Original Article

Patient's Safety as Integrated Part of Medical Curricula: Perceptions of Postgraduate Medical Doctors from Two Selected Teaching Institutes Peshawar Pakistan

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ABSTRACT

Objective: To Perceptions of postgraduate medical doctors Patient's safety as integrated part of medical curricula in Peshawar Pakistan.

Study Design: Qualitative study

Place and Duration of Study: This study was conducted at the Department of Pediatrics, Khyber Institute of Child Health, Peshawar and Rehman Medical College Peshawar from April 2010 to May 2016.

Materials and Methods: This was a qualitative study based on exploratory design where data was gathered through focus group discussion (FGDs) from post graduate medical doctors (Trainee Medical Officers, TMO) from two selected teaching hospitals i.e. Hayatabad Medical Complex (HMC) and Rehman Medical Institute (RMI) Peshawar. Thematic data analysis was done manually for construction of results in terms of narrations

Results: The basic definition of the patient's safety to them was "health care provision in such that there is no harm to the patients" while incorrect diagnoses and treatment was considered as medical error. Other reported characteristics related medical error are; ignoring patients, lack of skills of procedure and any unethical conducts. One of the senior TMOs explained it in these words "major component of medical error is incorrect diagnose, doctors usually miss diagnose the patients and later realize their mistake". Based on these definition almost all of the respondents accepted that everybody (doctor) experienced some sort of these incidents or medical errors during the journey of their career, most likely during house job the error took placed. The human factors in this regards included; work burden, fatigue, dealing with complex cases and attitude of the individual doctors and poor hospital management supervision system. Incident reporting system in the hospitals are not implemented yet in the teaching hospital. The participants were of the view that patient's safety concerns are given due importance in medical curriculums of Pakistan.

Conclusion: Patients' safety was considered as core component of clinical practices. It was emphasized that Patients' safety module is needed to be formally incorporated in undergraduates and post graduate medical curriculum in Pakistan.

Key Words: Patient's Safety, Medical Curricula, Perceptions of Postgraduate Medical Doctors

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INTRODUCTION

The eventual goal of a curriculum in medical education is to address and solve the problems that affect the health of the public. Recently patient safety has come out to be a distinct discipline of heath care services and raised considerable public concerns.[1]

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In Pakistan the media have reported a significant number of patients being harmed and even killed due to medical errors, thus it emphasizes to plan for patient safety. However the area of patient safety care has been neglected specially in developing countries including Pakistan. It is apparent that a notable number of patients harmed/killed being admitted in the hospitals. In Pakistan in most of the health care setup, there is a lack of trans-disciplinary, evidence-based strategies for the patient safety. Furthermore there are also lacks of incident Reporting System and risk management strategies in our health care system especially at public hospitals.[2]

As result of mass media campaigns, the graph of awareness among general population is in its ascending fashion, hence they demand for safe and evidence based health care at any cost.[3] In this regards undergraduate education plays an important role in the broadcasting of

the correct concepts, skills, and knowledge about patient safety. However apart all these importance, health care professionals (students) are not been properly guided.[4]

Considering the significance of the problem many medical colleges in the world have added patient safety as formal teaching in their curricula.[5] The issue has not been given its due attention in our setup.[6] There is dire need that the medical students should be well versed in correct concepts, knowledge and skills about patient safety. Therefore it is very vital that medical students should be guided toward the principal of patient safety and should become a core of undergraduate curricula.[4]

MATERIALS AND METHODS

This study was conducted at the Department of Pediatrics, Khyber Institute of Child Health, Peshawar and Rehman Medical College Peshawar from April 2010 to May 2016.The exploratory design was used to address the through detailed focus group discussion gathering the data rich in context. The study was conducted on participants who were able to provide a wealth of information that led us to the reason of lake of patient safety measures in our health care setup or vice versa. It also explored the understanding of several other factors influencing the patients' safety measures in the curriculum and practical field. Study participants comprised of trainee medical officers from two selected tertiary care hospitals (RMI &HMC), Peshawar. Semi-structured pre-tested in-depth interviews guideline was conducted to explore perceptions of Trainee Medical Officers, having at least 3 years of clinical experience. A total of three FGDs were conducted which comprised of 6-8 participants. Data collected from different TMOs were fully transcribed accurately by independent expert transcriber and verified by the researcher. Data analysis of the transcripts was done by the researcher and external independent coder. The process of data analysis followed below steps. A list has been made of all the ideas and the similar ideas were clustered together. The final themes were formulated after reviewing the sub-nodes of respondents.

RESULTS

Regarding perception of patient safety most of them perceived patient safety "mean ho harm to the patients" which are included: Prevention of patient from other disease while treating the first one, preventing patients from any accident any hazards, ensuring of proper sterilization. One participants among TMOs mentioned, "Patient safety would mean that patient should not be harmed not porn to any accident, any hazard. He/she should be given proper treatment. He/she should be safe and should not get any disease while curing the first one".

Interpretation of medical error: Varying interpretation regarding medical error was given. The subsequent term was used for definition of medical error which included; incorrect investigations, wrong diagnosis or unnecessary long prescription. The important characteristics associated with medical error are: not giving appropriate time to the patients, skipping them not listening to them and lack of exposure and knowledge about medical surgical instruments. One of the senior TMOs explained it in these words "major component of medical error is incorrect diagnose, doctors usually miss diagnose the patients and later realize their mistake" another

Interpretation of adverse Events: Major proportion of the respondents perceived adverse Events as an outcome of medical error. One of the TMO narrated, "Adverse effect, happen when error is done". Again ignorance was linked with adverse events as defined by one of the participant "If patient safety is ignored this mean adverse Events".

Incidence of medical error encountered: Almost all of the respondents accepted that everybody (doctor) experienced some sort of these incidents or medical errors during the journey of their career, most likely during house job the error took placed. The frequent errors concerning patient safety were included; error during blood sample taking, medication and some sort of procedure performing. Mostly patients were not fully informed of guided regarding the procedure they went. One of the participants voiced, "Everybody experienced some sort of these incidents or medical errors….The doctors are not doing any errors it is just negligence"

Human factors of medical error: Factors influencing the patient's safety measures included; human, system and management related factors. The human factors included work burden, fatigue, dealing with complex cases and attitude of the individual doctors. Secondly, doctors mostly unfamiliar to the instruments like; surgical instruments, biomedical instrument and machines which in turn lead to the medical error. A senior participant narrated that "new doctors unusually not familiar to instruments due to lack of knowledge secondary to complexity and burden of work responsibility"

System related factors of medical error: About 3/4th of the participants also perceived that patient safety related incidence also occurs due to fault in the system which included; Lack of accountability , lack of proper protocols for the procedure (medical, surgical or others) hence no practices or follow-up (like accidents reports) observed.

Participant knowledge about accident report in the system: The importance of incident reporting system was admitted by most of participants, however, they added that such system is lacking in our organizations. A female TMO said that "Every hospital has an hierarchy of management and everyone should submitted incidence report if occurred….unfortunately

we yet not seen anyone who reported or asked for submission of incidence report"

Possible challenges for patient safety being part of curriculum in Pakistan: The main challenges reported are; poor attitude, lack of proper system, lack of interest of higher authority for the curriculum change. A comprehensive statement was given by one of the senior registrar "possible challenges in teaching patient safety to be part of our undergraduate and post graduate curriculum could be roughly, poor attitude, lack of interest of higher authority in this regards, lack of proper system (accountability) and most importantly the lack of welling to acceptance of change in curriculum"

DISCUSSION

Health Care organizations in the world are now continuously trying to improve health status of the clients by creating a health safety culture.[7] In this regards, World Health Organization (WHO) published and recommended "Patient Safety Curriculum Guide" for health care professionals especially for doctors. This Guide was developed after a series of meeting and tasks accomplishment by group of universities.[8]

The current study used a mixed methodology to assess the attitude and perception of trainee medical officers regarding patient's safety perspectives as part of undergraduate and postgraduate medical curriculum in Pakistan. Results indicates that majority of TMOs were of the view that medical errors usually occur, but could be preventable. One fourth of the students pointed that "after an error occurs, an effective strategy is to work harder to be more careful" a similar finding was also reported by Leung GK, Patil NG,[9] and about 1/2 of them were of the opinion that that medical error is common among incompetent doctor and on other hand competent doctor rarely commit medical errors, however this statement indicates an elementary misunderstanding about the nature and form of human error. [10]

Participants pointed out that doctor's especially senior physician should spare some of their time for patient's safety. This is also evident from literature where strategies regarding patient's safety and evidence based practices and was found effective in term of health outcomes. A "unit-based Patient Safety Leadership Walk-rounds (PSWR)"model was tested and good health impact was observed. [11]

Unfortunately Incidence reporting in selected hospitals the system was not formally functioning. This indicates that if proper incidence reporting system established in tertiary care hospitals, there will be a marked reduction in medical error in future as also evident from Shaw KN et al, observation. He found that error in medication among children has significantly reduced when quality health care was assured by implementing patient's safety measures. [12]

Knowledge about "patient's safety" among physician was also associated with medical error. Ghalandarpoorattar SM, et al,[13] found clear gaps between physician's knowledge and actual practices concerning patient safety. It was stated that "education in medical error management to professionally support error disclosure might help reduce the gap".[13]

Comparatively to other domains of patient safety, the key informants admitted that poor attitude among physicians were observed regarding reporting of medical errors. However they further added that a Physician is not always supposed to report medical errors on routine bases". Whereas routinely reporting of medical error was found very effective in reduction of error and improvement of patient safety.[14]

Keeping the importance of the patients' safety in the recent era 3/4th of TMO suggested that patient's safety curriculum should be the part of undergraduate and post graduate medical curriculum. Hence majority of them agreed that "Learning how to improve patient safety is an appropriate use of time in medical school". Learning of patient safety aspect as undergraduate level was supported by most of the literature and found significantly effective.[15-18] Although the actual knowledge is not presented in the current study but varying definitions of patient safety, medical error and adverse effects were reported by TMOs. Most of them reported basic indicators of patient's safety however; none of them have stated a concise definition. Almost all of them have experienced medical error during their journey of medical practices. They further reported that medical error have directly associated with; human, system and management factors. [19]These findings of present study are in consistence with other literatures where these factors were found directly associated with medical errors among these, human factorswere the main cause of medical errors.[20]

The core contributing factors in present study were; lack of appreciations, poor health infrastructure, lack of implementations, and medical complexity as potential causes of errors. The participants further added that patient's safety features not being part of medical curriculum in Pakistan, are due to; poor attitude of physicians and lake of patient safety culture. More or less similar statements were reported by World Health Organization.[2] WHO has categorized these challenges into; system related factors, new innovations in medical field, work load and poor attitude of physicians along with lack of accountabilities and responsibilities due to which things can often go wrong and unintentional, but serious harm comes to patients during routine clinical practice, or as a result of a clinical decision.[2]

Curriculum review in the present study indicates that patients safety curriculum proposed by WHO was not given due importance in Pakistan. The terms proposed by W.H.O was not found in both undergraduate and postgraduate medical curriculum in Pakistan. Ethical

consideration; however were given due importance in addition to principals of proper medications, diagnosis and appropriate treatment. It is also important to emphasize that there is no other sources or guidance on content of patients safety or consensus on what, and how much to include in the curriculum apart from W.H.O recommendation. There is also uncertainty on the level of effectiveness of these measures taken or the impact on patient safety in a particular country. Although patient safety is regarded as an issue of vital importance throughout the world as indicated in the literature but fewer Universities have made serious effort in making patient safety as part of their curriculum to a degree which can translate theory into practice.[21] There is also lack of consistency in the content of the curriculum which makes it difficult to include in a module with suitable content or deliverable changes in practice. There is evidence of brief, mixed and separate and extended module curricula but the formats vary. The teaching method of these modules may also vary from traditional lecture to video assisted simulation formats.[22]

CONCLUSION

Trainee Medical Officers of selected institute were aware of medical errors being inevitable aspects vary from situation to situation. There was however poor response in term of agreement regarding incidence reporting. The medical errors being inevitable aspects was broadly liked with three basic factors; the human factor, system and management factors which have further multi-facets linkages, contributing to medical error. The interpretation about patient safety was basically considered as proper diagnose, treatment and avoidance from hospital acquired infections

Author's Contribution:

Concept & Design of Study:	Sher Bahadur
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Revisiting Critically:	Sher Bahadur, Saminullah Khan
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