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ORIGINAL ARTICLES

SOCIAL ACCOUNTABILITY OF A MEDICAL COLLEGE IN PAKISTAN - A CASE STUDY

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ABSTRACT

Objective: To determine perception of faculty regarding social accountability of a private medical college. *Study Design:* Qualitative case study.

Place and Duration of Study: The study was done at Islamic International Medical College of Riphah University Pakistan, from Jan 2017 to Jan 2018.

Material and Methods: Purposive sampling was done to collect data from 21 faculty members after informed consent. Interviews were done using open ended semi-structured questions to the point of saturation. The interview questions were based on Conceptualization, Processes and Usability Model (CPU). Triangulation for reliability was achieved by using multiple interviewees and co-investigator for data collection. The interviews were audio recorded and thematic analysis was done using NVivo software.

Results: Six themes emerged from data analysis. Subthemes for each theme were grouped with frequency of responses. Theme of social accountability included type of student produced, productivity and impact on population as subthemes. Second theme, major health issues of Pakistan had curriculum, expert input and vision as subthemes. Theme "inculcation of community health problems" included priority given to community health problems, educational program, health outcomes. Theme "predetermined competencies" comprised of stakeholders, and prospectus subthemes. Fifth theme "underprivileged students and admission process" considered railway employees, preventive aspect and student's society as subthemes. Finally, motivation to work, role of college and future employment were the subthemes for "exposure to underserved population".

Conclusion: Concept of social accountability is new to the faculty. A comparison between private and public sector needs to be drawn. If Social Accountability is to be taken up seriously by the medical education institutes across Pakistan, so they can contribute actively toward delivery of healthcare which is equitable, relevant, cost-effective and quality-driven, and which has a demonstrable impact on the health indicators of the communities it serves, then a major revision of the teaching and training programs needs to ensue. There must be a national consensus on the conceptual framework driving curricular change, with the end-object not being production of under-graduate medical doctors but, rather, a demonstrable and measurable impact on actual health outcomes of the society.

Keywords: Community health problems, Processer and usability model, social accountability.

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INTRODUCTION

The concept of social accountability of medical colleges and other health care educational institutes has been defined as: "the obligation of medical schools to direct their education, research and service activities towards addressing the priority health needs of the community, region, and or nation they have a mandate to serve. The priority health needs are to be identified jointly by governments, healthcare organizations, health professionals"¹. Recent changes to accreditation standards place increasing emphasis on social accountability stipulate that a medical school must be committed to addressing the priority health concerns of the population it has a responsibility to serve². The socially accountable medical school not only takes specific actions through its education,

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research and service activities to meet the priority health needs of society, but also works collaboratively with governments, health service organizations, and the public to positively impact people's health and demonstrate this by providing evidence that its activities are relevant, of high quality, equitable and cost-effective3. Medical schools should have positive impact on health status of the society by providing skilled and dedicated doctors; therefore, numerous international medical associations have highlighted the significance of social accountability in their institutions. About 130 medical organizations serving worldwide presented and emphasized the Global Consensus for Social Accountability of Medical Schools⁴. World Health Organization (WHO) has specified social accountability of a medical institution as their commitment to direct their education, research and service activities for improving health outcomes of the individuals, families, communities and nation at large⁵. A comprehensive framework Conceptualization, Production, Usability (CPU) has been designed by WHO in order to facilitate medical schools in evaluation of their advancement towards accomplishment of their goals of social accountability. This framework stipulates four values of social accountability which are relevance, quality, cost effectiveness and equity. All these values are highly related to the actions taken in any medical college⁶. In many medical colleges, especially in countries like US, UK, Australia and Canada, social accountability is being assessed in different medical schools, but it has been observed by the principal investigator that it has not been carried out in Pakistani Medical Colleges, as was evident when published literature was searched for Pakistani context. The purpose of this study was to ascertain the awareness level of the faculty regarding social accountability in a Pakistani medical college.

MATERIAL AND METHODS

A qualitative case study was done at Islamic International Medical College, Riphah University from 1st January 2017 to 1st January 2018. COREQ a 32-item checklist⁷ was used as repor-

ting guideline for quality assurance of the study. To ensure participant's honesty, the principal investigator Dr. Mahmood ur Rahman MHPE scholar and Professor of community medicine at Heavy Industries of Taxila Institute of Medical Sciences Pakistan, declared his independent position ensuring an honest and safe interview and data collection environment with investigators and observers, Dr Rehan Ahmed Khan medical educationist, surgeon and faculty member of Islamic International Medical college. Anonymity of information given by participants was assured at the outset; and participants were free to leave the research if they wanted. To ensure critical self-reflexivity, detailed verbal critical reflection was done with coinvestigators all of whom were experts in the field of medical education. Their expert opinion was sought on data collection methods, study design and clarifying reflective thoughts of the researcher, referencing these to the theoretical frameworks employed for study deign, interviews and data analysis.

Theoretical framework underlying this study was phenomenology using one-on-one semistructured and open-ended interview process triangulated with direct observation regarding conceptualization, processes, functionality, and usability aspects of the educational program; and analysis of the curriculum. The idea was to find out the perspectives of faculty about presence of social accountability. Purposive sampling was done to collect data from twenty one faculty members on interview questions. The participants were assistant professors, associate professors and professors from basic and clinical sciences. The participants who were engaged in teaching basic and clinical sciences and were involved in academic, research and administrative roles at undergraduate level and who signed consent form were included in the study. Those who did not fulfill these criteria were excluded.

Each of the participants were interviewed using a semi-structured open ended interview after taking informed consent. The interview questions were based on CPU model and were developed in consultation with Dr Charles conducted at a predefined time and in one of the predefined faculty offices or the conference room

 Table: Summary of each of the six themes with their subthemes from faculty interviews along with representative quotation from interview transcript.

 Theme 1: Concept of social accountability.

Theme 1: Concept	t of social accountability.	T	D (
Subthemes	Description	Frequ ency	Refer ences	Representative quote
Helping the society	How far we are successful in producing good doctors	21	27	SM- "It's which type of graduates we are turning out in society how they are coping with the populations' problems."
Productivity	Whether the doctors are produced in sufficient numbers according to country's needs	19	26	MF- "Students prepared as a doctor are as productive to the society as they should be. Quality of doctors, is it checked?"
Excellent output	Seven star doctors to be produced	15	20	SA- "I don't think so. Frankly all private medical colleges are made to earn money they are least bothered about anything else"
Theme 2: Major H	lealth Issues of the Population			-
Curriculum	Does curriculum covers the main Public Health Issues of our country	17	25	WBS- "We have more focus on teaching of those clinical problems and diseases which are common in our country and are particularly responsible for major components of morbidity and mortality in this country".
Expert Input	The faculty gives expert input regarding this issue	20	28	AK- "It is difficult to say whether it is by design or it is by default, every curriculum has to include major health problems of the world"
Vision	The vision of college coincides with the curriculum	19	30	AKN- "These are mentioned in our vision and mission"
Theme 3: Inculcat	ion of Community Health Problems in t	he Educa	tional Pro	ograms and assessment of health outcomes
Community Health Problems given priority	Primary health care is a theme followed in college's training and how it is imparted.	21	29	MH- "Yes, multiple teaching and learning methods are used which include SGD, Skill Lab, PBLs and large class formats and practical hands on Training. We have aligned that curriculum"
Revised Educational Program	Keeps on revising the educational program accordingly	20	29	AW- "Yes they are doing it by telling the students at the start of the session"
Health Outcomes	Being assessed periodically	21	28	TS- "Most of teaching faculty gets this information by Gantt charts"
Theme 4: Pre-defi	ned Competencies regarding pressing c	ommunit	y health i	
Shared with all the stakeholders	Requirement by PM&DC	21	28	DS- "We divide these competencies into cognitive, psychomotor and affective domains and thus accordingly develop the curriculum".
Verbally given	Sometimes in the class by the Teachers / Administrators	21	29	TD- "These are given at the beginning verbally and the faculty knows, students know what they are going to study"
By Prospectus	Always mentioned with clarity	18	20	AS-"Yes, because consensus of all major stakeholders and all who are involved, we share with them through the prospectus"
Theme 5: Conside		ıring Adr	nission P	rocess and teaching methods for cost-effective prevention
Railway employees or Al-Meezan	For admission process of the medical college and the reflec-tion of the quota for students of the under- served population	20	28	UK- "Yes they do. Actually I would say, our hospital is catering for the lower socio-economic strata and in this way they are doing it"
Preventive concept only in theory	Preventive aspects are exclusively covered but only in theory	21	23	MAK- "Health service delivery in the primary health care (PHC) is not being practiced"
Student's Society Activities	By such activities cost-effective preventive measures undertaken	21	30	AW- "We have students' societies who are working in different areas like we have recently arranged a separate camp in Thar. Our students in such activities learn cost-effective methods as well"
Theme 6: Exposur	e to Under-served Population and motiv	vation for	future ei	
Motivation to work	Whether and how the students are exposed to the problems of the underserved population of the community	21	27	SA- "Yes they are exposed in both our teaching hospitals at Railway and Sihala Hospitals and people/patient 90% of patients are from poor class"
Role of the college	Determination of the medical graduates in the under-served population.	21	30	TS- "Yes, they are at different affiliated hospitals when they go there on rotation"
Future employment	Who will work in far flung rural areas of the country	20	27	AB- "Employment is not directly the responsibility of the college. They go their own way and wherever they find an employment"

Boelen, who gave the initial concept of social accountability in 1995⁵. All interviews were

in the institution. Each interview consisted of 15-20 minutes. The interview started with an

open-ended question "What do you think social accountability of a medical college is?" No leading questions were asked in order to avoid getting a biased or modified opinion. English language was used during the interviews and the interviews were audio recorded. All the interviews were then transcribed. For the purpose of maintaining anonymity and confidentiality, all interview transcription documents were numbered before analysis and counter checked by the co-investigators. Interviews were conducted till saturation point of exhaustion of new ideas was reached. Field notes were taken.

To ensure credibility and trust worthiness8 of interviews, data triangulation was done by using multiple interviewees from study participants, feedback was taken from participants by sharing transcripts of their interviews with them to reduce any ambiguity and by asking participants to explain their understanding of the questions and the subsequent answering of the same. Review of prospectus, curricular documents, and course evaluations were done to substantiate the claims of the faculty during the interview. Methods triangulation was done by using oneon-one interview process with third party observation by the researchers at educational and service-delivery sites. Investigator triangulation was done by involving co-investigators. Theory triangulation was done by referencing interview to CPU model. Participants' bias was eliminated by taking their informed consent.

NVivo version - 11 Software was used for thematic analysis, based on coding of all audiotaped and transcribed interviews of study participants. All individual documents generated by transcription of interviews were separately coded. All the text was coded generating thematic nodes in the NVivo software version. The emergent themes were named according to the nodes in which the data were stored. Analysis was done using word search queries, word tree queries, word frequency queries, node analysis, and node comparison diagrams. Documentation of the results contained the NVivo output according to the above-mentioned queries, supported by pertinent quotations from the transcribed interviews. A deductive thematic analysis approach was used for data analysis which led to development of emergent themes which were consistent with the CPU Model. Ethical approval of the study was provided by Institutional Review Board of the University.

RESULTS

Out of 21 participants, 8 (38%) were female and 13 (62%) were male. 14 (66.6%) were professors, 3 (14.3%) were associate professors and 4 (19%) were assistant professors. 13 (62%) were from basic sciences and 8 (38%) were from clinical specialties. 17 (81%) (were from purely teaching cadre and 4 (19%) held administrative posts. Six themes with relevant subthemes emerged from data analysis (table). For the theme, Concept of Social Accountability, three subthemes were recognized as productivity i.e, long term effectiveness of knowledge imparted to the students, the type of students produced and impact of doctors produced on local population. Results show that Social accountability is a new concept with diverse meanings. The second theme "major health issues of Pakistan" was reflected by the educational program of the Medical College. It included: Curriculum, Expert Input and Vision. Seventy five percent of the respondents were of the opinion that major health issues of the population are made part of the educational program via the curriculum, expert input, vision of the college but remaining twenty five percent disagreed. The third theme was "Inculcation of community health problems in the educational programs and assessment of health outcomes". The majority of respondents were of the belief that teaching learning strategies ensure that community health problems are addressed in the educational program. Community based learning and primary health care were perceived as one and the same thing. However, some were of an opinion that primary health care is not included in the educational program. The assessment of health outcomes of the reference population was not done as there was no system made for this purpose. Fourth

theme was "Pre-determined Competencies according to the curriculum". Word tree for "curriculum" depicts the situation related to conceptualization and resultant description by the study participants (fig-1). The fifth theme was "Consideration of under – privileged students during admission process and teaching methods for costeffective prevention." The respondents were of the opinion that being a private medical college the cost-effective aspect was not possible but the preventive strategies were imparted to the prevalent health conditions of the society and the training of medical doctors might be due to lack of inclusion of social and behavioral aspects of healthcare of local population while educational program was conceptualized and lack of involvement of policy makers responsible for health financing^{8,9}. Professors, heads of departments and administrative faculty through participation in relevant committees were involved in decision making process related to conceptualization, processes and usability (CPU model). Junior

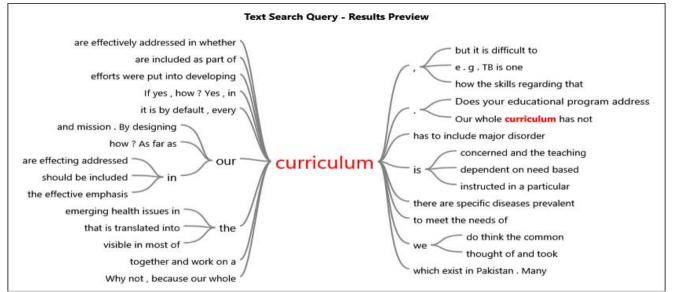


Figure: The word-tree for the word "curriculum" showing the context of the word as used by the respondents.

students only in theory. Under-served population was not given any quota in the admission process, but a quota for railway employees was kept. The sixth theme was "Exposure to Underserved Population and motivation for future employment for young graduates." The majority of the respondents were of the opinion that sufficient exposure to the underserved population is given at Sihala and railway hospital vicinity however majority of female students cannot attend as they don't get permission to stay away from home. Most of the respondents were of the opinion that the college has no role in employment of fresh graduates.

DISCUSSION

The concept of social accountability is new to our medical college. A mismatch between the facultywas only involved in the processes and outcome-level assessment.

The study showed lack of importance given to presence and sharing of graduate competencies. This may be because the participants were not cognizant with the Pakistan Medical and Dental Council (PM&DC) Competencies and Fitness-to-Practice guidelines and procedures. It is important to share these competencies (conceptualization) widely with the students, faculty and the society at-large to achieve congruence between end-product (utilization) and training (process) to achieve social accountability¹⁰. Inclusion of Primary health care (PHC)emerged as a central theme for addressing the health problems of the community through the curriculum. Although inclusion of PHC in medical curriculum has been a major recommendation internationally¹¹, it has not been a major theme, primarily because it is not assessed at graduate level, as there is dearth of qualified family physicians with an interest in education and capitalistic and competitive national and international market-forces¹². The curriculum is the mainstay of introducing the longitudinal themes of PHC for a medical college to be socially accountable by addressing the needs of the society served¹³.

This study reveals that social accountability is a relatively new concept in the institute under study in Pakistan. A strong emphasis was found on clinical specializations and credentialing through conceptualization and processes of medical education as a means to ensure physician competency but, the usability aspect was weak, especially in the cost-effectiveness, preventive and promotive and equity constructs of healthcare¹⁴. The institute was a private medical college with high costs of admitting students especially marginalizing students from low socioeconomic group. Moreover, open-merit leads to more females enrolling in undergraduate medical studies amongst them many don't practice medicine, due to societal constraints and traditional roles. Medical trainingis conducted in the expensive, urban, tertiary care setup focused on delivering tertiary care training with little or no emphasis on preventive and promotive aspects of healthcare with limited exposure to underserved population¹⁵. However,"Affordable Care Act" passed by senate of United States of America has paved way for transformation of their healthcare by making health care accessible, equitable, cost effective and promoting preventing aspects by highlighting the importance of primary care an important component¹⁶. We can learn from their transformational reform and rethink the mission of medical school.

If social accountability is to be taken up seriously by the medical education institutes across Pakistan, so they can contribute actively toward delivery of healthcare which is equitable, relevant, cost-effective and quality-driven, and which has a demonstrable impact on the health indicators of the communities it serves, then a major revision of the teaching and training programs is required. There must be a national consensus on the conceptual framework driving curricular change, with the end-object not being production of under-graduate medical doctors but, rather, a demonstrable and measurable impact on actual health outcomes of the society¹⁷. Assessment of social accountability is an emerging area in need of reliable and valid instruments¹⁸. The scope of study needs to be broadened by comparing public and private-sector medical colleges on the basis of CPU model. The findings of the study raise the issue of corporate social responsibility if training of doctors by a medical school is considered an integral part of health care industry in private sector¹⁹. Further research is required as medical education in medical college may be at the crossroads of social accountability and corporate social responsibility, operating as a component of health care industry, producing doctors serving the communities.

CONCLUSION

Concept of social accountability is new to the faculty. A comparison between private and public sector needs to be drawn. If Social Accountability is to be taken up seriously by the medical education institutes across Pakistan, so they can contribute actively toward delivery of healthcare which is equitable, relevant, costeffective and quality-driven, and which has a demonstrable impact on the health indicators of the communities it serves, then a major revision of the teaching and training programs needs to ensue. There must be a national consensus on the conceptual framework driving curricular change, with the end-object not being production of under-graduate medical doctors but, rather, a demonstrable and measurable impact on actual health outcomes of the society.

CONFLICT OF INTEREST

This study has no conflict of interest to be declared by any author.

REFERENCES

- 1. Boelen C. Coordinating medical education and health care systems: The power of the social accountability approach. Med Educ 2018; 52(1): 96-102.
- Leinster S. Evaluation and assessment of social accountability in medical schools. Med Teacher 2011; 33(8): 673-6.
- Boelen, C, Pearson D, Kaufman A, Rourke J, Woollard R, Marsh D et al. Producing a socially accountable medical school. Med Teach 2016; 38(11): 1078-91.
- Boelen C, Woollard R. Social accountability: The extra leap to excellence for educational institutions. Med Teach 2011; 33(8): 614-9.
- Boelen C, Dharamsi S, Gibbs T. The social accountability of medical schools and its indicators. Education for Health 2012; 25(3): 180-94.
- 6. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ) a 32-item checklist for interviews and focus group. Int J Qual Heal Care 2007; 19(6): 349-57.
- Shenton AK. Strategies for ensuring trust worthiness in qualitative research projects. Edu Informa 2004; 229(2): 63-75.
- 8. Biggs JS. The social responsibilities of medical colleges in Pakistan. J Coll Physicians Surg Pak 2013; 23(1): 2-4.
- Frenk J, Chen L, Bhutta ZA, Cohen J, Crisp N, Evans T et al. Health professionals for a new century: transforming education to strengthen health systems in an independent world. Lancet 2010; 376(9756): 1923-58.

- Larkins SL, Preston R, Matte MC, Lindemann IC, Samson R, Tandinco FD, et al. Measuring social accountability in health professional education: development and international pilot testing of an evaluation framework. Med Teach 2013; 35(1): 32-45.
- 11. Shields M. From clinical integration to accountable care. Ann Health Law 2011; 20(2): 151-64.
- 12. Rosenbaum S. The patient protection and affordable care act: Implications for public health policy and practice. Public Health Rep 2011; 126(1): 130-5.
- Tan CH, Macneil P. Globalization, economics and professionalism. Med Teach 2015; 37(9): 850-5.
- Hays R, Stokes J, Veitch J. A new socially responsible medical school for regional Australia. Educ Health 2003; 16(1): 14–21.
- 15. Hennen B. Demonstrating social accountability in medical education. Canadian Medical Assoc J 1997; 156(3): 365-7.
- Kwizera E, Iputo J. Addressing social responsibility in medical education: The African way. Med Teach 2011; 33(8): 649–53.
- Preston R, Larkins S, Taylor J, Judd J. From personal to global: Understandings of social accountability from stakeholders at four medical schools. Med Teach 2016; 38(10): 987-94.
- Sanaii M, Mosalanejad L, Rahmanian S, Sahraieyan A, Dehghani A. Reflection on the future of medical care: Challenges of social accountability from the viewpoints of care providers and patients. J Adv Med Educ Prof 2016; 4(4): 188-94.
- 19. Rourke J. Social accountability in theory and practice. Ann Fam Med 2006; 4(1): 545-8.