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# **A**n Evidence Based Approach to Curriculum Development in Forensic Medicine -- Point of View

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In recent years, educational institutions around the world have been increasingly confronted with the challenge of making curricula relevant to the needs of the time with regular up-dating in terms of actual necessity <sup>[1]</sup>. Financial constraints and increasing accountability for the use of public funds further highlights the need for universities to clarify their goals based on concrete data.

Undergraduate medical curricula cannot include all major specialties and the criteria for including content into the undergraduate curricula should not be based purely on the enthusiasm of teachers. It is clear that the more common strategy of offering a course in the hope that at some future time it may serve the physician graduate is not satisfactory. Thus, what should be taught at undergraduate level should be based on the needs and expectations of society from medical graduates. Rapid changes in medical information technology and the growth of government and patient influences (satisfaction rates, legal rights, etc.) should be factors which direct the behaviour of a medical professional and should be reflected in the content of medical programs. Since the requirements of patients, society and peers make a professional career much more complex now than it has been in the past, it emphasizes

the need for medical curricula to be focused on outcomes supported by a strong foundation of educational theory and research. It is therefore necessary to develop an evidence based approach to making decisions on the content that is to be included in undergraduate curricula.

The importance of determining what needs to be included in curricula is clearly illustrated in the statement "effective teaching can be more dangerous than no teaching at all if it is not really relevant" <sup>[2]</sup>. One way of determining what needs to be taught to students is to rely on the judgments of experts to determine what a neophyte in the profession ought to know and ought to be able to do. However, reliance on expert opinion per se to determine educational goals result in "curricula being crammed with an ever burgeoning quantity of new and highly specialized knowledge..." <sup>[3]</sup>. Alternately gathering evidence about what a competent medical officer needs to know and needs to be able to do by feedback from stakeholders, critical incident technique, task analysis or by epidemiological studies would render more relevant scientific evidence regarding curriculum development.

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. In short it is now appropriate to ask ourselves the questions "What sort of doctor are we trying to train? Have the needs and expectations of the society in which they will be practicing been taken into consideration?" <sup>[3]</sup>. 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. In the Sri Lankan context, 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<sup>1</sup>, on graduation, are expected to perform medico-legal duties <sup>[4-7]</sup>. 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

<sup>1</sup> PART V of the Medical Ordinance (1988). Available at [http://www.saitm.edu.lk/fac\\_of\\_medicine/MED\\_files/MO\\_1988.pdf](http://www.saitm.edu.lk/fac_of_medicine/MED_files/MO_1988.pdf). Accessed on 10/07/2012. ■

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 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 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 acquired at the end of undergraduate medical education. These should be defined even in embryonic form with provision for further development during the course of their careers<sup>[8]</sup>.

Review of Sri Lankan literature revealed that a discrepancy does exist between private sector employer needs and graduate skills of those passing out from the state universities<sup>[9]</sup>. Tharmaseelan (2007) noted that universities have a danger of offering programs that are not relevant or

do not match the needs or demands of the work world<sup>[10]</sup>. Subjects are introduced without prior consideration of future markets, review of needs or long term vision but merely because there are specialists in a subject area in the department who have an interest to promote their own favourite subject. However no studies have been published with reference to state sector graduate competencies and the state sector employer needs of Sri Lanka. It appears that there is a presumption that since the supply and demand are both related to the state sector that a needs analysis is irrelevant. 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 stakeholder expectations and graduate competencies with regard to medico-legal work.

It is seen that Forensic Medicine training at undergraduate level is not based on a formal process of needs assessment. It is not linked to the key priorities of the the ministry of justice which in turn should be communicated to the ministry of health and the ministry of higher education. In short there is a fairly loose relationship between the service provider (ministry of health), service recipient and the pre-service training institutions (ministry of higher education) which is not used in any formal way for workforce training and development<sup>[11]</sup>. 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.

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