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VIEWPOINTS

A Need to Rethink and Mold Consensus Regarding Pharmacy Education in Developing Countries

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Health systems struggle to keep up with overwhelming new health challenges.[1] Beside financial constraints, public expectations and technological advancement of health service, the other biggest challenge faced by healthcare systems in both the developed and developing world is the high prevalence of non-communicable diseases such as diabetes and hypertension. In the developing world in particular, health systems have responded to these challenges by placing additional demands on health workers[1] and by admonishing health care providers for not being appropriately educated. It is unacceptable to blindly blame health professionals while ignoring the shortcomings of the health education system.[2]

Likewise, pharmacy education in developing countries is also facing challenges such as:

- Isolation of pharmacy education from the practice of pharmacy.[3]
- Incongruity of pharmacy education with the current needs of the patients and the societies.[4]
- Inharmonious working relationship between different health professions.[1]

There have been laudable efforts to address some of the shortcomings of the current pharmacy education system in many developing countries.[5-10] Notwithstanding, we propose a 6-step "TARGET" approach to overcome the deficiencies of pharmacy education in developing countries. The 6 steps are:

Transform our views on "leadership" in pharmacy education.

Acknowledge the shortcomings of pharmacy education and audit the current pharmacy syllabi accordingly.

Reestablish the professional relevancy of pharmacy education.

Gather together the stakeholders in pharmacy education.

Elucidate the sets of roles and responsibilities expected from graduate pharmacy students.

Tackle new health challenges that arise as responsible members of the healthcare team.

In the rest of the letter, we elaborate on each of the 6 steps of our proposed solution. We have to create the "innovator's DNA" [11] in our pharmacy students by promoting advocacy and by inspiring them to seek leadership roles in the future. Leadership qualities are not inherent but acquired qualities and a high-quality education should include teaching students such qualities. We need innovative and courageous leaders who not only revolutionize pharmacy education and pharmacy practice but also support the next generation of innovators.

To be fair, we have to be cognizant of the weaknesses of the current pharmacy education system. These weaknesses should not be interpreted as failure or incompetence. We have to acknowledge that pharmacy education is dynamic and new health needs arise on a daily basis. The patterns of diseases change constantly; therefore, treatment modalities must change as well. We need good documentation systems to monitor and follow up on these changes and this requires a dynamic pharmacy education system that can produce dynamic and well-equipped pharmacists.

Unintelligible and static pharmacy curricula cannot mirror the integrated and dynamic demands of health care. The professional relevancy of the current pharmacy education system needs to be reevaluated, restructured, and continuously reexamined. The process might be costly and time consuming, but without a doubt, it will be worth it. The costs incurred from malpractice by ill-equipped pharmacists resulting from an outdated pharmacy education system would be huge and difficult to compensate.

Moreover, there is also a need to mobilize the stakeholders in pharmacy education.[10] These stakeholders are the ministries of higher learning, health, medical councils, pharmacy councils, nursing associations, clinical pharmacy, industrial pharmacy preceptors, and last but not least, pharmacy students. Pharmacy students are on the receiving end of pharmacy education and it is unfair not

to ask their opinions about the pharmacy education system. It is insensitive to discount their concerns about the uncertainties and qualms of the profession and the different modes of its delivery. In addition, we also need to revise student recruitment strategies. An outstanding preuniversity track record and high scores in college do not necessarily guarantee success, as the profession of pharmacy needs individuals who are also passionate, proactive, and progressive.

Some universities in developing countries are offering pharmacy degrees.[12] Each program has its own aims and objectives, and the roles and responsibilities expected of their graduates vary greatly. Furthermore, the ministry of health in many of these countries has defined its own sets of professional duties and responsibilities. We really feel that there is an urgent need to homogenize these diverse sets of roles and responsibilities to facilitate understanding by our pharmacy students and also to reach a consensus on the specific qualities expected of pharmacy graduates.

We understand that reaching a consensus might be difficult, but that is not our only aim. We also want to mold the consensus and facilitate procedures that may lead us to achieve an agreement. In the words of the late Martin Luther King, Jr.: "A genuine leader is not a searcher for consensus but a molder of consensus." With innovative leaders at our disposal, we believe that "consensus" can be molded. Once the consensus is molded, with the help of other members of the healthcare team, we would be able to exceed our current limitations and claim our victory by overcoming the challenges presented by the current health systems.

REFERENCES

1. Frenk J, Chen L, Bhutta ZA, et al. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *The Lancet.* 2010;376(9756):1923-1958.
2. Ahmadi K, Allotey P, Reidpath DD. A proposal to help achieve equitable treatment of transgender people in the health system. *Acad Med.* 2013;88(5):559.
3. Sleath B, Campbell W. American pharmacy: a profession in the final stage of dividing? *J Pharm Mark Manage.* 2001;14(1):1-25.
4. Dindial S, Fung C, Arya V. A call for greater policy emphasis and public health applications in pharmacy education. *Am J Pharm Educ.* 2012;76(8):Article 142.
5. Hassali MA, Shafie AA, Awaisu A, Mohamed Ibrahim MI, Ahmed SI. A public health pharmacy course at a malaysian pharmacy school. *Am J Pharm Educ.* 2009;73(7):Article 136.
6. Hassali MA, Saleem F. The need to include lifestyle medicine education in malaysian pharmacy curriculum. *Am J Pharm Educ.* 2012;76(5):Article 93.
7. Al-lela OQB, Bahari MB, Elkalmi RM, Jawad Awadh AI. Incorporating an immunization course in the pharmacy curriculum: Malaysian experience. *Am J Pharm Educ.* 2012;76(10):Article 206.
8. Saleh Abrika OS, Ahmad Hassali MA, Abduelkarem AR. Social pharmacy courses are often neglected in the developing world. *Am J Pharm Educ.* 2011;75(4):Article 65b.
9. Hassali MA. Challenges and future directions for public health pharmacy education in developing countries. *Am J Pharm Educ.* 2011;75(10):Article 195.
10. Anderson C, Brock T, Bates I, et al. Transforming health professional education. *Am J Pharm Educ.* 2011;75(2):Article 22.
11. Armstrong EG, Barsion SJ. Creating "innovator's dna" in health care education. *Acad Med.* 2013:1.
12. Anon. List of Authorized Local Universities Offering Pharmacy Course. *Pharmaceutical Services Divisions.* 2012. http://www.pharmacy.gov.my/v2/en/content/list-authorized-local-universities-offering-pharmacy-course.html. Accessed February 26, 2013.