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EDITORIAL

Health Professions Education in Oman

A contemporary perspective

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تعليم المهن الصحية في سلطنة عُمان

منظور معاصر

ريتو لاختاكيا

Health ensures vitality and productivity, and health care is a basic human right encompassed in various UN declarations and WHO commitments.[1,2] Provision of health to its people demands structural organisation and systems planning by a government. This in turn requires emphasis on health professions education and material resources, after analyses of demographic inputs and unique local health issues.

The Flexner Report of 1910 was a watershed in providing a roadmap for marrying technological advances in medicine with systemic reforms in health education—translating into better health care.[3] An in-depth review of the 100 years that have elapsed since the Flexner Report by a Global Commission of experts (published in The Lancet in 2010), has provided a reality check for health planners of the 21st century.[4] The Commission estimated a global count of 2,420 medical schools, 467 schools or departments of public health, and an indeterminate number of postsecondary nursing educational institutions, training about 1 million new doctors, nurses, midwives, and public health professionals every year. This seemingly positive picture is, unfortunately, counter-balanced by the realisation that four countries (China, India, Brazil, and USA) each have more than 150 medical schools, whereas 36 countries have no medical schools at all.[4] Besides these astounding figures, the Report points out glaring gaps in health professions education due to outdated curricula, poor manpower planning (qualitative and quantitative) and a dismal financial outlay on health education (only 2% of the annual budget in some of the most advanced countries).[5]

Against this backdrop, a very contemporary article by Gillian White, *Transforming education to strengthen health systems in the Sultanate of Oman*, is published in this issue of SQUMJ.[6] Its comprehensive framework reviews the links between education and health systems in Oman. Through interaction with the labour market, the provision of educational services supplies an educated workforce to meet the demand for professionals to work in the health system. The author refers extensively to the findings outlined in the Lancet Commission's Report 2010,[4] and its recommendations for new instructional and institutional strategies for the design of health care professions education subsystems.

It is noteworthy that, like other Gulf Cooperation Council (GCC) countries, Oman was a net importer of its health workforce only four decades ago. Visionary self-reliance initiatives, prompted by an increasing competition for health workforce in the global market place and the urgency to create more employment opportunities for citizens, improved the public health sector manpower. From just 13 physicians and a few nurses in 1970 (serving a total population of approximately 732,000), by 2007 the physician-population ratio had risen from 0.18 per 10,000 to 17.9 per 10,000 and a nurse-population ratio to 37.9 per 10,000. The total number of physicians employed by the

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Ministry of Health (MoH) grew 5.4-fold during the period 1985–2007 (from 638 to 3,459). During the same period, the number of nurses grew 4.5-fold (from 1947 to 8,143). The representation of Omanis in the MoH workforce grew from about 52% in 1990 to 68% in 2007, including leading categories such as physicians, nurses and laboratory technicians.[7]

Contributing to this remarkable achievement were MOH-established nursing and allied health science institutes, the College of Medicine & Health Sciences at Sultan Qaboos University (SQU) established in 1986, the Oman Medical College (a private medical school) and the Oman Medical Specialty Board pioneering postgraduate residency programmes in the country. In all, 1,053 students earned their MDs from SQU during 1993–2007.[8] These figures classically illustrate the sequential progression from assessing health needs to planning health education, with a resultant trained workforce to meet the health delivery challenges of the country.

The Lancet Commission Report, and in turn the article by Gillian White,[6] refer to three sequential generations of educational reforms through the last century: the first taught a science-based curriculum; the second introduced problem-based instructional innovations; the third now proposes to refine educational systems by adapting core professional competencies to specific local contexts, while drawing on global knowledge.[4,6] The process of achieving this is through *transformative learning* and *interdependence in education*.

Transformative learning involves three fundamental shifts: from fact memorisation to searching, analysis, and synthesis of information for decision making; from seeking professional credentials to achieving core competencies for effective teamwork in health systems, and from non-critical adoption of educational models to creative adaptation of global resources to address local priorities. 'Instructional' reforms enable this form of learning.[4]

Interdependence in education also involves three fundamental shifts: from isolated to harmonised education and health systems; from stand-alone institutions to networks, alliances, and consortia; and from inward-looking institutional preoccupations to harnessing global flows of educational content, teaching resources, and innovations. 'Institutional' reforms are the key to achieving these transformations.[4]

Gillian White effectively summarises the emerging generations of health profession educational reforms over the last century and the complexities of the health challenges of the new millennium detailed in the 2010 Lancet Commission Report. She then provides a historical overview of health planning, delivery and education over the last 40 years in the Sultanate of Oman and discusses the implications and applicability of the Report for health profession education in the country. The article lays specific emphasis on the organisation and education of nursing and allied health sciences, the achievements thus far and an incisive critique of unaccomplished goals.[6]

It is pertinent to draw the reader's attention to a number of existing transformations already in place in the College of Medicine & Health Sciences at SQU, the premier public university of Oman, and in the Oman Medical Specialty Board which governs postgraduate medical residency training in Oman. The succeeding paragraphs highlight how these measures fulfil in part or whole the six recommendations of the Lancet Report[4] for instructional, and four recommendations for institutional reforms in health professions education to achieve the outcomes of transformative learning and interdependence in education.

Instructional Reforms

Competency-based curricula with a local context in keeping with 21st century global health management systems have already been initiated and remain under close and periodic evaluation to maintain relevance and dynamism. Newer learning styles like team-based learning[9] and contemporary evaluation processes form a vital part of this evolution. Accreditation processes are well under way to offer credibility and provide checks and balances.

Reducing inter-professional barriers has formed the basis of combined educational modules in the first two years of the Medical & Laboratory Sciences degree curriculum providing an insight and dialogue between interlinked professions. The new curricula foster an environment of analytical skills and actively promote leadership, management and communication skills.

Information technology (IT) has been actively harnessed for teaching, student-teacher communication, research and analysis, and self-learning. Educational software, evaluation on-line, and statistical tools are some examples of the many ways IT has already integrated effectively with medical and allied health science education.

Incorporation of local and cultural aspects to learning has led to the introduction of a Foundation Year to strengthen basic knowledge of language and science. Active institutional support promotes electives and international research exchange programmes for students. SQU benefits from short and long term transnational faculty that enriches curricular content and educational delivery.

Educational resource centres are replete with a variety of books, journals and software tools. Faculty development in teaching technologies and active participation in conferences sustains and improves faculty performance and career progression.

Professionalism is addressed by specific measures including didactic teaching, role-modelling, measures of accountability of performance and resource management, and use of evidence-based medicine.

Institutional Reforms

Joint planning mechanisms between the Education and Health ministries, professional associations and academic community are in place and evolving as exhaustively covered in Dr. White's article.[6] Workforce planning, health outreach and incentives for professionals to be drawn from, and to deliver back to marginalised geographical areas and communities, has formed the driving force behind health planning and is a work in progress.

Transforming academic centres to academic systems which form the backbone of a vertical continuum between secondary and graduate and postgraduate programmes and horizontally between disciplines and professions still needs a yeoman's effort and change in mindsets.

Overcoming shortages through alliances and consortia are part of future global health planning. Already in place in selected institutions in the GCC region in general and in Oman, these alliances provide a means to enhance quality standards, growth and wider exposure to global health perspectives.

Nurturing critical enquiry encompasses inculcating this habit at all levels of academia, and within students and stakeholders from society. Excellent examples of ongoing processes include The Research Council of Oman's funding of national level projects looking into genetic and haematological disorders, and autism.

The foregoing sections constitute benchmarks for the introduction of global standards with local emphasis and interdisciplinary synergy, and can provide a template for emulation by other institutions in the country. This illustrative but not exhaustive 'report card' emphasises the steady steps which apex institutions have already put in place towards achieving global standards. Today, Oman is well on its way to rub shoulders with global benchmark health care delivery systems. This work-in-progress needs pace and direction to achieve its goals, for which the Lancet Commission Report exhorts a four-pronged approach: 1) mobilise leadership: academic leadership backed by a political strategy; 2) enhance investments: public, private and philanthropic; 3) align accreditation to meet global standards, and 4) strengthen global learning through shared academic and research knowledge.

Pitfalls and Hurdles

Gillian White's article lists a number of local issues that need to be taken into account for the fructification of quality health education.[6] A few other aspects that need to be addressed critically and managed through institutional systems are detailed below.

The necessity to enhance standards in English, and the measures already in place, have been highlighted by the article. It cannot, however, be overemphasised that the preparatory levels in pre-university education need a comprehensive review of the curriculum of basic sciences, mathematics and information technology. An in-depth joint effort by educators in secondary and higher education is the need of the hour. The benefits accrued from elevating standards (especially of schools outside urban areas) may show surprising results: increased representation in the stream of higher education and, in turn, the return of trained health professionals to their regions to serve the community.

Attitudinal changes are vital to health care delivery systems: the profession demands an approach of service and empathy in the highest specialised academic as well as the lowest rung health care worker. Initiating, inspiring and sustaining these are the arduous tasks of health educators. Personal examples set by pioneering generations of Omani physicians will stimulate this beyond the homilies that a didactic module on ethics and professionalism can instill.

Straitjacketing of academic achievement, in 'degrees' earned, stifles the development of the persona of a health professional whose role and success in health care will depend as much (if not more) on a lifelong 'professional' behaviour pattern. Inculcation of these paradigms merits attention by educators and internalisation by students.

Despite excellent and comprehensive governmental incentives through long years of professional education in the country and abroad, attrition erodes the trained workforce base. The reasons for this range from personal to career-related decisions. Compounding this outflow are premature lateral or vertical 'shifts' from professional to administrative roles. On the other hand, excellent individual instances of professionalism and performance, that have provided leadership by example, should be rewarded by incentives that should be a part of institutional reform.

Of concern, is an almost predictable trend among physicians returning after training to shun academic appointments in favour of positions in clinical service. A variety of personal and professional reasons have dictated this drift, one being the stringent demand of teaching hours and research. The latter aspect, in particular, weighs heavily in determining career advancement. If Oman is to build a strong academic workforce for its universities and other professional teaching institutions, these issues need to addressed. The world over, burnout and a greater value placed on contributions in clinical, non-clinical and research areas over teaching, deter young physicians from opting for an academic career.[10]

Greater care to judicious planning of levels of higher education for health professionals demands an in-depth analysis of the job grades on offer. Over qualification, while helping individuals actualise their academic aspirations, may result in disgruntlement and frustration when stagnation occurs in the available positions without foreseeable promotion to a more senior level.

Equitable distribution of trained quality health personnel to non-urban or semi-urban populations will remain an ongoing challenge.[11] Higher education, being state-sponsored, must include its students' commitment for short and long term service in regional areas after graduation. More concrete incentives to make such jobs attractive could combine allowances with regular opportunities for professional updating and re-training.

Every health educator, professional and stakeholder in Oman's health care system must consider the review article and the Lancet Commission Report as a clarion call to deliberate seriously over the issues raised. This would enable their effective participation in improvement of the health education system and health care delivery in Oman.

References

1. International Covenant on Economic, Social and Cultural Rights. Article 12. From: http://www2.ohchr.org/english/law/cescr.htm Accessed: Sep 2012.
2. The Right to Health. From: http://www.who.int/mediacentre/factsheets/fs323/en/index.html Accessed: Sep 2012.
3. Flexner A. Medical education in the United States and Canada: a report to the Carnegie Foundation for the Advancement of Teaching. New York: The Carnegie Foundation for the Advancement of Teaching, 1910.
4. Frenk J, Chen L, Bhutta ZA, Cohen J, Crisp N, Evans T et al. Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world (The Lancet Commission). E-pub 29 Nov 2010. DOI10:1016/50140-6736(10)61854-5.
5. Keehan S, Sisko A, Truffer C, Smith S, Cowan C, Poisal J, et al. Health spending projections through 2017: The baby-boom generation is coming to Medicare. Health Aff (Millwood) 2008; 27:w145–55.
6. White G. Transforming education to strengthen health systems in the Sultanate of Oman. Sultan Qaboos University Med J 2012; 12:429–34.
7. Ghosh B. Health workforce development planning in the Sultanate of Oman: A case study. Human Resour Health 2009; 7:47.
8. Ghosh B. Omanization of Health Manpower. The 7th Five-Year Plan Prospects: A Technical Appendix to the 7th Five-Year Human Resources Development

Plan (Document No. A.12/2001-10). Muscat: Ministry of Health, 2006.

9. Inuwa IM. Perceptions and attitudes of first-year medical students on a modified team-based learning (TBL) strategy in anatomy. Sultan Qaboos University Med J 2012; 12:336–43.

10. Blades DS, Ferguson G, Richardson HC, Redfern N. A study of junior doctors to investigate the factors that influence career decisions. Br J Gen Pract 2000; 50:483–5.

11. Al-Mandhari A, Al-Adawi S, Al-Zakwani I, Al-Shafaee M, Eloul L. Impact of geographical proximity on health care seeking behavior in Northern Oman. Sultan Qaboos University Med J 2008; 8:310–18.