ORIGINAL ARTICLE

Knowledge of Social Accountability in Medical Education among Faculty Members at Medical Sciences of Mashhad University

Background: Medial educations' models should train physicians with competencies and commitment to meet health needs in the community. This social accountability in medical education is not a new concept but provides equity, quality, relevance and cost-effectiveness in health care system. The aim of this study was to assess the knowledge of faculty members towards the situation and activities in this topic.

Methods: 133 university faculty members participated in this research from seven schools (Medical, Dentistry, Pharmacy, Nursing, Paramedical, Health and Complementary Traditional Schools) at Medical Sciences of Mashhad University (MUMS) in Iran during 2012-2013. A questionnaire was distributed to faculties that asked about their knowledge about social accountability in medical education and its position at this university.

Findings: The mean knowledge about social accountability was 3.80 ± 0.423 in clinical and 3.81 ± 0.368 in basic science faculty members ($p>0.05$). The mean knowledge in Professors, associates and assistant professors were 3.79 ± 0.11, 3.79 ± 0.08 and 3.90 ± 0.09, respectively ($p>0.05$). The faculties at Pharmaceutics School got the lowest level in this research.

Conclusion: The level of knowledge among faculties at MUMS on educational accountability is limited, and is lowest at Pharmaceutics School. There is a need for informing the necessity, development of position and concepts about this method among faculties, especially at Pharmaceutics School, to improve health services.

Key Words: Medical Education, Social Accountability, Health Care System

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دراسه آراء اعضاء الهيئه العلميه في جامعه مشهد للعلوم الطبيه في مجال التعليم الطبي الجيب.

التمهيد: على التعليم الطبي ان يربي اطباء متمهدين و ذوصلاحيه بمايتناسب مع متطلبات المجتمع و هذه الاجابه الأجتماعيه تكون لاجل حصول البشر على اربعه قيم هي المساواة و الكيفيه، التواصل و المردود في الخدمات الصحيه.

الأسلوب: إن هذه الدراسه المقطعيه و التحلليه اجريت عام ١٣٩٠ ه ش في كليات الطب، طب الاسنان، الصيدله، التمريض، العلوم المرتبطه بالمجالات الطبيه، الصحه و الطب البديل على ١٣٣ شخص من اعضاء الهيئه العلميه. تم استخدام استمارات قد صممت من قبل المحقق و اعطيت الى المشتركون في هذه الدراسه.

النتائج: كان ٨٦ شخص من الذكور ٦٥٪ و ٤٧ شخص من الإناث ٣٥٪ في هذه الدراسه. لم يكن هناك اختلاف بارز في الاراء بحسب الرتب العلميه. الموارد الخاصه $P<0.001$، ادراة الصحه $P<00.01$، ادارة العلاج $P<00.1$ لم يكن هناك اختلاف ذوقيمه بين الكليات و لكن على العموم اعضاء الهيئه العلميه في كليه الصيدله كان لديهم معلومات اقل بالنسبه الى السؤالات المطروحه في الإستمارات.

استنتاج: نلاحظ ان مستوى المعرفه في هذا المجال قليل عند اعضاء الهيئه العلميه و في هذا المجال اقل مستوى كان عند كليه الصيدله و لذا يجب تقويه هذه النقطه في برامجهم و خصوصا عند كليه الصيد له.

الكلمات الرئيسيه: التعليم الطبي، الإجابه الإجتماعيه، جهاز المراقبات الصحيه.

بررسی نظرات اعضا هیات علمی دانشگاه علوم پزشکی مشهد در مورد آموزش پزشکی پاسخگو

زمینه و هدف: آموزش پزشکی می بایست پزشکانی با صلاحیت و متعهد نسبت به نیازهای جامعه را تربیت کند. این پاسخگویی اجتماعی برای برخورداری همه انسانها از چهار ارزش برابری، کیفیت، ارتباط و بازدهی در خدمات بهداشتی و درمانی لازم است. هدف از انجام این مطالعه تعیین نظرات اعضاء هیات علمی علوم پایه و بالینی دانشکده‌های تحت پوشش دانشگاه علوم پزشکی مشهد در زمینه آموزش پزشکی پاسخگو می باشد.

روش: این مطالعه مقطعی- تحلیلی در سال ۱۳۹۰، در دانشکده های پزشکی، دندانپزشکی، داروسازی، پرستاری، پیراپزشکی، بهداشت و طب سنتی مکمل و بر روی ۱۳۳ نفر از اعضا هیات علمی انجام شد. یک پرسشنامه محقق ساخته، در مورد میزان آگاهی اساتید از آموزش پزشکی پاسخگو و جایگاه آن در دانشگاه، در اختیار اعضای هیات علمی قرار گرفت.

نتایج: در این مطالعه ۸۶ نفر(۶۵٪) مرد و ۴۷ نفر (۳۵٪) زن بودند. نظرات همکاران علوم بالینی با علوم پایه و استادان، دانشیاران، استادیاران و مربیان تفاوت معنی داری نداشت. موارد خاص نظیر وجود واحد آموزش پاسخگو در معاونت آموزشی(۰/۰۰۱ >p)، معاونت بهداشتی(۰/۰۰۱ >p)، معاونت درمان(۰/۰۰۱ >p) بین دانشکده های مختلف تفاوت معنی داری داشت. اعضاء هیات علمی دانشکده داروسازی در مجموع آگاهی محدودتری نسبت به سئوالات پرسشنامه داشتند.

نتیجه گیری: بنظر می رسد سطح آگاهی اعضاء محترم هیات علمی دانشگاه نسبت به موضوع آموزش پاسخگو محدود است که در این میان دانشکده داروسازی از رتبه پائین تری برخوردار است. اطلاع رسانی وتدوین جایگاه، مفاهیم و تاثیرات مستخرج از آموزش پزشکی پاسخگو در سطح دانشگاه بویژه دانشکده داروسازی می بایست تقویت گردد.

واژه های کلیدی: آموزش پزشکی، پاسخگویی اجتماعی، سیستم مراقبت های بهداشتی

جامع طبی تعلیم کے بارے میں مشہد یونیورسٹی اف میڈیکل سائنسس کے اکیڈمیک بورڈ کے اراکین کے نظریات کا جائزہ ۔

بیک گراونڈ: طبی تعلیم کاھدف معاشرے کو باصلاحیت اور ذمہ ڈاکٹر پیش کرنا ہے۔ ذمہ دار طبی عملے کا ہونا اس وجہ سے ضروری ہے کہ ہرانسان کو مساوات، معیاری طبی خدمات، ڈاکٹر اور مریض کے بہترین رابطے، اور طبی خدمات سے فائدہ پہنچنا ضروری ہے۔ اس تحقیق کا مقصد ذمہ دار طبی پریکٹس کے بارے میں مشہد یونیورسٹی آف میڈیکل سائنسس کے تحت آنے والے شعبوں کی اکیڈمیک کونسلوں کے اراکین کے نظریات کا جائزہ لینا ہے ۔

روش: یہ تحقیق دوہزار دس اور گیارہ میں مشہد میں میڈیسن، ڈینٹل میڈیسن، دواسازی، نرسنگ، پیرامیڈیکل شعبے، اور طب یونانی کے شعبوں میں ایک سو تینتیس افراد کی شرکت سے انجام دی گئي جن کا تعلق اکیڈمیک کونسلوں سے ہے ۔ تحقیق میں شامل افراد کو ایک علمی سوالنامہ دیا گیا جس سے ان افراد کے ذہن میں ذمہ دار طبی سسٹم کی تصویر حاصل کرنے کی کوشش کی گئي ۔

نتیجے: اس تحقیق میں چھیاسی مردوں اور سینتالیس خواتین نے شرکت کی۔ کلینکل سائنسس کے ماہرین، پروفیسروں، لکچررز، اسٹنٹ پروفیسرز اور دیگر تدریسی عملے نظریات میں خاص فرق نہیں تھا۔ دوا سازی کے کالج کے اساتذہ کی معلومات ذرا کم تھیں۔

سفارشات: ایسا لگتا ہے کہ اکیڈمیک کونسلوں کے اراکین کی معلومات اس موضوع کے بارے میں کم ہیں اور دوا سازی کالج کے اساتذہ کی معلومات اس سے بھی کم تھیں لھذا سفارش کی جاتی ہے کہ اکیڈمیک کونسلوں کو ذمہ دار طبی سسٹم کے بارے میں مکمل معلومات فراہم کی جائیں تاکہ معیاری تعلیم کے ساتھ ساتھ طبی سسٹم کو بھی بہتر بنایا جاسکے۔

کلیدی الفاظ: معیاری تعلیم ، طبی سسٹم ، اکیڈمیک کونسل ۔

INTRODUCTION

Medical training, as one of the most critical professions, that has close relationship with the community has always been a concern of health policymakers. Currently limitations of time and space, somewhat reduced technical credibility of training so that training methods may not suit the needs of learners and society. Considering the huge gap between the real needs of the community and training system at medical schools, as well as the traditional medical education provided at hospitals seems to lose its usefulness and effectiveness (1). Schools and institutions of higher education in the medical profession have been developed to train physicians that are able to meet the needs and expectations of the community and find solutions and answers to problems in health care systems. Since traditionally the responsibility of measuring, evaluating and prioritizing community health needs has been upon health care system over time, so the gap should not already exist between health and the education system (2-5). Boelen and colleagues in a paper in 2011 declared that one of the greatest challenges in the future of Medical Schools is trying to influence people's health through strong ties with the community. (6) In another study by the same author in France, the Delphi method was used to evaluate the social accountability of medical schools and the reference group was representative for 130 university faculty members and associations were related to medical education. The results show that improved ability of medical schools to respond to the health-related needs and challenges is important for citizens and society. In this way, we must consider the core values of quality, equity, relevance, and cost - effectiveness. The quality of evaluation procedures should be verified at schools and new criteria for accreditation must be submitted (7) Talaat and his colleagues have reported in Egypt in 2012 that medical schools can be motivated through the development of expected programs to strengthen accountable social services and improve community health(8).

Social Accountability is a branch of medical education that is responsive to community-oriented topics to meet the needs and expectations of actual deals. It is an orientation not just an approach or a set of specific measures. While interacting with inside and outside organizations, lead medical education and research to a specific direction (9). Various surveys show that most of educational systems of the world are dissatisfied with their medical education system (10) and introduced many strategies for getting out of this situation (11-17). The World Health Organization provided global Consensus for Social Accountability in Medical Education (GCSA) in 2010, leading to a revised planning standard for undergraduate medical education by the World Federation of Medical Education. In other words, we can say that the learning process must increase social responsibility. In this method, students will deal directly with non-patient specific without simple access to radiology and laboratory facilities. They also become familiar with patient's referral and get a holistic view of the patient. While in current medical education there are the continuous one-month internship with simple and cheaper planning, and the involvement of the social medical department and health issues, dealing indirectly with the patient focusing on specific diseases that require expertise, and direct access to laboratory and radiology. They easily refer patients to professionals and diagnosis is single-stranded (18).

The aim of this survey was to evaluate and understand teachers' views about this educational method and their valuable recommendations for the execution of community oriented medical education.

METHODS

A cross-sectional study on knowledge about accountability in medical education was conducted among 133 faculty members. The inclusion criterion was being a faculty member of Mashhad University of Medical Sciences with at least one year of experience and for a maximum of 30 years. The other members or incomplete questionnaires were excluded. The authors, based on results of document research and experts' opinion, developed the 31-item questionnaire for this study. It included 8 questions with 3 options and 23 questions with a Likert scale. The validity of questionnaire was detected by content validity and its reliability was determined by Cronbakh's alpha. Main outcome measures were knowledge about social accountability in medical education among faculty members at Mashhad University of Medical Sciences and a comparison between clinical or basic sciences faculty members or different academic levels. The researcher distributed questionnaires to faculty institutional email addresses. Participation in the study was voluntary and if the faculty agreed to participate in the study, he/she completed the survey instrument. Data were collected and analyzed by SPSS software for Windows (T-test or non-parametric statistical tests of Mann-Whitney and chi-square) and $P<0.05$ was considered significant. The results will declare the overall academic members knowledge about social accountability in medical education that would be helpful in future decisions and programs to promote medical education.

The study proposal was approved in Shahid Beheshti University of Medical Sciences.

RESULTS

We distributed the three hundred eighty questionnaires to faculty members working in Mashhad University of Medical Sciences and 133 questionnaires were collected. The Highest number was 77 (58%) for medical school. In this study, 86 respondents were males (65%) and 47 (35%) were females. Forty (30%) were graduated from Mashhad University of Medical Sciences. Twenty five percent of participants had fellowship, 40% were specialist 20% had PhD and 15% Master Degree. Thirty-nine (29.5%) participants were basic science teachers and 91(68.5%) were clinical faculty members. Most of them were assistant professors (46%).

57.1% of clinical faculty members were aware of social accountability unit presence in vice chancellery for education, while30.8% of basic science teachers did not

know and 28.2% said that there is not such a unit in educational department.

Nearly most of basic science members (90%), denied different medical groups' activities for accountability in medical education but 22% believed this position is definite.

About medical education in the field, there was no significant association between viewpoints and 50.5% of respondents in clinical group were agree that this method is of great importance (p=0.05).

Regarding other questions, there was no significant association between groups and we did not detect any significant correlation in knowledge about accountability in medical education between clinical and basic science faculty members.

The answers in different seven faculties were also compared and because of insufficient number in Paramedical, Health and Complementary Traditional Schools, these three were merged. The knowledge of members in different faculties about the subject categorized in three options, are shown in table 1 and viewpoints about 23 questions are shown in the box plot.

There was significant difference between the views of different faculties about the role of accountability in medical education in introducing students to culture of each region toward cultural barriers (p=0.048).

About the necessity of allocating a part of teacher evaluation to accountability in medical education, there was also significant difference between faculties and Nursing school with average of 4.11(0.58) that was greater agreement with this point (p=0.005).

General comments comparison among clinical, basic science faculty members and different affiliated faculties shows that the awareness of Pharmaceutics school faculty members was significantly less than other faculties about social accountability in medical education in the first eight questions; but in other 23 questions, it was not significant(p=0.096,one-Way ANOVA).

DISCUSSION

Medical education accountability is a new topic in the field of medical education (health centers, education) also known as medical education in field. When medical science

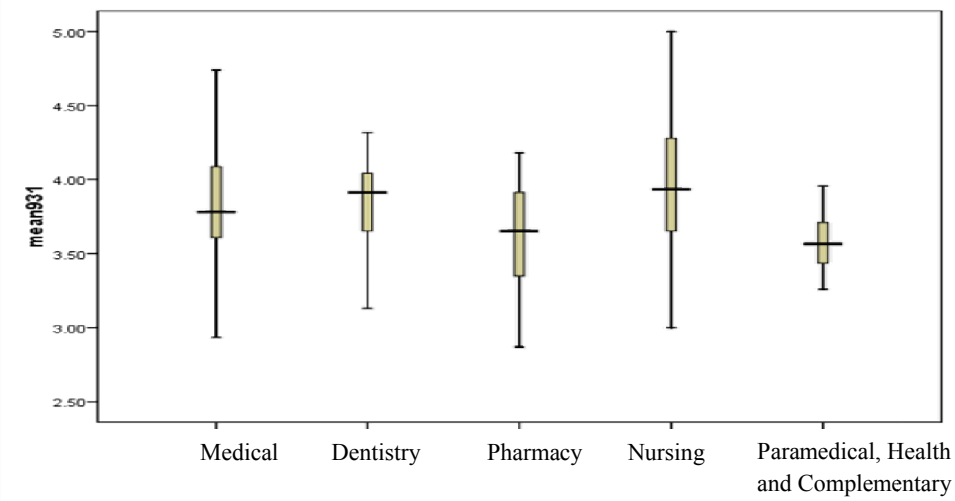

Figure 1. Comparison of different viewpoints of members in faculties to 23 knowledge questions in the study

Table 1. The awareness of participants about accountability in medical education and its position in different faculties.

Faculty	Respondents n	no		Don't no		yes		Not declared		Ordinal means	P- value
		n	p	n	p	n	p	n	p		
Medical	77	132	21.4	240	39	223	36.2	21	3.4	74.95	
Dentistry	17	64	47	30	22	41	30.3	1	0.7	41.88	
Pharmacy	14	64	57.1	26	23.2	21	18.8	1	0.9	29.21	0.001
Nursing	18	22	15.3	69	47.9	47	32.6	6	4.2	76.83	
Others	7	8	14.3	29	51.8	19	33.9	0	0	82.57	

n: number, p: percent, others: Paramedical, Health and Complementary Traditional Schools

experts concluded that social mission of education is far from society needs and expectations, the educational system integration with health services was brought up.(18) However it seems that many faculty members are not well acquainted with the quantity and quality of this method. Overall, our findings show that faculty members' knowledge in this area is moderate and significant differences between faculty views in basic science and clinical departments' about medical education accountability does not exist. Therefore, it is proposed to provide information about Educational Responsiveness for faculty member.

In resources already available, we did not find a similar study that deals with the various universities assessing opinions of faculty members in medical education accountability. Therefore, in this section, there is no possibility of comparison with other studies. The other limitation was that a relatively small number of faculty members returned the questionnaires, so results may not reflect the knowledge of faculty members in general. Although the questionnaire validity and reliability have been determined, there might be some problems and weakness because of inexperience.

In this educational method, the form of training (some days in a year) is discrete and becomes more difficult as they coincide with clinical wards and higher costs. To achieve its objectives, with a view of holism based on medical issues and actions in health care, this requires involvement of the majority of clinical departments. Opinions of Medicine faculty members are indicating a significant difference between the schools with an average of 74.95 for medical and 41.88 for dentistry school. Pharmaceutics faculty members with an average of 29.21 and the School of Nursing and Midwifery, with a mean 76.83 and in Other Schools (Paramedical, Health and Complementary Traditional Schools) 82.57 were aware of accountability in medical education. From the results, we can say that the Pharmaceutics School faculty members had not enough attention to accountability in medical education and need educational programs.

A literature review focusing on standards, tools and multi-institutional evaluation efforts of socially accountable medical education programs show that there is a clear need for a common rigorous evaluation tool for these programs. (19) According to our research, there is a lack of definite structural program to create favorable conditions for improvement in the university. Faculties at universities and colleges should associate with an efficient structure in high and low levels of health care system so that the teaching and research could be performed in the wider range according to community needs and if this is to happen, training mission in the community will be achieved. Since educational programs and instructional decisions in this field are based on the problems and needs of the community and services system, the needs of the health system and community should be the basis of educational system. Thus, the health systems and all hospitals virtually relate to educational programs and in this case, they will have active participation and technical support in matters relating to education and research.

The level of knowledge in faculties at MUMS on educational accountability is limited, and is lowest at Pharmaceutics School. There is a need for informing the necessity, development of position and concepts about this method among faculties especially at Pharmaceutics School to improve health services.

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