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When complex interventions meet complex systems: Local perceptions on factors influencing introduction of international healthcare accreditation in Pakistan

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In developing countries one contributor to poor health outcomes is weak health systems, key to their strengthening are interventions to improve the quality of health services. Lack of research, poorly developed information systems and other factors make it difficult to identify interventions that can bring about sustainable improvements in developing countries. Developed countries have undertaken some research on quality gaps in their health systems and have identified interventions to improve healthcare quality, but even here there is disagreement on what works, where and how. With the desperate state of health systems and health outcomes in many developing countries, these internationally accepted interventions have been introduced through Health Sector Reform (HSR) and Health System Strengthening (HSS) programs. A call for more rigorous research on transferring interventions has arisen, based on the recognition that these 'one size fits all' approaches involving the transfer of international interventions are ineffective. Conceptual frameworks used to study the transferability of interventions have emerged as part of this debate. These frameworks have been increasingly used to research the broader health system, political and social context within which health interventions are introduced, with the aim to identify what works, where and for whom.

Healthcare accreditation is one of these complex interventions; it involves the introduction of three components: an accreditation agency, healthcare standards and trained peer surveyors. Though the value of healthcare accreditation is increasingly recognized, there are few actual case studies exploring its adaptation in developing countries. The complex health system we researched is located in the northern most of four provinces in Pakistan which, since 2011, is called Khyber Pakhtunkwa (KP). The aim of the dissertation was to study international healthcare accreditation as a complex intervention and, using quality improvement and implementation theory, identify perceived factors influencing its adaptation within a developing country context.

For this investigation we used a case study approach with qualitative methods including semi-structured in-depth interviews, a structured group discussion, focus groups and non-participant observation of management meetings. We used data triangulation following data analysis using a tested 'framework' approach based on grounded theory and an adapted conceptual framework from implementation science to increase the robustness of the analysis and findings. Our conceptual framework provided a guide and schematic model to synthesise the results of the research. The conceptual framework included three parts: the components of the *unadapted intervention* (healthcare accreditation), the *outer setting* factors such as economic, political, policy, social and the health sector reform factors influencing the introduction of the intervention and the *inner setting* factors such as structural,

political, cultural, people (individuals involved) and the (change) process context through which the intervention would proceed.

This study was one of the first of its kind in the region to investigate the introduction of a complex intervention into a complex health care system. Using our conceptual framework categories of inner and outer setting, we found six perceived inner setting and two perceived outer setting factors that could influence the introduction of healthcare accreditation in the study setting. Four were health system factors: (1) clarity in what is meant by healthcare quality, (2) priortization and establishment of basic health services, (3) strengthening management competencies and (4) linking accreditation and regulation with a focus on quality improvement methods. The two other inner setting factors were perceived to be important motivators or incentives for individuals or groups: (1) having a basic salary and working conditions such as essential equipment and skills and knowledge to do ones' job (training, job descriptions, supervision) and (2) the need for recognition of providing good quality services. The two outer setting contextual factors were perceived as external to the health system but able to influence the introduction of accreditation. The first external factor was the influence of political and cultural mechanisms, this was most often couched in the terms of 'political interference', 'vested interest' or 'sifarish' (an Urdu word referring to a form of patronage). The second is the influence of local change mechanisms with the perceived need to adapt to how change occurs in the setting and strengthen decision-making processes.

Transferring components of international healthcare accreditation requires not only clarity in the components of the intervention, but the social, cultural and health system factors influencing their adaptation. These factors need to be considered to strengthen the healthcare accreditation intervention to enable improvements in the health care system. Even when the components of an intervention have an international acceptance, and clear definition of components, it is essential to articulate the assumptions and mechanisms underpinning the change theory within a particular setting. For instance, change mechanisms, incentives and motivators and decision-making processes were seen to be key to the introduction of healthcare accreditation in our setting. The internal and external contextual factors influencing how the healthcare accreditation components will trigger change, allows for early and mid-term adaptations of the intervention, thus strengthening the introduction process, and providing for defined goals to be met. As our research showed, in this setting, change happens in small steps: the local 'cultural' context is that actors need to feel convinced and, despite the lack of formal decision-making processes, one way of convincing them is involvement in decisions.

The overall aim of the dissertation was to identify perceived factors influencing the introduction of healthcare accreditation in a developing country context and has identified that these perceived factors are found not only within the health system, in such areas as motivators of health personnel and trained health managers, but also in the broader social and cultural context. The importance of researching these broader contextual factors has been suggested by other researchers but our study is one of the first to explore this subject in a developing country. The results of this dissertation are important for health systems strengthening in Pakistan and in other developing countries. The dissertation also suggests a draft framework to guide further research in introducing complex interventions in complex developing country health systems. Several areas for research are suggested.