would require a different approach. In one case (Epi-Bio) analytical skills needed are different from analytical skills required in social sciences. This difficulty in understanding the relevance of social sciences combined with extremely poor reading habits creates an attitude not conducive to learning. Instead of honestly struggling to learn, resistance to learning emerges and the very inclusion of social sciences is questioned.

Way forward

Dialogue and negotiations with students over the pedagogy used and what educational theories guide the pedagogy needs to continue. Furthermore, larger discussions at the department level are also needed so that difficulties faced are seen as issues for the department and not only of the director of the course.

Bioethics in Post-Graduate Medical Education

Post graduate medical education (PGME) at Aga Khan University started its first training programs in 1986. Currently it has residency programs in 32 disciplines along with 28 sub-specialty Fellowships. AKU attracts young doctors from all over the country, and some from neighboring countries, who compete for more than 570 positions in the 50 programs. The impact of AKU PGME has been felt nation-wide, as its systems and processes have helped and influenced postgraduate medical education all over Pakistan.

Content

The generic academic activities include lectures on various topics of bioethics, along with a half day consolidated workshop for postgraduate year II, which is repeated again at year IV level with a higher level of discourse. Sessions included are on confidentiality, integrity in research, physician-pharmaceutical relations, introduction to basic principles of clinical ethics.

Pedagogy

The vision of PGME at AKU is to provide excellence and innovation in specialized medical education and to ensure professional, ethical and moral development of trainees at all levels. Individual programs have a core curriculum that mostly encompasses the scientific knowledge based education. PGME runs a parallel generic curriculum which covers crosscutting themes such as communication skills, research methodologies and professionalism. These include mandatory workshops and lectures conducted by subject experts to various levels of trainees across all disciplines and specialties.

Workshop starts with a short video (<http://www.siut.org/bioethics/CBECProduction.html>) that highlights the issues of respect for person and unprofessional attitude of doctors towards patients. It covers the issues of consent taking, privacy and patient autonomy. A facilitator leads an interactive discussion highlighting the learning objectives of the video. This sets the stage for three case-based small-group discussions on each of the above sub-themes. Once the groups have gone through the in-depth discussions they gather in the larger class to have facilitator-led interactive discussion which ties these sub-themes together under the umbrella of 'respect for person'.

Bioethics Grandrounds: The bioethics groups conduct quarterly symposia on various themes of clinical and organizational ethics which is attended by trainees along with medical students and faculty. These sessions are mandatory for the trainees to attend, and all other clinical and academic activities are suspended during this time. Issues like disclosure and

truth-telling, end-of-life care, academic freedom, etc. are presented and deliberated upon by experts in these grand rounds.

Challenges

Bioethics curriculum for the Residents continues to be person dependent rather than becoming institutionalized. Dearth of faculty is also a challenge as this teaching is voluntary.

Way forward

As a broader and more comprehensive mandatory curriculum in bioethics for post graduate trainees is to be institutionalized. Innovative teaching techniques and blended learning approaches to facilitate learning of trainees in a time efficient manner needs to be further explored. Efforts are underway to develop a mandatory short course in a blended learning format for the post graduate trainees at the Aga Khan University.

Conclusion

Teaching of humanities and social sciences and bioethics has come to stay at AKU. Whether it is the undergraduate medical education, or post graduate programs, the issue is not whether these subjects are to be taught. The issue is how the contents and teaching continue to improve. Faculty development plans are discussed to strengthen the faculty for taking forward the concerned subjects. While Bioethics Group at AKU continues to advance ethical concerns both in teaching and research and within the organization, a Humanities and Social Sciences Group is also needed to help establish the relevance of humanities and social sciences to medicine and health, not only in research but also in health services and education. This is work in progress, and embodies a determination to continue striving for excellence.

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The authors acknowledge Dr. Syeda Kauser Ali for her role in initiating this submission.

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