

## EDITORIAL PREFACE

# Developing Public Health and Primary Care Competencies through Patient Centered Care in a User Driven Framework

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User Driven Healthcare (UDHC) is not only a disruptive innovation in the health care service provision, but, also, a radically new way of introducing medical students, graduates and professionals to real life problem solving. It introduces medical students to the core public health competencies in a patient-driven, evidence based manner. UDHC has been conceptualized as improved health care achieved with concerted collaborative learning between multiple users and stakeholders, primarily patients, healthcare professionals and other actors in the care-giving collaborative network across a web interface (Biswas, Martin, et al, 2008). In addition to bringing the boons of evidence-based practice and personalized medicine in a patient-centered model of care, this model also has significant role in building up core competencies in the

medical students and professionals involved in the system (Chatterjee, Bera, et al, 2014).

Core competencies form the foundation stone on which the principles of medical education are founded. It is through the achievement of these competencies that the objectives of medical education are realized. Depending on the dynamics of an education system, and the healthcare demands of the associated principles, the specifically identified core competencies may vary slightly from one context to the other. In general, core competencies relate to the development of knowledge, skills, attitudes and behavioral traits that lead to the generation of empathetic, efficient and effective physicians. Through their involvement with the UDHC system and network, the medical students are expected to develop certain skills, which can add

to the competencies being developed in course of conventional medical education.

## **ANALYTICAL AND ASSESSMENT SKILLS**

Through real life case solving (as described later on), students get a chance to integrate theoretical learning with bedside clinical skills over an online, asynchronous, patient centered manner. This teaches the students not only the principles of evidence based medicine, but also serves as a humble reminder of the fact that the patient is at the heart of the issue. This has also led to a pilot collaboration between the BMJ and PCMS, Bhopal, in structuring a case-based hands-on clinical clerkship for students who have just cleared their basic sciences courses.

## **COMMUNICATION SKILLS**

In the age of the Internet, the communication channels are becoming more open, more volatile and demand from the medical professional an ability to communicate better, now more than ever. In such an age, traditional doctor-patient and doctor-doctor and even clinician-community communication has altered. One of the serendipitous side effects of using an online, asynchronous system is that it automatically nurtures in the participants an ability to communicate over the newer technological barriers. With the absence of verbal and non-verbal cues, to sustain an online communication with success, one is forced to adopt a clear, unambiguous and comprehensive thought process that puts an idea across multiple stakeholders (at multiple levels of capacity building) without fail. The permanent, reproducible nature of online communication also has the propitious side effect of exciting in younger medical professionals the need to understand the medicolegal aspects of medicine, an often ignored facet in the developing world medical curriculum.

## **CULTURAL COMPETENCY SKILLS**

In the online world, distances from Boston to Bengal can be traversed with the single click of a button. In such a globalized village, cultural competency is a must (Ambrose, Lin, et al, 2013). As a medical professional, it becomes even more important to understand the cultural diversity in a clinical encounter and respect it, while, at the same time, provide the best possible care, in line with the patient's wishes, expectations and values. While traditional encounters may shape a medical student's concepts of body language and non-verbal cues, the online structure of UDHC exposes him to a cultural diversity that is unprecedented in the traditional system. The cultural gulf that one has to bridge, while dealing with patients and other medical professionals teaches the student to understand and respond to the diverse needs arising from the cultural spectrum that s/he is exposed to.

## **UNDERSTANDING COMMUNITY DIMENSIONS OF CLINICAL MEDICINE**

The focus of the curriculum in most medical schools in India is on clinic-based/institution-based, curative medicine. In the Indian scenario, Community Medicine is in a state of flux at the moment, where it is incorporating competencies of preventive medicine, clinical sciences and primary care, while, at the same time, instilling concepts of epidemiology and public health in the students. In this situation, there is a vacuum in which the medical student does not really learn the community dimensions of clinical decision making that is impressed upon him in a clinical setting. UDHC is patient driven, community run and bottoms up. It is a unique "pull system" where the patient is not only made aware, but also generates the demand for healthcare services at the community level. By involving medical students and young graduates into the system at an early phase, they are attuned to the needs of the community and how

clinical medicine should be modeled to fit into the urn of the community needs.

## LEADERSHIP SKILLS

Training physicians to have leadership skills in the context of individual and community care is critical for elimination of the lack of equity in the healthcare setting. However, unfortunately, there are no structured curriculum in the developing world context that aim to teach medical students the need to develop leadership skills and combine them with community service opportunities to result in elimination of inequity in healthcare access and utilization (Goldstein, Calleson, et al, 2013).

The caregiver and the careseeker are equal stakeholders in the clinical and prescriptive decisions arising out of the UDHC framework. As a result of this departure from the classical, paternalistic model of the traditional system, the careseeker is empowered to demand a healthcare strategy designed to suit his expectations, while, at the same time, delivering the best care advocated by the principles of evidence based thinking. This community involvement leads to spawn leadership and change-bringing capability in the careseeker. It also goes a long way in establishing mentoring, peer advising and personal development relationships between medical professionals at different levels and competencies within the framework of the UDHC system. This unique mix of learning and decision-making therefore stands in stark contrast with the conventional system of one-way, didactic medical education. This empowers the younger professionals to ask, demand answers and be accountable to the patients and to his peers. This is a unique leadership skill development environment engendered within the UDHC framework.

## SYSTEMS THINKING SKILLS

Systems thinking is the process of multidisciplinary approach to deal with a clinical problem. As we obtain a better understanding of the social

and cultural determinants that affect health and disease, and, more importantly, human behavior (which eventually dictates all aspects of health or disease), it is but a natural conclusion that every physician in the future needs to develop systems thinking skills. (West, 2012)

Within the UDHC strategy, the patient's need drives the system. This is a radical departure from the conventional system where the prescriptive clinical skills play a major role. But once the onus is transferred to the patient, then, a medical caregiver is forced to develop the systems thinking skills in order to be able to deal with the problems which are unique to every individual. The ability to churn out a customized solution, instead of a "one size fits all" way out, to what might be otherwise considered as mundane, "everybody" problem, forces the clinician out of his comfort zone. It becomes the physician's duty to analyze the complex environmental factors (social, cultural, economic or even personal quirks) in addition to the disease biology and pathology, within a systems thinking framework, to devise tailor-made, customized solutions.

## CONCLUSION

The UDHC framework is capable of not only driving users to channel evidence based practice on a needs-basis, it also plays a similar role for the medical students involved in the system. With the stress on patient-centered and patient-driven care, students are exposed early to the notions of empathy and the role of patient expectations in driving medical decisions. This primes them as empathetic administrators of evidence based medicine rather than one who crunch out numbers. However, the systematic adoption of this model within the constraints of pedagogy as interpreted in the traditional medical education system is still some distance in the future. Until and unless the focus moves from sporadic assessments based on subjective and non-uniform criteria to an objective, continuous one, preferably based on an online portfolio development with documentation of development

of clinical skills and reflective practices, this system is unlikely to work well. For now, the advocates of the system will introduce highly motivated students who understand the risks and advantages of dabbling in extra-curricular academic activities and try to evaluate, albeit in a qualitative framework somewhat open to biases, the modifications needed to make the most telling impact.

The power of information technology, combined with social networks on the Internet is awaiting a disruptive innovation to come into the medical education system. It is no longer a question whether the revolution will come or not: it is a matter of time now.

## REFERENCES

- Ambrose, A. J., Lin, S. Y., & Chun, M. B. (2013). Cultural competency training requirements in graduate medical education. *Journal of Graduate Medical Education*, 5(2), 227–231. doi:10.4300/JGME-D-12-00085.1 PMID:24404264
- Biswas, R., Martin, C.M., Sturmberg, J., Shanker, R., Umakanth, S., Shanker, S., & Kasturi, A. S. (2008). User-driven health care - answering multidimensional information needs in individual patients utilizing post-EBM approaches: a conceptual model. *Journal of Evaluation in Clinical Practice*, 14(5), 742-749. doi: . Review. PubMed PMID: 19018905.10.1111/j.1365-2753.2008.00998.x
- Chatterjee, P., Bera, K., Seth, B., Price, A., Sengupta, R., & Biswas, R. (2014). Thematic analysis of a collaborative, patient-centered model of care bringing personalized medicine to resource restricted settings. *Indian Journal of Medical Informatics*, 8, 85–90.
- Goldstein, A. O., Calleson, D., Bearman, R., Steiner, B. D., Frasier, P. Y., & Slatt, L. (2009). Teaching advanced leadership skills in community service (ALSCS) to medical students. *Academic Medicine*, 84(6), 754–764. doi:10.1097/ACM.0b013e3181a40660 PMID:19474554
- West, G. B. (2012). The importance of quantitative systemic thinking in medicine. *Lancet*, 379(9825), 1551–1559. doi:10.1016/S0140-6736(12)60281-5 PMID:22516561

*Amy Price is a director of the ThinkWell charity where she leads the PLOT-IT (Public Led Online Trials-Infrastructure and Tools) project. Her institutional affiliation is with the University of Oxford. Her goal is build clear channels to propel evidence into practice by supplying the public, and those in low resource areas, with tools to make evidence-based healthcare choices. Responsible shared decision-making requires access to standardized and accurate shared knowledge. Amy is encouraged and motivated by the goals of Evidence-Based Healthcare to increase health literacy and its sensitivity to develop person centered values in research. Research literacy builds bridges and education in research between patients, researchers, clinicians, scientists and regulators. An informed, engaged public is a significant source of empowerment. She and her team plan to engage, train and empower the public to plan, prioritize and take part in all aspects of research including the formation of online randomized controlled trials prioritised by the public and supported through expert methodological input. Her background in international relief work, clinical neurocognitive rehabilitation, service on the boards of multiple patient organizations and as a trauma survivor have equipped her with the flexible mindset to relate to all stakeholders and cultures. Amy's experience has shown her that shared knowledge, interdisciplinary collaboration and evidence-based research is the voice that will develop the future. She welcomes the opportunity to learn from and contribute to the work of others.*