INTRODUCTION

The role of medical ethics in medical education has had an established history for over two millennia. The most commonly referred document of medical ethics is the Hippocratic Oath. The association of medical ethics with teaching and training and health profession has been informal, largely dependent on role modelling and the social contract of the physicians with the community that they abide by. In the United Kingdom (UK) the discussion of the opportunities for the medical students to learn about ethics was prompted by the Pond Report in 1987 and established through the General Medical Council’s subsequent recommendations regarding the subject in 1993 through its document: ‘Tomorrow’s Doctors’. In 1999, the UK consensus statement described how medical ethics and law shall be part of a core curriculum in a coordinated effort by major medical schools in the United Kingdom, including teaching, learning and assessment in medical ethics in the undergraduate medical curricula. Literature, overtime, has reported establishment of medical ethics as a taught and assessed subject not just in the UK undergraduate curriculum but elsewhere in the developed world.

Professionalism, medical ethics, medical law and the social contract have been established constructs of health profession practice not only in the West but also in the Eastern and Middle Eastern culture. The various communities have allowed health professionals to regulate their practice based on the high trust placed on them. This trust was rooted in the healing powers of the practitioners, their ability to communicate effectively and their professional practice depending on the environment and the social contract have been established constructs of health profession practice. Whereas, knowledge gained and skills acquired in undergraduate and postgraduate training would mould to fit into professional practice depending on the environment but would still largely conform to evidence based medicine, in the case of professional behaviour and ethics, the environment and role models can shape development of behaviour and practice positively as well as negatively.

ORIGINAL ARTICLE
BEHAVIOURAL SCIENCES AT UNIVERSITY OF HEALTH SCIENCES: THE WAY FORWARD

Junaid Sarfraz Khan, Osama Mukhtar, Saima Tabasum
Department of Examinations, University of Health Sciences, Lahore-Pakistan

Background: The association of medical ethics with teaching and training and health profession has been informal, largely dependent on role modelling and the social contract of the physicians with the community that they abide by. This study was conducted to examine the effect, if any, of introducing the subject of Behavioural Sciences on students’ performance in the clinical years’ ‘viva voce’ and ‘patient interactions’ components of the examinations. Methods: A prospective study on four cohorts of students at UHS from 2007 to 2012 (8,155 candidates). Reliability was calculated through Cronbach’s Alpha. Linear Regression Analysis was applied to determine the relationship between the scores of Basic Medical Sciences, Behavioural Sciences and Forensic medicine with the viva voce and Structured Stations marks of the Clinical Sciences in OSCE. Gender and demographics analysis was also done. Results: Cronbach’s Alpha was 0.47, 0.63, 0.67 and 0.53 for the Papers of Behavioural Sciences from 2007 to 2010 respectively. Poor predictive value of Behavioural Sciences for performance in the clinical years’ viva voce and OSCE was identified. Basic Medical Sciences and Forensic Medicine were statistically significant predictors for the performance of female candidates in all four cohorts of the study (p<0.05). In Central Punjab, Behavioural Sciences statistically significantly predicted for better performance in all four cohorts of the study (p<0.05). Conclusion: It is premature to understand the results of Behavioural Sciences teaching at University of Health Sciences (UHS). We can still safely conclude that it can only have a positive sustained effect on the healthcare delivery systems and patient care in Pakistan if it is integrated within each subject and taught and learned not as a theoretical construct but rather an evaluation of one’s values within the code of conduct of medical professionalism in the larger context of the societal and cultural norms.

Keywords: Behavioural Sciences, Medical Ethics, Medical Law, Professionalism, Societal norms.


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A number of techniques are being used for teaching medical ethics. These include medical dramas, incident reports, patient encounter videos, case reports, scenarios, role modelling, peer or group learning, critical decision making exercises etc. Literature from the West reports an increase in whistle blowing opinioned to be the result of the focused medical ethics teaching program. As already stated, teaching of medical ethics has more complex learning and teaching pathways, since medical ethics, professionalism and behaviour are also social constructs and cannot be separated from the values related to ethics and professionalism of the society.

In Pakistan, medical ethics and communication skills were introduced as a taught and examinable subject in the University of Health Sciences Lahore in 2007. The name given to the subject was ‘Behavioural Sciences’ taught over the first three years of Bachelor of Medicine; Bachelor of Surgery (MBBS) curriculum and assessed in the end of year examination of the third year of medical education through Multiple Choice Questions (MCQs), Short Essay Questions (SEQs), Objectively Structured Performance Evaluation (OSPE) stations including psychosocial assessments of patients. It is believed that over time Behavioural modifications introduced through this subject would improve the quality care provided by health care professionals in the community. The introduction is still recent and its effects upon patient care cannot be fully understood at present. However, the aim of this paper is to examine the effect if any of Behavioural sciences on students’ performance in the clinical years’ ‘viva voce’ and ‘patient interactions’ components of the examinations.

**MATERIAL AND METHODS**

It is a prospective study. The objective of the study was to determine the impact of Basic Medical Sciences, Behavioural Sciences and Forensic Medicine subjects on the Viva voce and structured station marks of the Clinical Sciences Subjects in OSCE. Subject of Behavioural Sciences was included in the course for MBBS students in 2007. Four cohorts passed through MBBS course after the inclusion of Behavioural Sciences subject. These four cohorts from 2007 to 2012 were our population of the study (8,155 candidates). Reliability of the Behavioural Sciences paper was calculated through Cronbach’s Alpha. Linear Regression Analysis was applied to determine the relationship between the scores of Basic Medical Sciences, Behavioural Sciences and Forensic medicine with the viva voce and structured stations marks of the clinical sciences in OSCE. Linear Regression Analysis was also used on the same variables by taking gender and demographics of the candidates under consideration. p-value of less than or equal to 0.05 (p<0.05) is considered as statistically significant.

**RESULTS**

The values of Cronbach’s Alpha were 0.47, 0.63, 0.67 and 0.53 for the question papers of Behavioural Sciences from 2007 to 2010 respectively. These results of Cronbach’s Alpha show moderate internal consistency reliability.

Linear Regression Analysis was applied on marks of the candidates in viva voce and structured stations of clinical sciences by taking marks in Basic Medical Sciences, Behavioural Sciences and Forensic medicine as the predictor variables.

In the cohort of 2007, the linear regression analysis showed that the regression model for Basic Sciences subjects and Forensic Medicine was statistically significant (p<0.05) but not so in the case of Behavioural Sciences. Results of the Coefficient of regression for the regression equation are presented in table-1.

In the cohort of 2008, Regression Model of all three predictor variables were found to be statistically significant for the dependent variable “Clinical Sciences”. Results for regression equation are presented in table-1.

In the cohorts of 2009 and 2010, only regression model of Basic Sciences was found to be statistically significant and Behavioural Sciences and Forensic Medicine regression models were not significant in both the cohorts (p>0.05). Coefficients of Regression are presented in table-1.

To determine the same impact on the basis of different genders and locality, the whole data of four cohorts were divided according to the gender and localities and Linear Regression Analysis was applied on marks of the candidates in Viva voce and structured stations of clinical sciences in OSCE by taking marks in Basic Medical Sciences, Behavioural Sciences and Forensic medicine as the predictor variables.

Results of Linear Regression showed that the Basic Medical Sciences and Forensic Medicine were statistically significant predictors for the performance of female candidates in Viva voce and structured stations of clinical sciences in OSCE in all four cohorts of the study (p<0.05). However, females’ performance was not predicted significantly by Behavioural Sciences. None of the three independent variables were statistically significant predictors for the performance of male candidates in viva voce and structured stations of clinical sciences in all four cohorts of the study (p>0.05).
DISCUSSION

One of the limitations of this study is that it assumes that better performance in the subject of Behavioural Sciences learnt over the first 3 years in the MBBS curriculum would translate to better performance in components of the clinical years’ examination where attitudes, behaviour, communication skills and body language matters at the time of viva voce and patient interactions. It might very well be that we are comparing oranges with apples since there is a lot more that matters in the clinical years’ examinations than just medical ethics, medical law, communication skills and body languages. Nevertheless, the authors believe that till the full impact of the introduction of the subject of Behavioural sciences in the undergraduate medical curricula in Pakistan can be fully understood, something that might take another 10 years, an assumption that teaching and training in medical ethics, medical law, communication skills, conflict resolution, counselling and other sociological, anthropological and psychosocial aspects of health and disease improve student performance in examination and patient interactive components of examination may give an indication of the effect of the subject on Behavioural modeling.

The subject of Behavioural Science at UHS covers medical etiquette, professional ethics and medical professional code of conduct with emphasis on an attempt to adapt to rapidly changing technological environments and the politico-socioeconomic pressures on decision making. It concerns with the day-to-day dilemmas and professional responsibilities faced by health professionals in their practice. In the West, medical ethics and law has become an integral component of the undergraduate health professional education. However, the curriculum is not designed towards impressing contents, implications and application of moral values upon the students but rather sensitizes them to the moral values of the society, the professional code of conduct in relation to that and the implication of these moralities. It provides them with the existing ethical guides that safeguard current practices and the reasons for it and the moral medical code of conduct within the societal moral values. It allows students to question their own moral structures and those of their patients and peers and how they interact with each other. It allows them to critically analyse the current practices in terms of attitudes, behaviours and moral decisions in order to recognize alternative pathways when they encounter moral dilemmas. The purpose of the entire course which in many institutions runs through the entire length of the program and is integrated at every level is to develop a personal moral stance that shall remain unaltered at even the worst of times. This cannot be achieved without exposing the students to a holistic awareness of their social contexts and norms. It helps when medical ethics is taught not as a subject for teaching and learning content but as values and Behavioural modifications necessary to become a good doctor. Under the circumstances, it would therefore be best to guard against philosophers and pure Behavioural scientists from teaching professionalism, medical ethics and medical law to our students. It may very well be more effective if clinicians supervised and sensitized by Behavioural scientists are involved in the teaching-learning
processes through case studies, studies of ethical dilemmas, simulated or real patient encounters, group discussions, video recordings of clinician-patient encounters, scenario and problem-based learning, critiquing of management plans, critical analysis of medical dramas, incidence reports, society’s response to medical ethical issues etc.11,20,21 Since assessment drives learning, reflective assignments, constructed around Kohlberg’s model, common ethical dilemmas, psychosocial assessment, portfolio assessment and scenario based questioning can be an effective tool to develop professionalism and ethical personality stance. In the opinion of the authors, this can only be achieved through integrating the Behavioural Science concept within each subject and assessing it formatively and summatively in all examinations in the undergraduate course. This would make the concept part and parcel of all training and learning processes within the curriculum.

CONCLUSION

Even though it is pre-mature to understand the results of Behavioural Sciences teaching at UHS, we can still safely conclude that Behavioural Sciences can only have a positive sustained effect on the healthcare delivery systems and patient care in Pakistan if it is integrated within each subject and taught and learned not as a theoretical construct but rather an evaluation of one’s values within the code of conduct of medical professionalism in the larger context of the societal and cultural norms. It would require training and teaching of the faculty by Behavioural scientist and sociologist. It will also require continued and sustained supervision of all aspects of teaching and learning in Behavioural Sciences and its assessment throughout the program. But it will require a move away from purely theoretical and philosophical training by the ethicists.

AUTHOR’S CONTRIBUTION

JSK: Introduction, Methods & Conclusion. ST: Discussion & References. OM: Data Analysis.

REFERENCES


Address for Correspondence:
Dr. Junaid Sarfraz Khan, Controller of Examinations, University of Health Sciences, Khayaban-e-Jamia Lahore-Pakistan
Tel: +92 42 99231218
Email: junaid.sarfraz@hotmail.com