Chapter 101
Medical Education:
The Need for an Interconnected, Person-Centered, Health-Focused Approach

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ABSTRACT

The notion that the medical professions are grounded in sound social and philosophical commitments to human well-being and advancement is the very foundation of medicine since time in memoriam. Caring is the essential work of all health professionals, since most patients have no medical condition explainable by the mechanistic biomedical model. Health, illness, and disease, and biomedically defined disease distributions in the community follow a Pareto distribution (aka the 80/20 split) (i.e. only a minor percentage require tertiary hospital interventions). This chapter unravels important failures inherent in current medical education approaches – the misconceptions about science, the limitations inherent in the prevailing worldviews, the shaping of attitudes and behaviors resulting from social interactions in health professional institutions, and the impact of the lack of flexibility within health professional institutions. Positing that health is a personal dynamic balanced state, represented through a somato-psycho-socio-semiotic model, is the basis on which principles for a patient-centered educational approach are developed. Such a new curriculum would embrace the complex adaptive systems principle – focusing on the interdependencies between teachers and learners, allowing the curriculum to emerge over the course based on learners' clinical exposures and experiences, fostering a critical engagement with the multifaceted knowledge base of the disciplines, and most importantly, building the necessary resilience for handling, individually and collectively, the emotional demands of caring.

INTRODUCTION

Medical education has always been a contentious endeavour. At the beginning of the 20th century Flexner reformed a highly fragmented and poorly conceptualised medical education system, introducing pre-clinical basic science study followed by clinical bed-side teaching (Flexner 1910). Universities embraced Flexner's reform more enthusiastically for the former rather than the latter. The unintended consequences soon became noticeable as exemplified here: the disappearance

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of metaphysics, logic and philosophy has made doctors less educated (Croockshank 1926), a threat to the mellow judgment and broad culture embodied by the greats of the time: Osler, Janeway, Halsted (Flexner 1930), and the separation of disease from man and his environment (McWhinney 1975).

The change from predominantly infectious disease to chronic disease during the second half of the 20th century necessitated a widening of the approaches to medical care. The social sciences provided important insights to living with chronic disease, the impact of self-management, and the need for community-based care. The academic literature has explored these aspects in great detail (for an overview see e.g. (Sturmberg 2007)), however medical teaching and medical practice have largely ignored these necessities in favour of pursuing every more micro-level disease mechanisms, resulting in a practice of ever greater fragmentation, specialties now have their own subspecialties (sometimes jokingly referred to as the doctor for the right and the doctor for the left ear).

THE UNDERPINNINGS OF HEALTH CARE MAKE HEALTHCARE A SOCIAL ENDEAVOUR

The notion that the medical professions are *grounded in sound social and philosophical commitments to human well-being and advancement* is the very foundation of medicine since time in memoriam (Illich 1976; Pellegrino and Thomasma 1981; Sturmberg 2007). It should not be frowned upon, rather it should be the starting point of re-thinking the purpose, meaning and operation of care. Caring in fact should be the imperative work since most patients we care for have no medical condition explainable by the mechanistic biomedical model (Green, et al. 2001; White, et al. 1961). These studies show that the epidemiology of health, illness, dis-ease and disease in the community follows a Pareto distribution (Figure 1), with only a minor percentage requiring tertiary hospital interventions (Sturmberg, et al. 2011). A point important to take into consideration when thinking about health professionals' education!

These findings result in the need to re-frame health as an evaluative complex-adaptive state (Sturmberg 2013; Sturmberg 2009b). The somato-psycho-socio-semiotic model of health describes health as a dynamic balanced state between the bodily, emotional, social and cognitive or sense-making dimensions of personal experience. Not surprisingly patients and doctors may markedly differ in their views about the nature of this personal evaluative state, especially since health and dis-ease can be experienced as much in the presence as absence of identifiable diseases (Figure 2).

Given the needs of the people to address their subjective wellbeing of health, illness and dis-ease rather than merely an underlying less frequent disease (Lewis 2003; Sturmberg, et al. 2011), humanities, *supported b*y sciences and technology, should rightly be the driver of the healthcare system (Brody 1994; Hartzband and Groopman 2009a; McKenna 2012b; Sturmberg, et al. 2010a; Sturmberg, et al. 2010b). We tend to talk about systems in a very loose way, and approach system change with an unshakable cause-and-effect mindset, a fatal mistake. Systems not only consist of many interconnected agents acting in nonlinear (and non-deterministic) ways, it also entails that their configuration and dynamics are governed by a common goal, a core driver. It is this core driver that ultimately "determines" the fate of any system (Cilliers 1998).

STATUS QUO

Before being able to argue for a different approach to health professional education one needs to understanding the current system. Analysis of the prevailing health professional education environ-

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