

## The Fledgling Medical Education in Pakistan: Challenges and Recommendations

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Pakistan has a population of 180 million and around 30% of the population has no access to medical facilities.<sup>1</sup> Negligible proportion (~2%) of Gross Domestic Product (GDP) is allocated to health.<sup>2</sup> Therefore, it appears that the health care system and health education may not become a legislative priority in the upcoming years. It seems that policy and decision makers have given up on health education as its priority (constant declines from 2.8% to 2.2% of GDP allocation).<sup>3</sup> As a result of lack of initiative from the public sector, there is mushrooming of private medical institutes all over Pakistan. The need of changes in the existing Pakistani medical education has been highlighted before.<sup>4,5</sup> Pakistan Medical and Dental Council (PMDC) was empowered in 2012 by the Pakistani parliament to maintain a quality check in various medical colleges of Pakistan.<sup>4</sup> However, and despite this positive step, changes that need to be implemented in medical education has been a matter of debate/concern in the past few years. Perhaps implementation of a modified Flexner model and/or THENet schools could offer a potential solution in this regard.<sup>5</sup>

In this scenario, it is very important to quickly re-evaluate and standardize undergraduate medical teaching/framework/formats/Quality Control (QC)/Quality Assurance (QA) systems for all medical colleges. Another challenge is application of control systems. Despite clear guidelines from PMDC related to infrastructure, resources and methodology, there appears to be a conformance issue amongst both public and private sector medical institutions. As an example, paucity of resources range from (a) outdated instrumentation (b) equipment and (c) educational methodologies/syllabi/teachers' training/capacity building.<sup>6</sup>

It is also important to consider national priority

areas so that national and international medical educationists can provide appropriate guidelines. Several challenges particularly to the need of community based medical education in the region have been discussed.<sup>5</sup> Moreover, lack of employment opportunities locally have added to the problem i.e. most of our human resource trained (on outdated undergraduate systems) in medical discipline are being exported to the west/the middle-east etc. There they find themselves frustrated as they encounter a gap between their competencies and international expectations difficult to negotiate. Of those taking up medical teaching, 99% percent of the teachers have no formal medical educational training.<sup>7</sup> Hence, we need to critique and recommend solutions because continuing on the same patterns, we will not be able to address the mega issues.

Following areas need to be addressed in order to revise the existing medical curricula.<sup>7</sup>

Define physicians' characteristics who can meet societies' needs  
Change in the medical curricula  
Quality assessment of medical education Improved,  
continued research activities in medical education  
and Restructuring the educational environment  
Locally, it is relevant to consider demands of the society while training/generating medical professionals. Some more challenges in this area include; (a) Inappropriate distribution of graduates in urban and rural setting (b) Increased resistance to take up rural role and (c) Reduced clinical exposure to ambulatory sites. As a result, the product of our medical colleges does not generally seem to have a service paradigm inclined towards contributing to rural landscape where 80% of the population resides.

Division of medical training in '3' traditional phases  
(a) basic sciences (b) pre-clinical and (c) clinical studies needs to have integration to remove

dissociation between (a) theory and practice and (b) education, patient care and research. In this regard, our recommendation would also be resourced from model by Patrick et al;<sup>8</sup> (a) external and internal evaluators, (b) setting goals, (c) periodic self-evaluation, (d) monitoring of progress, (e) modification of strategies and (f) external evaluation by universities which may require accreditation and affiliations. This is relevant because there also seems to be a paucity of quality assurance in medical education leading to uncontrolled mushrooming of private medical institutions. Another area of improvement is lack of interdisciplinary collaboration when it comes to ongoing research activities in Pakistan.<sup>9</sup>

Finally, there is strong need for developing an education environment where undergraduate students should evolve as matured self-learners and teachers to transform into facilitators. In absence of a strong regulating system of standardization of public and private sector medical colleges, it would be a big challenge to re-engineer the medical education environment for standardization and homogeneity. In order to do this perhaps we have to review the presence or absence of political will for medical education as legislative priority. There appears to be a gap in areas of distance learning and collaborative inters institutionalized curriculum delivery, which currently reduces the exposure to the outside world.

#### Suggestions and future direction

A concerted effort is required to prevent undergraduate medical education losing its relevance in international context. Hence, the following macro recommendations are suggested.<sup>10,11</sup>

#### a) Change within our basic approach towards ADULT LEARNING:

1. Adults need to know why they need to learn something,
2. Adults need to learn experientially,
3. Adults approach learning as problem-solving,
4. Adults learn best when the topic is of immediate value.

#### b) Changes with reference to curricula, related homogeneity & monitoring issues:

5. Competence based curricula,
6. Regular supervision and monitoring,
7. Establishment of department of medical education,
8. Training of teachers as facilitators,

#### c) Generating financial sustainability:

9. Securing proper funding,
10. Encouraging investment in the health research and

#### d) Policy directed by epidemiological indices and ensuring metamorphosis of medical education

11. Increased collaboration between healthcare planners and service providers and
12. Learning should be community oriented, i.e., education should focus on the demographic and epidemiological patterns.

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**Conflict of Interest:** None declared.

Rec Date: July 12, 2013 Accept Date: Oct 4, 2013

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