An evidence based approach to identifying competencies for medico-legal practice in Sri Lanka

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Abstract

Criteria for including content into undergraduate curricula should not be based purely on the enthusiasm of teachers. What is be taught at undergraduate level should be based on the needs and expectations of society from medical graduates and therefore be evidence based.

Forensic Medicine training at undergraduate level, in Sri Lanka, is not based on a *formal process* of needs assessment. It is not linked to the key priorities of the the ministry of justice (service recipient) or the ministry of health (service provider). The links between these institutions need to be utilised maximally in a formal way for workforce training and development. Unless this task is approached thoughtfully and systematically the curriculum would merely be a reflection of faculty interest rather than of stakeholder, student or public needs.

This paper highlights a needs based approach that maybe utilized in developing a medico legal curriculum and is also relevant in the development of curricula in other disciplines.

Key words
Forensic medicine
Undergraduate curricula
Needs assessment

Introduction

Forensic Medicine is a subject in the undergraduate medical curriculum in all medical faculties in Sri Lanka. In spite of the fact that the medico-legal expectations from a medical officer remain the same Forensic medicine curricula of the medical faculties have changed considerably over the past decade. These varying academic programs of the different medical faculties address the medico-legal requirements which are uniform throughout the country. In revising curricula, in the present context of public accountability, it is appropriate to ask ourselves the questions what

sort of doctor we trying to train and whether the needs and expectations of the society in which they will be practicing taken into consideration (Harden, 2002). These questions become even more relevant in the field of forensic medicine where the extent, duration and pure existence of a forensic medicine training program in undergraduate medical curricula have now become controversial. While some feel that Forensic Medicine should be a postgraduate subject others justify its existence in undergraduate curricular based on the fact that all medical officers, on graduation, are expected to perform medico-legal duties. The changing face of medico-legal practice in Sri Lanka is evident by the increase in the number of board certified medico-legal specialists/consultant judicial medical officers and by the introduction of short duration informal training programs for those medical officers who request such training. Therefore it may be assumed that the 'actual' medico-legal requirements of a non-specialist medical officer are diminishing. However the fact that Forensic Medicine is not a popular branch of medicine for specialisation, lack of updating of the circular of the ministry of health regarding the medico legal duties of a medical officer and the informal nature of the short duration training programs make it necessary to ensure adequate undergraduate training in Forensic Medicine. Furthermore, the fact that Forensic medicine is not merely the conduct of autopsies or the examination of clinical medico-legal cases and that it encompasses many other aspects at the inter-phase of medicine and law (eg., certification of death, documentation, maintaining records, ethical behaviour), justifies the inclusion of Forensic medicine as an undergraduate subject in the medical program in Sri Lanka.

The need for an evidence based approach

Over the past few decades, the emphasis in medical education has been on methods of teaching, learning and assessment and on instructional strategies and tactics. More recently, attention has shifted to some extent from an emphasis on the education process to a consideration of the product and the expected learning outcomes. The high expectations of the medico-legal system in Sri Lanka from a medical officer who has limited training in medico-legal work (purely undergraduate) lead to the hypothesis that a gap exists between employer expectations and graduate competencies with regard to medico-legal work. The ill-defined 'medico-legal role' of medical officers, concerns expressed by interested parties that; there is a reluctance and lack of confidence among medical graduates to perform medico-legal duties, dissatisfaction among stakeholders about the performance of medical officers and concerns that too much time in the undergraduate curriculum is being used for Forensic medicine highlights the necessity to define these so called professional competencies that should be aquired at the end of undergraduate education.

Over time, the Forensic Medicine curricula have been rarely re-examined but have been only slowly modified to accommodate new information and instruction methods. Frequently the curriculum drives the objectives (the objectives are changed to meet what the faculty want to teach), rather than the learning objectives driving the curriculum. In the light of these findings, it needs to be questioned whether the Forensic medicine curricula are been driven by 'needs' or the attempts of instructors to include what they think is important and convenient.

The proposed method

The methodology utilised to identify competencies should be based on the opinion of stakeholders (judiciary), employer (ministry of health) and the experts in the field (judicial medical officers).
This could be done using a 2 stage approach.

Stage 1: **Identification of competencies** required for medico-legal practice based on opinion of stakeholders (interviews of judiciary), requirements of the employer (circulars of the ministry of health) and a literature review

Stage 2: Based on the above, **obtaining the consensus** of experts in the medico-legal field (via a Delphi survey among judicial medical officers) on competencies required

Stage 1:
Since lawyers and judges are frequently exposed to the evidence of medical witnesses it is considered that they would provide valuable insights in to the medico legal functions performed by medical officers. A group of lawyers and judges should be selected based on a process of purposeful sampling which ensures a diverse mix of respondents, regarding age, experience, type of work undertaken (prosecution/defense) and courts practiced. Semi-structured, focused, in depth interviews of 30-45 minutes duration should be conducted on lawyers and judges regarding their opinion on competencies required to function as an expert medical witness. Qualitative analysis of the interviews would result in compilation of a list of competencies expected by the judiciary from medical officers.

Subsequently a questionnaire should be designed to include a list of potential competencies from a menu of competencies drawn from the following sources, as medico-legal duties of ‘medical officers’;

(1) Opinion of the judiciary from stakeholder interviews
(2) Manual of management of District Hospitals, Peripheral units and Rural hospitals and the Manual of management of provincial hospitals, (1995)
(3) Subject benchmark statement in medicine , Sri Lanka (2004)
(4) The criminal procedure code of Sri Lanka (1979)
(5) The evidence ordinance of Sri lanka (1895)
(6) Literature related to developments in medical education (Simpson et al., 2002)

Each competence should be accompanied by a five point competency category scale, prepared according to the degree of importance in performing medico legal duties.

After pilot testing of the questionnaire it can be used as a tool to establish consensus on competencies that are expected from a medical officer in performing medico-legal duties in a Delphi technique which is an accepted consensus defining approach (Brown et al. 2005, 2006).

Stage 2:

The Delphi survey should consist of the following

(1) selecting the "expert panel" based on identified criteria eg., Successful completion of the MD in Forensic Medicine OR Board certified in forensic medicine, in the absence of an MD

(2) circulation of the questionnaire among the panel where they should be requested to define the standards required by a medical officer in performing medico-legal duties, to be judged competent and encouraged to rate each competency according to a five point competency category scale. The respondents should also be prompted to add any other competencies that they felt were necessary or remove any items they felt inappropriate or unnecessary, and provide any further comments. (The responses should be anonymous and the questionnaires coded to ensure that non-responders could be contacted and to ensure that the feedback from the first round questionnaire could be given accurately via the second round questionnaire).

(3) Summarize the ratings given by the respondents in the first round by calculating percentages for each statement from the total responses to the questionnaire and analyse the free text comments for any common recurring themes.

(4) The second round questionnaire should be created by excluding statements which received 80% or more for the competency category 5 (essential). The remaining statements could be included with information of the percentage response to the categories definitely not important, undecided and essential, for each statement together with a reminder of the respondents own previous score. The second round questionnaire should be re-circulated among the experts who responded to the first round questionnaire. Each expert should be asked to study the group response and indicate whether their individual opinion remained unchanged or should be modified in the light of the responses made by the other members of the panel.

The responses to the statements in the second round should be compared with the first round responses. The percentages can be calculated for each statement in each category considering the cumulative response in both rounds. The percentage change in response should also be calculated for each statement.

In order to distinguish the more important statements a *group agreement* can be defined as, if the statement under consideration received a total agreement of >= 80% in the essential category in the first Delphi round.

The *net change* in agreement between Delphi rounds can be used as a measure of the *level of agreement* between the panel members. *Group consensus* can be defined as total agreement >=80% in the essential category after the second Delphi round with a net change of less than +/-10%.

If both these parameters *(group agreement* and g*roup consensus)* are satisfied, *group consensus agreement* can be established and the statement will be defined as an essential competence for medico-legal practice (Brown et al,. 2005).

Validation of these competencies may be then done by a committee forum which could consist of a validation sample of experts who will be requested to provide their views upon the list of competencies identified as “essential”, subsequent to the Delphi survey.

Conclusion

In this era of increased efficiency, a well planned, comprehensive program would enhance the likelihood of accommodating such courses in medical curricula because they would be more manageable, less intimidating to students and other faculty, less expensive or commanding of precious resources, and more immediately relevant to the needs of future medical practitioners.

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