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Brief Communication

Interprofessional education and practice in an Indian setting

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Abstract

With current global healthcare trends, there is a growing need for interprofessional education (IPE) and interprofessional practice (IPP) in collaborative care of persons with chronic medical conditions. Tools and models for IPE and IPP are now available, but they are not yet in widespread use. Developmental-behavioural paediatrics is a medical discipline that is characterized by IPP with an encouraging emergence of this speciality in India and other developing countries. This article provides an overview of IPE and IPP, followed by a precise account of an Indian institution, which provides services to children suffering from neurodevelopmental disorders utilizing an IPP approach and implementing IPE to its trainees.

Keywords: India; Interprofessional education; Interprofessional practice; Neurodevelopmental disorders

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Background

Interprofessional education (IPE) occurs when students from two or more professions in health and social care learn together during all or part of their professional training with the aim of cultivating collaborative practice for providing patient-centred healthcare.[1–3] This approach can develop teams of future healthcare providers who will work together with a respectful and positive attitude to deliver consolidated, unified patient care. IPE programmes have existed in US undergraduate medical education (UME) since the 1960s, but are becoming more prevalent.[4,5] Various methodologies exist, such as patient-driven didactic lectures, journal article reviews (journal clubs), live clinical case simulations, discussions, e-learning models (including using telemedicine), and experiential learning (community-based or visits with families and agencies).

Interprofessional practice (IPP) is defined as a process of shared communication and informed decision-making under the influence of grouped knowledge and skills.[6] IPP enables trainees to assimilate the knowledge, attitudes, and beliefs of IPE to practice in the workplace as a member of an IPP team. IPP teams understand how to optimize the skills of their team members to provide better health services to patients and the community. Assessment can be performed using training logs, objective structured clinical examinations, and student ratings and reflective writings. Unfortunately, despite the availability of several outcome measures for IPE and IPP, such as the Readiness for Interprofessional Learning Scale (RIPLS),[7] Interprofessional Perceptions Scale (IPS),[8] and Modified Index of Interdisciplinary Collaboration (MIIC),[9] most lack sufficient theoretical and psychometric development.[10] Successful implementation of IPP involves having healthcare professionals understand the perspectives of allied health professionals and including them in decision-making for the patient's and family's

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needs. This begins with effective communication, not only with other healthcare providers but also with allied health professionals and health-related agencies, and this continues with working effectively as a member or leader of a healthcare team or other professional group. IPP is being implemented in several subspecialities such as oncology (medical, nursing, radiation therapy) and endocrinology (social work, nutrition, medical), among others, and now increasingly in the neurosciences.

An Indian model of IPE/IPP in evolution

Developmental-behavioural paediatrics is an example of an established subspeciality of paediatrics in developed nations, with training programmes and an increasing critical mass of providers who engage in IPP.[11] In India, as in other developing nations, it remains a new emerging subspeciality. LTM General Hospital and LTM Medical College compose an academic centre in Mumbai, India, for the education and practice of undergraduate and postgraduate medical trainee studies for over 60 years. Approximately two decades ago, the DBP subspeciality emerged in the traditional and well-established speciality of paediatric neurology. The model of care employed was a clinical and service-driven one, its primary aim being to diagnose and treat children with neurological diseases and developmental disorders. This model was primarily a "medical one" based on a single physician provider, with referrals placed as needed to other specialities (psychology, social work, education). However, this often led to fragmented care, lack of adequate adherence to follow-up, and failure to "close the loop" on communication between the solid specialities. Increasingly, the need for an IPP team comprising trained allied professionals was realized, and this model coalesced as an independent practice entity, the dedicated "Learning Disability" centre in 1995, with recognition and approval by the state government for assessment and certification of children with specific learning disabilities. This coincided with an increasing awareness in the public domain, and among policy and law-makers, of the need to support children with developmental disorders in the educational setting.

More recently, with the emergence and recognition of DBP as a subspeciality in India, coupled with the growing need for the centre to expand its scope to conduct assessments beyond learning disorders to other neurodevelopmental disorders (autism spectrum disorders, attentional issues, language disorders, intellectual disabilities and other behavioural issues), the importance of an IPP team was further recognized. Many of these disorders cannot be diagnosed solely by a medical professional. The centre has also evolved from a diagnostic-only centre to one also providing interventions, such as career planning, remediation, and behavioural and counselling strategies. The centre today is a regional model of IPP and includes developmental paediatricians, psychiatrists, clinical psychologists, special educators, speech-language pathologists, and occupational therapists who collaborate to provide optimum patient care.

Building on the educational mission of LTM Medical College, the need was felt to train young paediatricians in this emerging speciality. Thus, approval for a state-university-affiliated fellowship programme in developmental paediatrics was sought and finally obtained in 2013. The curriculum was modelled on US post-graduate fellowships in DBP, with a shift in focus from the traditional patient-physician paradigm to a more holistic approach, with special emphasis on IPP of shared decision-making and defined responsibility. During this process, the lack of a critical mass of trained educators was keenly felt and a successful international collaborative developmental-behavioural paediatric (DBP) educational model using videoconferencing was initiated.[12] The aim was twofold: educational (case-based trainee teaching and training of team members by their international counterparts) and developmental (finer development of the fellowship programme in collaboration with the programme director). Along the way, successful outcomes included mentoring trainees on research projects that yielded presentations at international professional conferences and publications in peer-reviewed journals. The advantage of the videoconferencing modality was both practical (avoiding expensive and burdensome travel between participants) and convenient (inexpensive technical needs and awareness of time zone differences between India and collaborators in the US).

Some measured outcomes during the biweekly sessions performed over the course of two years included the following: Indian participants reporting satisfaction in interacting with subject area experts, greater confidence in their ability to diagnose and manage neurodevelopmental disorders, and access to regular updates on new guidelines pertaining to these conditions. The US participants gained a greater understanding of international IPP and the cultural aspects of DBP care. Both groups identified research areas for collaboration. At the Pediatric Neurodevelopmental (PND) Center, in addition to on-site case-based discussions and video-conferencing modality, IPE is conducted with subspeciality fellows and paediatric trainees through collaborative case discussions and immersive learning. By working with different professionals, trainees acquire IPP skills and learn a systematic collaborative approach.[13]

While there are similar subspeciality centres in India addressing DBP needs, many of them are private practices offering the IPP model, the PND is the first of its type to incorporate the dual IPP and IPE model in an academic public hospital setting.

Future directions

Global healthcare trends have improved, even in developing countries such as India, due to better immunization coverage of vaccine-preventative diseases, improved sanitation and public health awareness, and a greater focus on wellness for patients with chronic medical conditions. Against this backdrop, there is an increasing requirement of medical and allied health professionals from more than one discipline to collaborate in the care of people to improve health and wellness. To promote and increase awareness of this speciality amongst postgraduates and undergraduates, plans are underway for IPE specific to DBP inclusion in the UME curriculum and training at our institution. Collaboration with colleagues across India to replicate this model in other academic institutions can help foster interest in the field of DBP, increase the work-force base, and potentially increase IPP in caring for families and children impacted by developmental disorders.

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Conflict of interest

The authors have no conflict of interest to declare.

Authors' contributions

MPG and NSS conceived and designed the study; SH, HS, MPG, and NSS wrote the initial and final drafts of the article and provided logistic support. All authors have critically reviewed and approved the final draft and are responsible for the content and similarity index of the manuscript.

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