ORIGINAL ARTICLE

Social Accountability of the Curriculum in Medical Education: A Review on the Available Models

Background: Social accountability in the schools of medicine is very important. It is an essence to recognize the methods and models used and implemented in the world in order to make use of the results and experiences. Therefore, the purpose of the present study was to review some models of social accountability in the world.

Methods: The key words, including social accountability, faculty of medicine, and curriculum were searched in the data banks, Elsevier, PubMed, Elsevier, Eric, Google scholar ProQuest and also the Iranian data banks, including Magiran, and SID. Then, the extracted data were categorized. In total, 80 articles were found and after analysis of the abstracts only, 30 articles in relation with the topic were selected. Finally, only 10 articles were chosen that were about social accountability models. Results: Five models of social accountability are used in the faculties of medicine and medical curriculum in the world, including: CPU model, The NET model, AIDER model, ASPIRE model, and CARE model. These models adapt functional approaches in order to upgrade the ability of social accountability among learners and providers of health services.

Conclusions: In fact, social accountability should be established as a culture among students and teachers. Introducing the current approaches in the world and their results, could be influential in the universities of Iran in order to establish the requirements and provide changes in educational curriculum. Among the five models, CARE model is recommended to be implemented and assessed in the schools of medicine of Iran, it should be noted that this model could be more consistent with the educational system of Iran.

Keywords: Social accountability, Faculty of medicine, Curriculum

Ali Emadzadeh¹, Moitaba Mousavi Bazzaz², Mohamad Beza Noras³, Sharareh Karimi^{4,} ¹Department of Medical Education, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad Iran ²Department Of Community Medicine, Faculty Of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran ³Department of Persian Medicine School of Persian and Complementary Medicine, Mashhad University of Medical Sciences Mashhad, Iran ⁴Department of Medical Education, Mashhad University of Medical

* Department of Medical Education, Mashhad University of Medical Sciences Mashhad, 0639419410 IRAN

Sciences, Mashhad, Iran

Tel: +989153721875 Fax: +985138415222 Email: Karimish1@mums.ac.ir

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پاسخ گویی اجتماعی برنامه درسی در آموزش پزشکی: مروری بر مدل های موجود

زمینه و هدف: با توجه به اهمیت موضوع پاسخگویی اجتماعی در دانشکده های پزشکی و نیز ضرورت شناخت روشها و مدلهای مورد استفاده در دانشکده هایی که آن را اجرا کرده اند و بهره گیری از نتایج و تجارب آنها، هدف از نگارش این مقاله، مروری بر چند مدل پاسخگویی اجتماعی در دنیا می باشد.

روش: با استفاده از کلید واژه های پاسخگویی اجتماعی، دانشکده پزشکی، برنامه , PubMed, Elsevier, ProQuest, Elsevier, Eric, بایگاههای اطلاعاتی , PubMed, Elsevier, ProQuest, Elsevier, Eric و ایرانی شامل: SID, Magiran, انجام شد و مطالب استخراج و دسته بندی گردید. از بین ۸۰ مقاله بدست آمده پس از بررسی چکیده تنها ۳۰ مقاله در رابطه با موضوع انتخاب گردید واز بین ۳۰ مقاله مرتبط فقط ۱۰ مقاله که در مورد مدلهای پاسخگویی اجتماعی بود انتخاب شدند.

یافته ها: پنج مدل برای پاسخگویی اجتماعی تا کنون در دانشکده های پزشکی و برنامه های آموزش پزشکی در دنیا بکار رفته است که عبارتند از: مدل AIDEN ، مدل AIDEN مدل AIDEN ، مدل AIDEN و مدل CARE . این مدل ها با اتخاذ رویکردهای کاربردی، توانمندی پاسخگوئی اجتماعی فراگیران و ارائه دهندگان خدمات سلامت را، ارتقاء می دهد.

نتیجه گیری: در حقیقت پاسخگویی اجتماعی باید به عنوان یک فرهنگ در بین دانشجویان و اساتید رواج یابد و نهادینه شود. معرفی رویکرد های جاری در دنیا و نتایج آن، می تواند در ایجاد نیاز و تغیر در برنامه آموزشی دانشگا های ایران موثر باشد. از پنج مدل معرفی شده، مدل ARE، با توجه به اینکه جدیدترین مدل معرفی شده می باشد و با فضای آموزشی کشور ما تطابق بیشتری دارد جهت اجرا و ارزیابی در دانشکده های پزشکی معرفی می شود.

واژههای کلیدی: پاسخگویی اجتماعی، دانشکده پزشکی، برنامه آموزشی

مستوى الإجابه الإجتباعيه للبرنامج الدراسى فى التعليم الطبى متابعه النساذج العوجودة

التمهيد و الهدف: نظرا لأهبيه موضوع الإجابه الإجتماعيه في كليات الطب و ايضا ضرورة معرفة الاماليب والنماذج التي تم استخدامها في الكليات و معرفه النتائج و التجارب ، الهدف من هذه الدرامه هو متابعه عدد من نماذج الإجابه الإجتماعيه في العالم.

الأسلوب: تم إستخدام كلمات المفتاع التاليه: الإجابه الإجتماعيه . كليه الطب. Pro . Elsevier . Eric, Google scholar, Pub Med . والديرانيه SID . magiran و تم استخراج المطالب بشكل مبوب. تم اختيار ٥٠ مقال بشكل تخصصى و ايضا تم اختيار ١٠ من بين ٨٠ في مجال الإجابه الإجابة الإجتماعيه.

النتائج: هناك خس أماليب إجابه اجتماعيه حتى الان في كليات طب العالم و هي مستخدمه في البرامج التعليميه و هي عباره عن: AIDER, THE NET, CPI, ASPIRE. إن هذه النماذج تعتوى على قدرات ترفع المستويات العلميه بحيث تؤدى الى رفع مستوى الإجابه الإجتماعية عند المتعلمين و مقدمين الغدمات الصحيه. الإجتماعية نفى المعقيقة يجب أن تصبح الإجابه الإجتماعية تقافه عند الطلاب و الاستنده. إن تبيين الإتجاهات الموجوده في العالم و نتائجها تساعد على تبيين المحاجه و ايجاد التغيير في البرامج التعليمية في جامعات ايران. اخترنا نموذج ARE من بين النماذج الخمسة لأنه احدث نموذج و يطابق البيئة التعليمة في البلاد لاجرائه و تقيمه في كليات الطب.

كلمات المفتاح: الإجابه الإجتماعيه ، كليه الطب ، البرنام التعليسي.

میڈیکل تعلیم کا سماجی سطح پر ذمہ دار ہونا، موجودہ ماڈلز کا ایک جائزہ

بیک گراونڈ: میڈیکل تعلیم کی یونیورسٹیوں اور کالجوں میں میڈیکل نصاب کا کا سماجی لحاظ سے جواب دھ ہونے کی نہایت اہمیت ہے اس کے علاوہ ان ماڈلوں اور روشوں کی شناخت کی بھی ضرورت جنہیں طبی تعلیمی مراکز نے نافذ کیا ہے۔ان کے اھداف و نتائج کو بھی سمجھنے کی ضرورت ہے۔ اس تحقیق میں یہی کام کیا گیا ہے۔

روش: بم نے سماجی سطح پر ذمہ دار ہونے کے کلیدی الفاظ کا استعمال کرکے مختلف طرح کی عالمی اور ایرانی میڈیکل ویب سائیٹوں میں اس کی تلاش کی اور ان سے حاصل کئے ہوئے مواد یک تقسیم بندی کی اور اسی مقالوں میں سے صرف تیس مقالوں کا انتخاب کیا گیا اور تیس مقالوں میں سے محض دس مقالے سماجی سطح پر ذمہ داری کے حاصل تھے۔

نتیجے: دنیا کی یونیورسٹی میں پانچ ماڈل استعمال کئے گئے ہیں جو میڈیکل تعلیمی نصاب سے سماجی ذمہ داریوں کے جوابدھ بھی ہیں۔ ان میں سی پی یو، دا نیٹ، آئیڈر، ایسپائر، اور کیئر، یہ تعلیمی ماڈلز نافذ کئے جانے کی صورت میں طلباء کو سماجی ذمہ داریوں کا حامل بناتے ہیں اور ان کی تعلیم کو بہتر بناتے ہیں۔

سفارشات: دراصل سماجی ذمہ داریوں کا حامل ہونا میڈیکل ٹیچروں اور طلباہ میں ایک ثقافت بن جانا چاہیے دنیا میں آج کل جو روشیں اپنائی گئی ہیں ان سے ایران کی تعلیمی ضرورتیں پوری کی جاسکتی ہیں۔ مذکورہ پانچ ماڈلوں میں کیئر چونکہ جدید ترین ماڈل ہے اور ہمارے ملک کے تعلیمی ماحول سے زیادہ مطابقت رکھتا ہے لہذا اسے ہمارے ملک کی یونیورسٹیوں میں استعمال کیا جانا چاہیے۔ کلیدی الفاظ: سماجی لحاظ سے ذمہ داری، ماڈل، طبی تعلیمی مراکز یہایان۔

INTRODUCTION

Social accountability about the influential social issues of human health has been considered in all old medial schools, including, Greek and Iranian medicine (1, 2). Although the faculties of medicine have attempted to train physicians that could provide peoples' health needs and reduce their pain and suffering, the changes in the distribution and spread of diseases, different social classes, and the increase of levels of specialized services, have upgraded and changed the needs of the health services of people (3). Owning to these changes, a new concept has been raised in the community as accountable physicians and accountable faculty of medicine (4-6).

The social accountability approach attempts to enhance the organizational performance via supporting citizens' cooperation and accountability of policy makers in the health services (7). Therefore, the concept of social accountability has become very favorite in the faculties of medicine that responds to a valuable purpose in order to realize social justice in the health system (8).

The World Health Organization (WHO) considered society as a main part of education in medical sciences that established new duties and missions for students, teachers and educational planners. WHO described social accountability as: "leading education, research and services in order to provide health needs and health priorities of a society, region or nation that are committed to provide services" (9). Considering social accountability in the medical curriculum orients all educational activities to train physicians that can meet the health needs of the target group (10).

Consequently, the pundits believe that social accountability is a new arena in the medical education that is a type of cultural change; this concept should be studied for deep perception (11). The biggest challenge of faculties of medicine in the future will be the attempt to present the influence of interaction with society on the health. This issue is the exact purpose of social accountability (12).

The published report in 1910 was a turning point in the new medical education that lead to the mission of accountability on social issues that influences peoples' health (13). This report and its following changes and circumstances was the source of debates and great changes in the medical education system, especially in the North America (14, 15).

In accordance with Edinburgh Declaration, the physicians' duties are: upgrading health, preventing disease, providing primary care, treating and relieving the patients' sufferings with sympathetic approach and based on ethics, influential management of the health of groups, supporting patients and society, good communication with the society, critical thinking, being skillful in using information and social and behavioral sciences, and having personal motivation for lifelong learning. Furthermore, it is mentioned in the declaration that: although the physicians are not trained to deal with these issues, since the faculties of medicine are responsible to train the future physicians and as health service providers in educational hospitals, they could not be ignorant of these changes. Consequently, all countries around the world were called to review their educational programs of medicine in accordance with the twelve

principles of the declaration.

Five years later, another World Assembly with the topic "Changing World Profession" was established in collaboration with the World Federation for Medical Education in Edinburgh, 1993. Since the physicians have to deal with rapid changes of service system, providing a new description of the education of physicians was emphasized (16).

Although a few studies have been conducted in Iran, it seems that this educational arena was not considered in the faculties of medicine. Therefore, the current study was conducted due to the importance of social accountability in the faculties of medicine and also the essence to recognize methods and models that are used in the world and make use of their results and experiences. The main purpose of the study was to present some models in order to analyze the position of social accountability in the faculties of medicine and also educational programs of medicine and to be used by planners.

METHODS

This is a descriptive-narrative study. The articles related to social accountability were searched in data banks, including Google, Eric, ProQuest, Elsevier, PubMed, Scholar, Embays, Magiran, SID. The key word including, social accountability, medical education, educational program and curriculum were searched in the title, abstract or key words of the articles. 80 articles were found, after analysis of the titles of the articles, only 30 were extracted. Then, the abstract of the articles were studied and 20 of them were deleted since they did not imply to the models of social accountability or were not available thoroughly. Five articles introduced models of social accountability. Only one article was about the position of social accountability in Mashhad University of Medical Sciences and four articles were about the analysis of obstacles, solutions and comparison of two models of social accountability. In total, ten articles were used in the study.

RESULTS

Introducing the models is required to use and teach social accountability in educational programs. At the conclusion of the results of the study, five models of social accountability were recognized. Each of them is explained separately and finally a model is recommended for the educational program in Iran. The models are explained below:

Model of Conceptualization/ Production/ Usability

This model has three domains, eleven sections and thirty one parameter, it provides a comprehensive list of parameters for the assessment and enhancement of the quality of social accountability. In other words, it is a systems thinking that attempts to cover a coherent series of steps, including concept, action and impact or result. This hybrid model is made of a wide range of discovered parameters of elements via recognition of the current and future health needs and challenges of the society and the strategies to respond them influentially. Moreover, it is probable that it confirms the produced interventions and predicted impacts of peoples' health and fitness. This model consists three arenas and each of them has different parts and each part has different items. In total, it provides a comprehensive list of

items to assess and enhance the quality of social accountability. This is a systems thinking and as its name represents, it acts in three arenas, including conceptualization, production and usability. In other words, this model is a mixture of a wide range of items that recognizes the current and future health needs and future challenges of the society and to find appropriate strategies to respond influentially and properly, and confirms the predicted result and impacts of people's health and fitness.

Conceptualization refers to the justification of measure about needs and challenges of the society. Production refers to the process and results of action plans to focus on needs and challenges. Usability refers to the status of production and their impact on health. Table one presents the categories and explanations (17).

2. Training for Health Equity Network

This model has used twenty indexes of the previous model. Network model is a world movement to transfer health professional education in order to focus on the regional needs. Half of the indexes of the program are allocated to the

consequences of implementation of programs in the community. This program could make a network among the faculties of medicines in the countries of Cuba, Venezuela, Canada, South Africa, Australia and the Philippines in order to coordinate and collaborate in the implementation and assessment of social accountability of the programs (18).

The purpose of this model is to work together in order to increase the influence of scientific institutes on the health and the equitable development of health systems in deprived and village areas of Africa, Asia, Europe, America and Australia. Network model is a learning association, in which, health institutes, faculties, physicians and communities have contact with each other, to be equipped and support each other to solve regional and national challenges of health and make sure that everyone has access to high quality health services. The purpose of this model is workgroup in order to enhance the impact of scientific institutes (such as faculties of medicine) on the health and equitable development of a health system that is available for all people including the deprived and village areas of Africa, America, Asia, Europe

area	subthemes	index and its description	
Conceptualization	sources	Values: four main values (quality – equality- relevance - effectiveness Population: the characteristics of society and their priority needs Health system: the extent of the health system and consistency and harmony with other organization Employees: qualitative and quantitative needs of the staff	
	Engagements	Mission: mission and goals of the institutes based on resources Position: the extent of the covered population Cooperation: the cooperation of the stakeholders of the community with the organization Favorable consequences: defining and specifying the profile of the employees (qualifications)	
	Governance	Strategic planning: coordination of the institute with the strategic plan of the community Management: credibility – coordination and assessment of the implementation of the plan Resources: mobility of internal and external resources inconsistence with interaction part	
Production	Field operations	Education – research and services consistent with interaction	
	Educational program	Goals and content: based on the explained qualifications The structure of curriculum: early and continuous exposure to the community problems Learning process: learning to solve complicated problems of the community Centers: centers of the coverage of community health and related to other levels of health services	
	Students	Requirements: priority and equality of students of deprived areas Occupation: orienting and assisting to reach careers in relation to the priorities of the health of the community Assessment: analysis to reach qualifications	
	Teachers	Resource: using different teachers from health and social sciences disciplines Capability: teachers becoming the model from the perspective of reaching capabilities Supporting: education and applause to increase capabilities in social education	
	Research	Relevance to health management based on the indexes of reference and practice	
	Service	Health service based on user indicators	
(Usability)	Employment	Employment opportunities: supporting and cooperating to provide health professions as the higher priority Organizational posts: preservation and distribution of graduates based on the needs of the society Quality of services: keeping the capability of staffs Performance: enhancing the condition of career in the first level of health	
	Impact	Cooperation: cooperation with the stakeholders to enhance system management Impacts on health: reducing the dangers and upgrading the health Upgrade: connecting the users' results to regional and national decision-makers	

and Australia. In fact, network model is a learning association via which scientific institutes, faculties, physicians, and communities can have contact with each other, assist and support each other in order to solve national and regional challenges of health and make sure that everyone has access to health services.

Special measure are taken in this model, including:

- Growth of equity of health via increasing the number of faculties that
 use principles of social accountability to find the needs of deprived
 population.
- Assisting to search for the needs of population that professional health faculties provide services for them.
- Supporting professional health faculties that are involved in the modification through leading policies that are based on evidences, practical tools and capacity development.
- Supporting the modification of the health system in order to increase concentration on health equity and social accountability in medical education (19).
- 2. AIDER Model (Assess, Inquire, Deliver, Educate, Respond)

This model (Assess, Inquire, Deliver, Educate, and Respond) is based on this concept: "to what extent, the educational program has recognized the needs of the community and trains capable physicians to provide services". This model was applied in two universities in Canada and both studies have monitored the level of services provided in deprived areas.

This model is a continuous monitoring process that requires the community cooperation in any level. Community collaboration is perceived as the active participation of all deprived stakeholders to provide consultation, qualitative data and feedbacks. This interaction is reached by supervision process and the results of empowerment of the community. The base of thinking systems will be the empowerment of deprived stakeholders to be able to redesign the communication with physicians of health care. The implementation of the model will nurture social accountability culture in each person and also in the whole of the chain of the medical education. Regardless of experiences in practice or acquaintance with social accountability, this model is an available method for physicians to reach social accountability in all levels. This model has got five steps (figure 1) that forms an iterative process. It means that each step is notified by the previous one. These steps are as follows, respectively:

Assess: a process in which "a concern about health services" that is highlighted by a physician, patient or members of the community is assessed. Samples of the members of the community are friendship centers, social workers, supporters and women's shelter. These assessments also assist to recognize the obstacles of availability and how they are influenced by social factors of health. A list of influential social factors that could be used in the assessment step is named "LESS GAGED" in brief, including: living condition, race, social-economic status, sexual orientation, gender, age, geographical condition, education, and disabilities.

➤ Inquire: physicians and stakeholders are a process of the research inquiry. Special research methods are raised in _____

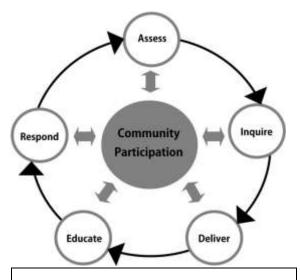


Figure 1. AIDER Model

one or two methods, action research or a research based on developed design. In this issue, the action research is used and includes query of the deprived stakeholders of the community and pays attention to daily concerns and extracting their changes. Developmentally-based community is a mixture of experimental research and theoretical design. This research methodology includes cooperation between the profession and the community in order to influence, the changes of a complicated system.

- Deliver: after the physicians consult with the people that have been deprived of the services, assess and inquire, they deliver and implement the regular changes for modification. To make a scientific movement, the physicians deliver the results of the study to the public, policy makers and deprived stakeholders. A scientific movement is an integrated support that is reported by social and scientific researches and also clinical analysis that finally results in the enhancement of social accountability.
- Educate: to educate, support, and upgrade the knowledge of health is an essential step to help the deprived stakeholders of services to become aware of the changes of service system. Social empowerment strategy could increase the social awareness of health and the service system and empowers the knowledge of health and the process of health activities. The knowledge of health includes the empowerment of deprived stakeholders orally and practically in order to enhance the health of people and the community. The data should be feasible, available and achievable to reach the knowledge of health
- Respond: it includes responding to changes and concerns of the society, receiving feedback and estimating the impacts of changes to the service system. A team effort includes a professional commitment to respond to the needs of the community, furthermore, receiving feedbacks from stakeholders to empower social accountability in the faculties of medicine and partners of health. Understanding the nature of scientific and social movement helps the doctors to conduct a suitable analysis of changes (figure 1) (20).

3. Aspire Model

This model focuses on interpersonal networks in human resources and providing social capital in the programs. This model is a unique innovation of Europe Medical Education Association that has the potentiality of the promotion of education along with research as a great measure in a faculty of medicine. The positive result of this plan is that it allows faculty of medicine to recognize education and training internationally as the final purpose. With the recognition of this model, a unique faculty of entrepreneurship is provided for supervision, and self-advancement in teaching and learning. Europe Medical Education Association in collaboration with the University of Queensland in Australia, 2012 conducted the pilot of Aspire model in the applicant universities and assessed the indicators of social accountability. The universities that were active in this respect received a reward certificate.

This model was created in order to reach the deep layers of traditional accreditation process. Recognizing the educational program with a faculty of medicine would help to control the equal analysis of determining standards and criteria in the world level to reach excellence in education. Influential function is the innovation of this model; furthermore, it motivates excellence in education. This approach of characteristics of excellence that is thoroughly consistent with regional content would determine it. An international panel of authors in medical education recognized that working with the three panels of this model is a criterion to determine excellence in three arenas. The areas that should be assessed are: students, students' engagement in the curriculum and the faculty of medicine, social accountability and responsiveness as a mission of the faculty of medicine. The university can select to be assessed in one, two or all three arenas. These arenas could be a board of trustees and three panels of international leaders in the educational medicine and practical skills of teachers and professors (21).

The university ranking has been conducted in Iran since 2001. The latest Ranking of Education of Universities was held in 2011. The nineteenth indicator of this program included ten criteria for the rate of accountabilities to the needs of communities in the universities (22).

- 4. CARE Model "Clinical activities, Advocacy, Research, Education" Recognizing the priorities of health concerns in the deprived communities and transferring the data to medical institutes is a tool to make changes in cultural and educational programs. This model was used in the University of Saskatchewan in Canada and the evidences showed that it has had outstanding impacts to change the culture of the faculty specially the students. This model could be a successful sample for other educational institutes in order to outreach the careers in the realm of health and research and enhance social accountability in the communities. This model is the abbreviation of four words, each of them determines a key area in social accountability, including:
- Clinical activities: includes the signs of the initial problems and responding to changes in the community, ______

such as overcoming barriers of accessibility.

- Advocacy: speaking on behalf of the deprived people that are not heard and working with partners and policy makers in order to transfer the vision of a patient-based system.
- Research: based on the sense of curiosity and in respond to the real needs that leads to evidence based practice and high quality care.
- Education: educational models and teaching the expertise that provides respond based on society opportunities to learn services and integration of social accountability in practical education and lifelong education of a physician (23).

DISCUSSION

Implementing social accountability in the faculty of medicine and other faculties related to health, firstly the models of social accountability used in the faculties of medicine around the world should be studied. Then, based on the conditions of each faculty, a model or a combination of models should be used. The purpose of the article is to determine and present the models of social accountability in the faculties of medicine around the world. Therefore, data banks of related articles were searched and finally five models were introduced.

There is a growing interest for social accountability in the faculties of medicine and other faculties related to health in the world (16). Social accountability is an approach to deal with inequalities in the health services that is determined by the distribution of health and welfare in a society. Social accountability mostly engages medical institutes to provide an equal and accountable system. In other words, it is important for the physicians to perceive the hierarchy of social levels, good health and health services. In order to enhance the health of deprived stakeholders, social inequalities and health should be determined by various different approaches. Therefore, using each of the models or approaches could be influential.

Implementing a framework for social accountability requires multidimensional approach, including: knowledge about health inequalities that has been developed by medical education, knowledge about the social determiners of health, recognition of the partners of unequal health services, determining a meaningful method to estimate the problems and assessment of measures.

All of the models concern about being influential and fair concentrate on the accountability to deprived stakeholders of the community. In the analysis of these models via a thinking system, it is determined that each model focuses on different relationships of health service system. It clarifies that how a health service system interacts with other systems from political and economic perspectives. As WHO explains: "a health system consists of all organizations, people and measure that their main purpose is to restore or upgrade the level of good health" (20). Rezaian, in his article about a review on different perspectives of the accountable faculties of medicine toward society, has studied different aspects of accountable faculties of medicine toward the role of ethics in

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their triple activities. He declares that education, research and health services in the faculties of medicine should be in accordance with ethics principles. This is an essence and all accountable medical schools should follow it. Ethical teachings are established in accordance with the international rules and standards and also the culture of each society. Therefore, a simple and comprehensive model of an accountable medical school toward the society is that provide education, research and health services based on ethics principles (24).

In other words, social accountability should become the main mission of faculties of medicine, based on that the needs of society should be recognized thoroughly at first. Nicholson et al. have concluded in their study that "health equity network" and "Aspire Excellence Model" are two influential models that could be used for the assessment of social accountability in the medical education programs (25). Furthermore, in accordance with the details of each model, it is concluded that "Health equity network" and CPU models have particular position. Since in the model of health equity network, all students and enthusiasts could become a member and participate in different programs of social accountability and perceive its concept. Furthermore, in CPU model, the areas are exactly determined based on which the rate of social accountability could be evaluated.

In addition, analyzing the models of social accountability used in the faculties of medicine, each of them has been influential in the assessment of the indicators of social accountability and the CARE "Clinical activities, Advocacy, Research, Education" model was taken into more consideration. It has recently been used in the Saskatchewan University of Canada and has led to valuable results about social accountability. Four influential areas about social accountability is recognized in this model. Conducting

several activities leads to upgrade the level of social accountability. Easy and exact specification of the arenas has made this model more feasible in comparison with others. Comparing and perceiving these five models, table 2 specifies number, arenas and the type of the systems of each model.

In order to develop social accountability, there are different structural barriers that should be solved in order to increase social accountability of medical education. Different recommendations about making the curriculums more accountable have been provided to institutes but mostly they are based on personal experiences and their efficiency should be studied in different educational systems and orienting educational researches toward accountability in medical education is an essence (18).

In conclusion, using these models could be influential in the enhancement of social accountability of faculties of medicine and even other faculties related to health. The important point that should be considered in the application of these models is that social accountability should become a culture among students and teacher, however, it take time (26). The following should be considered: changing the content of educational curriculum, development of inter-sections coordination, leading continuous educational programs, compilation of the evaluation of the level of accountability in the assessing programs of universities, educating clients and service providers in the realm of health and related researches (27 - 28). Among the models, CARE model is more consistent with the educational system of our country, it the newest model and also the simplest in implementation. Therefore, it is recommended to be used in medical universities.

Furthermore, each model specifies the areas of activities clearly that helps the students to perceive the meaning of _____

Model	Number of areas	Type of area	Type of system
CPU Model	3	Perception	
		Product	Based on thinking
		Usability	
THE NET Model	1	Transferring education from healt network	h equity Based on cooperation and learning
AIDER Model	5	Assess	
		Inquire	
		Deliver	Based on needs and society cooperation
		Educate	
		Respond	
ASPIRE Model	2	Human resources	Based on excellence
		Social capital	based on excenence
CARE Model	4	Clinical activities	
		Advocacy	Develop the mode of action
		Research	Based on the needs of society
		Education	

social accountability clearer and assist them to become qualified and efficient physicians in the society that provide health service for all people. It should be noted that in the application of these models, social accountability should become a culture among students and professors, however, it takes time. In total, in accordance with the four main areas of CARE Model and its feasibility, this model is recommended to implement and evaluate social accountability in the faculties of medicine.

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