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Instrument Development, Diverse Evaluation and Furthering Interprofessional Research Globally

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EDITORIAL

Contributions to this issue respond directly to the continuing and widely identified (Brandt et al, 2014, IOM, 2015, Parker et al, 2011) need to measure, evaluate and validate interprofessional approaches, educational material and social context in both concert and isolation. Instrument development is a key means of achieving this and featured articles report on and evaluate a diverse range of interventions. Alongside this, the fundamental and encouraging international focus of interprofessional research is reflected here as studies from eleven different countries throughout Europe, North America, Sub-Saharan Africa, the Middle East and Australasia are included.

Whilst there have been empirical weaknesses identified in previous IPE evaluation work (Reeves et al, 2014) the depth, diversity and reach of the studies in this issue provide important insight across method and context. Iverson and colleagues explore interprofessional student team competence and address the reported difficulty in incorporating IPE opportunities into academic settings through the use of The Creighton-Interprofessional Collaborative Evaluation (C-ICE) instrument. Hendricks et al have responded to this with their study of an academic-practice partnership. Using action research methods, they have suggested that the structured implementation of interprofessional collaborative practice environments (IPCPs) effectively bridges the previously identified gap between academic and practice contexts. This is then complimented by work from Shirazi et al who have also covered the development of a theory based assessment instrument. Measuring readiness to change for interprofessional collaboration in an Iranian context, this study evaluates a widely used technique in a setting in which interprofessional collaboration, and aspects of teamwork more broadly have not been practically integrated. This sees potential benefits for both Iranian healthcare research and the interprofessional discipline as a whole, as exploration in a novel context such as this provides key transferable insight.

Evaluations of the Readiness for Interprofessional Learning Scale (RIPLS) have also been covered via a short report from Kerry et al, and an exploratory and confirmatory factor analyses from Yu and colleagues. The latter called for further and more robust psychometric testing of the RIPLS, offering an important critique of the tool. In addition to these studies, this issue also features a timely systematic review from Welsch et al which explores the literature on the didactic portion of TeamSTEPPS[®], an educational tool designed to improve teamwork and communication in healthcare settings. The literature reveals the positive influence of the utilisation of TeamSTEPPS[®], but also described considerable variation in the associated program designs, making general conclusions and more in depth evaluations difficult.

Educational intervention for enhanced interprofessional collaboration comprises an area of research which has and continues to evolve throughout, local, national and international settings. This issue reflects this and includes a range of studies which progress educational knowledge and provide key pedagogical analysis. Carderelli et al offer valuable implications for chronic care practitioners as they assess perceptions before and after participation in continuing IPE. Interdisciplinary team training was also explored, as Giuliante and colleagues undertook a feasibility study of a geriatric team training initiative. Whilst there were no reported quantitative changes in attitude, participants' perspectives were again said to have improved after the intervention, not only suggesting that the TeamSTEPS® approach is an effective one, but also reinforcing the value of qualitative inquiry.

The need for successful and effective interprofessional education, and appropriate evaluation of such is further reinforced by the range of clinical contexts and areas of investigation. IPE in rural practice has been explored by Osborne et al, an interesting insight into the learning experiences of course facilitators in Early Childhood Education came from Attrill et al and an Interprofessional international service learning experience was qualitatively assessed by Noonan and colleagues. Work such as this, which not only evaluates the educational approach, but also the clinical environment, national context and conditions for collaboration will be central to the continuity of interprofessional research which combines practice and theory in a way which utilizes an increasing empirical archive.

The value of engaging with in depth qualitative data has been evidenced by Ziman et al who question the use of Surgical Safety Checklists in operating rooms. By undertaking an ethnography of safety cultures in a Canadian operating room it has become clear that the complexity of professional cultures is unlikely to be fully accounted for by adopting approaches which simply fulfil predetermined criteria. Ethnographic investigation was also adopted by Caronia and Saglietti, who explored knowledge and agency amongst nurses in an Italian intensive care context. The paper reports some fascinating findings relating to the distinct forms of knowledge which nurses hold, and the subsequent implications for the interprofessional constitution of case construction. This novel study sheds new light on nurse/physician interaction and again provides an elegant synthesis between an empirical healthcare setting and the complex nuances of jurisdictional dynamics. High quality research from the Middle East, like other highlighted regions, is emerging with the example of Hasan et al offering additional qualitative findings, as they approach the previously unexplored nature of physicians' perspectives on their collaboration with pharmacy colleagues in the United Arab Emirates. This relationship is one which has received increasing attention in North American, European and Australasian contexts (Bergman et al, 2016, Alkhateeb et al, 2009, Ryan et al, 2018), although this study provides much needed insight from the UAE and other countries with similar or equivalent healthcare systems.

The geographical disparities which this study referred to have also been further addressed. Johnson and Carragher's systematic review which mapped the literature on IPC in type 2 diabetes care in the Middle East is of particular importance to a region in which the disease is of critical prevalence. Whilst collaboration in this context and area is in evidence, the need for a more structured, standardized approach is likely to improve outcomes.

Healthcare challenges in Kenya and other Sub-Saharan African countries often require complex, context specific intervention. However, the universal impact of effective interprofessional collaboration provides a genuine practical response to many of the difficulties faced. Vinayak and Brownie explore collaborative task sharing on behalf of midwives to enhance Point-Of-Care Ultrasound (POCUS) access among pregnant women in Kenya. Where the need for interprofessional collaboration is perhaps most acute, the study mapped and evaluated the educational and practical implications of the introduction of an invaluable collaborative intervention. This study provides a

useful representation of this issue as a whole. Identifying an area of concern, applying methods of staff education, tool validation and nuanced interprofessional critique has taken place not just in this instance, but throughout the issue with considerable success.

This issue consolidates validity in a number of senses. Whilst the validity of specific interprofessional education measures and instruments which support interprofessional collaboration are consistently evidenced and critically explored, the validity of interprofessional collaboration itself is productively reinforced through an internationally and methodologically diverse selection of studies. This has been further emphasised by the spread of global research this issue has brought together and provides a foundation for further research that encompasses regions that are often neglected by the literature.

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