Teaching Patient Safety in the Undergraduate Curriculum-What Students Think

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ARTICLE INFO	ABSTRACT
Published Online: 31 January 2023	Patient Safety was incorporated into the undergraduate curriculum in our faculty in 2015. The faculty developed an introductory curriculum based on the WHO Patient Safety Manual. Students were then required to identify and work on a patient safety project during their clinical rotations. All reports were graded and completion was a requirement for the final professional examinations. Students' impressions on the teaching programme and understanding of patient safety was gauged with a questionnaire.
Corresponding Author: **G Ramachandran**	The programme improved awareness of students in the area. Ideal teaching and assessment mechanisms need to be developed to improve and sustain outcomes.
KEYWORDS: Patient Safety; Undergraduate; Teaching; Assessment	

INTRODUCTION

Patient safety is defined as the absence of preventable harm to a patient during the process of health care and the reduction of unnecessary harm associated with health care to an acceptable minimum.*(1)

The WHO estimates that*(2)

- 1 in 4 patients are harmed while receiving health care.
- Approximately 134 million patient safety incidents occur each year in developing economies contributing to 2.6 million deaths annually due to unsafe care.
- Medication errors cost an estimated 42 billion US dollars annually.

Health care delivery is now undeniably more effective. However it is now more technology driven in all areas and the increasing complexity of procedures and management that a patient is subjected to makes it important that safety issues are ensured in all patient-doctor encounters.

This need has been recognized in Malaysia as well, with the 13 patient safety goals developed by the Ministry of Health.*(3)

The challenge for the faculty was to develop an introductory patient safety module and segue it into the existing curriculum. We based our curriculum on the WHO Patient Safety Manual covering general patient safety, errors in medication prescribing, surgical errors and communication. The aim of the programme was to emphasize

- The magnitude of patient safety issues in medicine.
- The need for good communication to avoid or minimize errors.
- The need to work in teams to ensure good results.

The curriculum was delivered via lectures and a video. This was done in year 3, in year 4 students were divided into 20 groups and were required to work on a patient safety project and produce a report. These reports were graded and the best 5 were selected for oral presentation to the faculty and students. The report was a part of continuous assessment for the Final Professional Examinations.

METHODS

A student feedback questionnaire was distributed to all students who were part of the 1st cohort. A total of 22 students (12%) responded in the 1 week provided for feedback.

The significant findings from the feedback were

Parameters	Agree (%)	Disagree (%)
Patient safety is an important part of clinical training and care.	90	10

The taught module is an adequate introduction to the topic.	86	14
The teaching learning method is satisfactory.	55	45
The project is a good method of assessment.	71	29
There should be questions on patient safety in the final examinations.	16	84
To implement patient safety awareness is important.	90	10
To implement patient safety education is important.	77	33
To implement patient safety standard operating procedures are important.	70	30
To implement patient teamwork is important.	80	20
To implement patient documentation is important.	71	29
To implement patient incident reporting is important.	68	32
To implement patient a non-punitive environment is important.	76	24
Patient safety is the concern of senior members of the team	48	52
The Ministry of Health Malaysia has a documented patient safety process with key areas of achievements that are measured.	86	14

The module was accepted as an adequate introduction to the subject. However the group that responded was almost equally divided on the choice of teaching and learning method used. The students accepted the use of the project to assess understanding of the topic and overwhelmingly did not want any further assessment in the final professional examinations. While most students seemed to realize that patient safety required awareness, education and teamwork among other

requirements it was surprising to note that almost half still felt it was the concern of senior members of the health care team. The results while indicating some clear areas of strength in the programme was limited by the small numbers who responded to the feedback questionnaire.

DISCUSSION
With the increasing complexity in delivery of health care patient safety must be ensured at all levels as a quality indicator. In order to achieve this all health care personnel should be exposed to the basic concepts involved in assuring patient safety. This should ideally begin when they are students.
Education in patient safety improves health care quality, prevent errors and addresses gaps in physician education on how to handle errors and manage patient expectations. The patient safety module in our undergraduate programme serves as a primer to these issues by introducing our students to basic concepts in this area.
Resistance to introducing this module arose to a large extent from clinicians; this is not exactly unexpected as

- Many clinicians fear the threat of malpractice.
- Additions to the teaching loads results in increasing demands on educators and the curriculum.
- Adequate training to deliver the curriculum is needed.*(4)

However the evidence indicates that

- Improving patient safety reduces risk of litigation.*(5)
- Teaching in context results in better acquisition of facts, this was borne out by the fact students who took part in the patient safety project understood the need for awareness, education, policies, teamwork, incident reporting and a non-punitive environment to ensure good outcomes.*(6)

In spite of these gains many students felt the responsibility for patient safety was the concern of senior health professionals. This could be due to barriers in the reporting mechanisms that made it difficult for junior doctors as well as fears regarding the repercussions of reporting incidents. Teachers who are unable to adapt and resist changes in ensuring patient safety contribute to this negative perception.*(7)
This is evidenced in a report by the General Medical Council in 2015 that highlighted difficulties in teaching patient safety which included difficulties in identifying with the issues of patient safety*(6). This was somewhat overcome using the patient safety project. This exposed students to some of the processes involved in the implementation and monitoring of patient safety initiatives in the partner teaching hospitals.
Assessment is always a challenge; we used the patient safety project as we felt that it was a nonthreatening form of assessment. At the same time it allowed students to identify

issues, understand the initiatives taken to ensure safety as well as work in teams to achieve a desired outcome. We felt that some of the key competencies in building a patient safety culture were addressed in this way. This method of assessment did not cover higher order competencies but it has been acknowledged that assessment in this area is challenging and requires study.*(8)

CONCLUSION

"It may seem a strange principle to enunciate as the very first requirement in a hospital that it should do the sick no harm".

It may come as a surprise that the quote above is from Florence Nightingale, and it epitomizes the importance given to patient safety by health workers and reformers in the 19th century. It is humbling that what we strive to achieve is but a continuation of their work.

- Patient safety must be an integral part of the undergraduate curriculum.
- There is a raised awareness among students in this area after introduction of this module.
- Maximal gains can be achieved by teaching it in the context of clinical experiences.
- Assessment of this area should be rooted in clinical context to improve outcomes.

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