EDITORIAL

KNOWLEDGE TRANSLATION IN HEALTHCARE - TIME TO BRIDGE KNOWLEDGE AND ACTION GAP

'O believers! Why do you say, what you do not do?

Most hateful is it to Allah that you say, what you do not do.

As Saff, 61/ 2-3

This is the era of evidence based medicine. We advocate quality care based on evidence based medicine. It is taught to our undergraduate and postgraduate students. Doctors and other healthcare workers are expected to practice according to guidelines and recommendations based on available evidence. Similarly, the policy makers are also expected to make health policies in light of best evidence. But unfortunately this is not always the case. There are many times when we have the knowledge about protocols, standard operating procedures or guidelines but we tend to ignore them. This is not a problem limited to Pakistan or other low to middle income countries. It is a global issue. It is estimated that 55% of patients in the US do not get ideal health care according to accepted standards. Several practice audits have also shown that sound research evidence is not being put to practice[1]. These gaps between knowledge and our actions are called "knowledge – action gaps" and the process of bridging this gap is knowledge translation (KT). It is known by many other terms like implementation science, evidence informed decision making, integrated knowledge transfer, diffusion of innovation, research utilization and so forth[2]. The term knowledge translation can be defined as "exchange, synthesis and ethically sound application of knowledge"[3]. Literature review suggests that patient outcomes are better when healthcare providers successfully bridge the knowledge-action gap.

KT can play an important role to improve healthcare in Pakistan. Although Pakistan is showing a "steady improvement" in the key health indicators but when compared to regional countries it is still lagging behind[4]. Main reason is lack of a robust health care system which can be partly attributed to a large gap between knowledge and practice. This gap is present both at policy making level and hospital practices and is justified by lack of resources, time, political and administrative support or unrealistic guidelines. There are however, occasions when despite absence of any major reason, simple standard practices and guidelines are not followed. For example, Pakistan is expected to miss Millennium Development Goals 4 and 5 (regarding child and maternal health). This situation can be improved by using chlorhexidine and misoprostol to reduce neonatal and maternal mortality respectively. Although this practice was partly adopted; it still lacks large scale uptake and implementation[5]. At the level of hospital practices many examples of knowledge – action gap can be cited. Status of waste disposal in many of our hospitals is suboptimal and needs improvement. Misuse of antibiotics, lack of hand hygiene, care of spine in a trauma patient, prophylaxis of deep venous thrombosis in hospitalized patients, status of pain management and palliative care in our hospitals are some examples where our practices are not according to international standards. Many more examples can be cited. Is the reason for these practices lack of knowledge? The answer is no. Knowledge which is not applied is useless. Ignoring evidence not only leads to problem at the level of hospital, it leads to problem at the national level, resulting in unrealistic and misplaced policies which lead to poor distribution of national resources and imprudent priorities.

What is the reason for this situation? What are the barriers to knowledge uptake? Is it sufficient to hand over guidelines and standard operating procedures to doctors and paramedical staff and expect that the guidelines will be followed? The situation is far more complex than

this. In a study by Karamat and colleagues[6], various barriers to KT in Pakistan were studied. The most important barriers were found to be related to management and structure of institutes. Lack of support from the top management was found to be the main cause. This lead to ineffective strategic planning and a non-supportive institutional structure.

The other main barrier, according to above mentioned study is related to a mindset of 'no lesson learned'. Unfortunately we do not learn from our mistakes. Most of us tend to remain as cave dwellers rejecting to get out of our comfort zone and adapt to change. Furthermore lack of team work and reluctance to share information demoralizes those who want to change the status quo.

The question is how can we improve the situation? Changing the organizational culture to the one that is conducive to KT is the foremost requirement[7]. This needs to start from the top. The leadership should possess the necessary attributes to bring about the desired change[8]. The leaders should be supported by policies of government so that it is easy for them to bring about the desired change. Influencing policy making is not easy anywhere in the world. Health policies are influenced by various political and local agendas[7,9]. It is the duty of healthcare professionals engaged in research to convey the research finding at appropriate level and in a manner that is effective. Knowledge brokers can play a key role in influencing policy makers. Knowledge brokers are the link between researchers and knowledge users - both policy makers and practitioners[10]. They may include health advocates, professors or well-known practitioners. Knowledge brokers should be identified so that their services can be used to influence the policy makers and healthcare workforce.

Regular clinical audits, mortality and morbidity meetings and reviewing our practices against quality indicators in the absence of a threatening environment can help us identify areas which need more attention. A culture that will encourage us to admit our shortcomings and brush up our practices is the key to improving the situation. This will only be possible in a health system that is open, non judgmental and non vindictive, yet open to change and criticism.

KT is a complex non linear process which needs to start simultaneously from a change in the mindset of health care workers and the leaders, policy makers and administrators in health sector. We may not have the financial and technical resources that are available to developed countries, but we can forge a collective resolve to change our paradigms and make further efforts to implement guidelines and standard operating procedures specific to our setup based on sound research.

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