

GUEST EDITORIAL

Evidence-based Teaching Practices: A Road Less Traveled in Pakistan?

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It is no secret that most health professionals, after postgraduation, aim to secure an academic position in a teaching institute due to various personal and/or professional preferences. Personal interest in teaching, inspirational figure/ role model-driven career selection, fixed working hours, financial rewarding, societal respect, and relatively easier career path are some of the prominent motives for health professionals to join academia (Huda & Yousuf, 2006). Indeed, it is a personal choice of a health professional should he/she opt for an academic career path. However, a serious question to ask oneself is: Am I prepared and ready for this challenging role? As Adam Urbanski once said,

“Anybody who believes that all you have to do to be a good teacher is to love to teach also has to believe that all you have to do to become a good surgeon is to love to cut.” (1946 - American Federation of Teachers)

Unfortunately, most (if not all) postgraduate programs in Pakistan are designed in such a way that they focus more on the core specialty and tend not to provide dedicated training on how to conduct evidence-based teaching practices. Evidence-based teaching refers to a process in which teachers use findings of empirical and concrete research evidence to inform their teaching practices (Thomas & Bussi eres, 2021). This process of applying research to practice is not haphazard but systematic, and it typically follows five essential steps: ask, acquire, appraise, apply, assess. Ask refers to asking a question related to a teaching problem; acquire refers to searching and retrieving the literature evidence; appraise refers to critically appraising the quality of the acquired evidence; apply refers to extracting valid and reliable findings from the literature and applying to own teaching setting; and assess refers to assessing whether or not the application of evidence to one’s teaching helped solve the problem (Thomas et al., 2011).

As most novice teachers in our education system lack an understanding of educational theory or pedagogical practices, they learn on the job and use the hit and trial method to improve their teaching practices (Iqbal et al., 2020). Consequently, these

health professionals cum teachers often use those teaching strategies that are not supported by evidence to positively influence student learning. Some of the known ill-informed teaching strategies include didactic lectures, teacher-dominated small group learning, borrowed teaching strategies from foreign education systems, and misuse of learning styles in instruction. These teaching malpractices result in wastage of limited educational resources, student demotivation, failure to achieve curricular goals, and a poor reflection on the personal and institutional portfolio. More importantly, it affects the overall healthcare system as these teachers are responsible for producing safe and high-quality healthcare providers for tomorrow. As of Ernest Leroy, “A poor surgeon hurts 1 person at a time, but a poor teacher hurts 130 (students) and consequently hundreds of patients”.

What are the potential solutions?

Here one wonders that what could be the possible solutions to this gruesome problem. Below, I describe some solutions that can be broadly classified into three domains.

Responsibilities of teachers

First of all, the health professionals assuming teaching roles should consume their time, efforts, and available resources to acquire pedagogical competence through formal and structured training so that they can practice evidence-based teaching. Due to the ongoing COVID-19 pandemic, many international Universities are now offering virtual professional development courses. The teachers could use these opportunities to develop their knowledge and skills in educational theory and practice. Second, they should regularly consult literature evidence to learn and incorporate teaching strategies in instruction that are known to support knowledge retention and schema formation. Some of these strategies are: assessing prior knowledge and linking new information to it, summarizing information at the end of educational events, providing cognitive or hands-on rehearsal opportunities, providing constructive feedback on learning, nurturing learners’ metacognition et cetera. Third, they should align instructional methods to the desired curricular outcomes. For instance, if a final year medical student is expected to skillfully examine, diagnose and manage a patient with diabetes then the teaching approaches should be

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focused more on developing their cognitive and psychomotor skills through clinical or simulation-based teaching instead of imparting cognitive knowledge through didactic lectures. Finally, they should motivate students to be independent and self-directed learners and advocate the use of evidence-based learning strategies that can help in their learning, such as, peer-assisted learning, near-peer tutoring, collaborative learning, cognitive rehearsals, et cetera.

Responsibilities of institutions

Next to teachers, the onus to ensure evidence-based teaching is insinuated onto the institutions. The health professional institutes should provide sufficient continuous professional development opportunities to their teaching staff. In fact, it should be mandatory for the faculty to attend these professional development activities to polish their teaching skillset. Moreover, the planners of faculty development activities should not entirely rely upon the participants' feedback or self-reported change. They should incorporate certain evaluation methods to observe whether or not these activities helped bring the desired improvement in teaching practices. Some of the best methods to observe the change include peer evaluation, student feedback, graded assignments et cetera. More recently, entrustable professional activities (EPAs) have been advocated as a reliable tool to observe, evaluate and certify teaching proficiency (Iqbal & Al-Eraky, 2019).

Responsibilities of regulatory bodies

Finally, the national regularity bodies, such as, Pakistan Medical Commission (PMC) and the Higher Education Commission (HEC) of Pakistan should devise minimum standards for health professionals, in addition to their core specialty, who wish to choose an academic career. A postgraduate qualification in the respective specialty is certainly not sufficient to warrant the teaching proficiency of the aspirants. A basic qualification in education should be a prerequisite to secure a teaching position in health professional colleges. Additionally, it is also the responsibility of these regulatory bodies to standardize the professional development programs across Pakistan to maintain quality. Lastly, the regulatory bodies should also come up with a plan to regulate the certification of the faculty by legitimizing a continuous professional development framework. Sethi and Wajid (2020) have suggested a re-evaluation of professional growth through documentation of continuous professional development activities instead of renewing the registration by mere payment of the prescribed fee. Their recommendation is strongly supported by growing evidence, which suggests that a decline in competence over time is very much possible if the skillset is not regularly practiced and polished through

continuous professional development (Steinert et al., 2016). This editorial is an appeal to the teachers, educators, administrators, and policymakers to support evidence-based teaching practices in academia to ensure meaningful and effective education. It is about time that individuals, institutions, and regulatory bodies start paying attention to evidence-based teaching so that a resource strained education and healthcare system of Pakistan could be streamlined.

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