Development and application of a social accountability assessment tool at the Shahid Beheshti University of Medical Sciences

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Introduction
Meeting the community's needs is a critical need of governmental agencies and educational institutions. Organizations and government systems that rely on social capital are considered inefficient and vulnerable if they are unable to meet the needs of society. Thus, accountability is a key pillar of government management that leads to effective actions and better service delivery.1,2 In the meantime, the medical education system is criticized more than any other system due to the importance of public health in the community and the training of forces that play a central and essential role in public health.3 Meeting the needs of the community through higher education is a major challenge, and these institutions must be held accountable to the community in case students fail to achieve the necessary qualifications for serving the community.4 Public accountability means that by accepting the consequences and outcomes of their responsibility, individuals, groups, or institutions must be accountable to the general stakeholders of the organization. Accountable organizations are defined by two main characteristics: making the maximum effort to identify the stakeholders' needs and making the maximum effort to address those needs.5 Such definition is central to all organizations and institutions that deal with people and society. The World Health Organization describes social accountability in health as guiding all educational, research, and service activities towards addressing health concerns and priorities in the covered community.5 Medical schools worldwide should be held accountable to society in their three main tasks: education, research, and service delivery.6,7

In the Islamic Republic of Iran, the medical education system has been integrated into the health system since 1985, a particular situation that was achieved relative to other countries in the world, which may be considered a step towards social accountability. This is because separation in the clinical and academic areas minimizes accountability at two levels. In other words, the health system will not be accountable to the quality of service

Abstract
Background: One of the critical needs of governmental agencies and educational institutions is meeting community needs. Organizations and governmental systems that rely on social capital are considered inefficient and vulnerable if they are unable to meet the needs of society. Thus, accountability is a critical pillar of government management that leads to effective actions and better service delivery.1,2

Methods: Critical review methodology was used in the first phase to review texts and documents available in the field of social accountability and to collect items used to develop the social accountability assessment tool. The Delphi method was then used to finalize and approve the model and assessment tool. University processes were investigated and evaluated based on the social accountability tool in the second phase.

Result: In all, 422 university processes were investigated and evaluated to determine their accountability in different fields. The mean score of the evaluated processes was 11.9 out of 100.

Conclusion: The results show that social accountability is a relatively new topic that has received considerable attention in medical education in Iran. Given the relative newness of this topic, these results could be expected; social accountability should try and be expected to improve in the coming years.

Keywords:
Social Accountability
Social Responsibility
Accountability Assessment
Accountability Evaluation

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providers educated by themselves, and universities of medical sciences will deliver their graduates to an independent system and will not be liable for their future performance. However, solely integrating these two areas is not a reason for universities' accountability to be prioritized against the needs of the community. Because integration creates a new organization that has never existed anywhere in the world and creates a new experience, there is a need for specific and different programming within the educational systems across all countries. Thus, considering the integrated system of medical education and the universities of medical sciences as a novel system coordinating health, treatment, and medical education in Iran, study in this field is of great importance.

Considering that the concept of social accountability in universities of medical sciences is expanding rapidly and universities are trying to reach excellence in this field, the evaluation of these institutions in the field of social accountability is very necessary. In this regard, efforts have been made worldwide; the most famous is the THEnet evaluation process. This evaluation process focuses on results and in practice it focuses less on the processes and the quality of the processes in the institutions.

Thus, given the above context and the importance of the subject, the researchers decided to develop an evaluation tool to assess the work processes in terms of social accountability at the Shahid Beheshti University of Medical Sciences.

Materials and Methods
There were two phases in the current study. The first phase consisted of developing a social accountability assessment tool.

In this phase, the texts and documents available in the field of social accountability were reviewed using critical review methodology based on Carnwell and Daly's method: 1. For the first step, the purpose of the literature review was determined by the authors to conduct the study on how the working processes of a university of medical sciences can be assessed in the field of social accountability.

2. The study scope was determined in the second step. The search began with the terms social responsiveness, social responsibility, and social accountability, and each of these terms was merged with the words of assessment and evaluation. PubMed, Google Scholar, SCOPUS, and ERIC databases were searched.

3. Third, the inclusion/exclusion criteria were identified. All related articles published in valid journals were considered in both English and Persian without time constraints.

4. For the fourth step, both the abstract and the main body of entered articles and literature were scanned in order to understand what was done, how it was done and why it was done.

5. Fifth, articles related to the purpose of the current study were selected and reviewed.

6. The sixth step consisted of the conclusion of the literature review and a primary draft of the social accountability assessment tool was designed.

The Delphi method was used to validate our social accountability assessment tool. This method is widely applied in the research context and was utilized to validate the developed questionnaire. The Delphi panel was made up of 12 researchers from Iranian universities with research backgrounds related to the study topic. Purposeful sampling was used to assemble panel members who met the above criteria, and the primary draft of the social accountability assessment tool was sent to them. This process was performed over three rounds. In each round, after taking into consideration feedback from participants, comments were analyzed and the changes were made and resubmitted. Finally, all participants reached a consensus at the end of the third round and approved the developed tool. In this tool, a separate column was titled “Indicator Description” for each index, and then the weight of each was determined to clarify the concepts of the indices defined and prevent different interpretations of these indices.

The second phase consisted of investigating the working processes of different areas at the Shahid Beheshti University of Medical Sciences.

In this phase, the authors called all departments and units of the university's subdivisions and asked them to report on social accountability-based university processes. University processes are activities and tasks undertaken by staff to achieve a consistent output. University processes may support policy, workplace agreements, relevant legislation by mapping day-to-day activities and tasks to be performed by staff. University subdivisions were given nine months to submit their work-accountable community processes in a format designed and provided to them to be submitted to the secretariat. Eventually, all submitted processes were reviewed by a specialized panel based on the designed checklist.

Results
The assessment tool of social accountability
In this phase, a tool was developed by critically reviewing the texts and documents and was approved by experts in the field using the Delphi method. This tool shows to what extent each intra-organizational activity complies with the community needs principles (Figure 1).

The levels of attention to the community's needs are discussed in the following, including social responsibility, social responsiveness, and social accountability; also the relationship between the levels of attention to needs and organizational performance levels of explained.

Social responsibility: This refers to an attempt to identify the social needs and problems. Toward this end, the organization must continually take steps to identify
the needs of the covered community and naturally plan to address those problems and update its plans to the community's changing needs using valid need assessment techniques. In medical science education, such efforts are reflected in the mission and vision of the university or Faculty of Medical Sciences, and the university has units to monitor community needs and to address these needs in all educational programs.20,26

Social accountability: Organizations must assess the extent of the effect of their implemented programs to address community problems including the two preceding concepts, that is, identifying community needs and problems and planning and implementing community-wide programs. Universities of medical sciences should work closely with other organizations and bodies to address community health needs and problems and to provide evidence of the effectiveness of measures taken in addition to needs assessments and proper planning and implementation of community-wide programs to

Figure 1. Social accountability assessment tool.

| Level of engagement | Indicator Title | Indicator Description | Score | Maximum Score | Achieved score |
|---------------------|----------------|----------------------|-------|---------------|----------------|
| Needs assessment prioritization process | Community-based needs assessment | Burden of disease | 10 | 20 | |
| | | Demands | |
| | | Expectations | |
| | | Quantity, distribution, and coverage of services or products | |
| | | Appropriateness and quality of services and products | |
| | | Satisfaction with services or products | |
| | | Upstream orientations, policies, and requirements | |
| | Use of scientific approach in need assessment | 3 | |
| | Existence of continuous needs assessment and environmental monitoring system | 3 | |
| | Prioritize services and programs based on needs assessment | 4 | |
| Program Goals | Developing clear, objective, measurable and achievable goals | 5 | 10 | |
| | Alignment of goals with identified needs and priorities | 5 | |
| Description of a developed program | Community-related planning | 5 | |
| | Engaging the community in the planning process | 5 | |
| Implementation / intervention steps | Performing the program within the community | 5 | |
| | Engaging the community in program implementation | 5 | |
| | Integrated function with other health subsystems | 5 | |
| Output | Production of community-related output (products and services) based on identified needs assessment | Training Accountable human resources (Education) | 15 | |
| | | Production of society-related science (Research) | |
| | | Providing adequate service to the community (Service) | |
| | Production of community-based outcomes according to identified goals | Providing quality and appropriate services | |
| | | Dissemination, absorption, and application of qualitative and relevant knowledge | |
| | | Reducing the burden of community health problems | |
| Outcome | Meeting the community health needs according to the identified goals | Community Health Improvement | |
| | | Increasing community satisfaction | |
| | | Justice in providing services to the community | |
| Impact | | | | 15 | |
| | | Total score | | 100 | |
determine the effect of the programs’ implementation and to determine the achievement of goals that meet the health needs of the community.\textsuperscript{5,20,26}

**Evaluating university processes**

In all, 422 university processes were investigated and evaluated to determine the accountability of university processes in different fields at the Shahid Beheshti University of Medical Sciences in 2017. Overall, the mean score of all evaluated processes was 11.9 on a scale of 0 to 100. The results of different parts of social accountability based on the designed tool are summarized in the following chart (Figure 2).

### Discussion

The current study aimed to develop a social accountability assessment tool in different fields of an higher education organization. To this end, the authors developed a general social accountability model through a critical review of the relevant literature. The authors hold that organizations providing services to society wish to move towards greater social accountability, and that they can plan and implement processes as social accountability based on this model in specific organizations such as this university. In the next step, this study was designed based on the model developed for measuring social accountability for different processes in an organization. Using this tool, various work processes were evaluated at the Shahid Beheshti University of Medical Sciences.

Based on the results of this evaluation, on average, the work processes at Shahid Beheshti University of Medical Sciences are not accountable to community needs, as indicated by a score of 11.9/100. Investigating the different community accountability components also indicated that some components such as goals formulation, planning, and implementation in the community outperformed other components, although the performance was below average in those cases. The highest score in this assessment belonged to developing goals, meaning that while nearly half of the university processes had set goals, only 7\% of them were in line with the needs and priorities of the community. The importance of evaluating performance outcomes and investigating their effect on society\textsuperscript{20,24} is one of the most critical components of social accountability; however, unfortunately, none of the university-level working processes have evaluated their outcomes and their effect on the covered community. Therefore, it can be concluded that the distinction between accountability and responsiveness\textsuperscript{15} that assesses the effect of performance on society remains largely ignored, and it can be said that the Shahid Beheshti University of Medical Sciences has planned and implemented its university processes at the accountability level. Another considerable point is that in the needs assessment process, only 1\% of the university’s university processes used a continuous needs assessment and environmental monitoring system; the rest of the university processes that performed the community need assessment (25\% of all university processes) performed a cross-sectional needs assessment only once. This is while continuous need assessment of the covered community is one of the most important components of social accountability,\textsuperscript{5,14,15} therefore, it seems necessary to plan appropriately in this regard.

### Conclusion

The results obtained in this study show that social accountability is a relatively new topic in the medical education world, especially in the field of medical education. This has only recently received considerable attention in Iran; thus, the results obtained are to be expected. However, one can hope to see further improvements in community service delivery in the coming years to meet the needs of society, considering that this issue has been emphasized in upstream documents in

![Figure 2. Social accountability, Shahid Beheshti University of Medical Sciences.](image-url)
recent years and that policy makers and senior executives are paying particular attention to it.

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Authors' contributions
All authors contributed to the design of the study. S.Y, M.A, and S.M have conducted the study. M.A and S.M wrote the manuscript and S.Y and M.S provided detailed comments on the manuscript.

Ethical approval
Not required.

Competing interests
None declared.

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