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FOCUS ON INTERPROFESSIONAL EDUCATION

Background

"Interprofessional education occurs when two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes" [1] The importance of interprofessional education (IPE) has been increasing around the globe in academic centers that train health care personnel. Its growth parallels the increased emphasis on wellness and disease prevention that is driving health care reform efforts and the increasing complexity of health care. The increasing body of literature in the health care professions that links errors in patient care to poor communication between disciplines has also put added emphasis on the need to train students to work effectively across disciplines. The World Health Organization (WHO) advocates for IPE inclusion into curriculums for all health care students. IPE must prepare students to provide the health care of the future, and this health care must be evidence-based, standardized, reliably delivered, efficient, equitable, and patient-centered. In order to meet these goals, WHO defines a learning continuum of competency domains from pre-licensure through experiential learning and ultimately through licensure and professional practice. IPE focuses on developing student skills for team practice in each of the following four competency areas: values/ethics for interprofessional practice, roles and responsibilities for collaborative practice, interprofessional communication practices, and interprofessional teamwork and team-based practice[2] . Based on the above definition of IPE, it is clear that IPE does not include passive non-reflective classroom instruction from multidisciplinary faculty or simply instruction from faculty of a discipline different from the student's own. IPE also does not include providing classroom didactics without providing interprofessional interaction. Experiential practice that places a student in a patient care setting with a practitioner from another profession with no shared responsibility for patient care decisions is also not considered IPE.

Logistics

Interprofessional education brings students of different professional groups into contact with each other in a range of predetermined conditions that promote positive attitudes between professional groups. IPE through interprofessional student teams is designed to facilitate the transfer of skills, values, and knowledge learned within teams into their future practice. The ultimate goal of interprofessional education is to train students to provide patient-centered care in a collaborative health care team. A combination of learning activities have been used to facilitate IPE learning in the academic setting and promote transition to the student's experiential settings. These activities have involved synchronous and asynchronous e-learning, formal and informal small and large

group face-to-face activities, and classroom didactics. One literature review indicated that 71% of studies on implementation of IPE indicated that their activities had been in

place for no more than 5 years and therefore implementation strategies vary between academic centers due to the relative newness of the implementation.[3] The most frequently reported educational strategies include: small group discussions, patient case analysis, multi-disciplinary panels, large group lecture, clinical teaching/direct patient interaction, reflective exercises, intervention offered for credit, simulation, community-based projects, and E-learning.[3] These elements of learning, problems, and cases should be designed to teach core content, encourage critical reflective thinking and practice, and challenge learners to integrate new knowledge by building complexity into clinical care plans and interprofessional practice simulations.[4] In multidisciplinary forums, students are encouraged to understand not only their own role and that of other professional students, but also to reflect on their own knowledge and skills and those of their co-learners. IPE should include five elements of cooperative learning: positive interdependence, face-to-face interaction, individual accountability, interpersonal and small-group skill development, and group processing of information.[4]

Three stages have been identified in the longitudinal provision of IPE. In the early stage of IPE, the focus is on teamwork and group processes, reflection and documentation, team communication, shared knowledge, and ethics. As the students progress, there is a more advanced focus on these same processes and additionally, communication with patients, student awareness of the group's diversity of knowledge, and more complex ethical dilemmas in increasingly complex cases.

Students at this level also encounter aspects of patient-centered care and the relationships between cultural, religious, and socioeconomic factors and their effect on access to health care and the provision of

effective wellness and therapy strategies for an individual patient. The final stage of IPE focuses on the same domains but occurs during the experiential portions of the student's experience.[5]

Benefits of IPE

The WHO views IPE as essential for the development of a "collaborative practice-ready" student who becomes a competent member of the health workforce. It gives the students real world insight, a knowledge base about the work of other health care disciplines, and a model of what collaborative practice can be. It prepares them to collaborate more effectively with practitioners from other disciplines to provide safe, high quality, patient-oriented care. Reeves reports on 46 high-quality studies of global origin many of which showed positive outcomes with respect to learner satisfaction, student attitudes and perceptions, and collaborative knowledge/ skills or behaviors.[6] Training students for a collaborative practice model becomes important since collaborative practices can improve workplace practices and productivity, improve patient outcomes, raise staff morale, improve patient safety, and give populations better access to health-care (WHO, 2010).[1] Collaborative practice has been shown to reduce hospital psychiatric admissions in patients with bipolar disorder.[7] Research on outcomes of other collaborative practice models is ongoing and becoming more rigorous so that positive patient

outcomes in other fields may be identified. [8]

Barriers

Traditionally, students within the health professions have been trained primarily within their own colleges by faculty within their own practice and with students within their own disciplines. For many health care students, exposure to collaborative practice did not occur until their experiential rotations, or sometimes not until after

graduation. The most commonly reported barriers to implementation of IPE have been secondary to this insulation of various college curriculums. These include scheduling and limitations of timing of IPE inputs into the curriculum, learner-level compatibility , preparation time required, financial support, lack of functioning interdisciplinary clinical role models, lack of flexibility in locked models of professional education, disciplinary turf guarding, insular certification and accreditation requirements, the initial expense of new programs, and faculty/staff support.[9] The provision and sharing of suitable interactive learning lab space can also be logistically challenging. Justification for changes is sometimes constrained by the fact that many health care settings, even now, have not fully implemented interprofessional team care and therefore, students on rotation struggle with the application and faculty role models may not be readily observable.

Student attitudes

Engagement and interaction of students from different healthcare disciplines can be a rewarding experience for both students and faculty. Student satisfaction has been assessed in approximately one third of the IPE implementation studies. Curran et al found three types of educational

opportunities that health care students

assessed as being very positive. In general these activities were: (1) the opportunity to meet and interact with students in other health disciplines, hear their perspectives, and discuss approaches to care based on an integrated perspective (2) panel discussions presented by an interprofessional mix of practitioners followed by student discussion (3) Simulated patient interactions. Students were least positive about online small group discussions and didactic module material [10]

Conclusion

For health care providers to collaborate

effectively and potentially improve health outcomes, they must be provided with opportunities as students to collaborate with other disciplines. The barriers to and logistics to developing IPE programs can be formidable but equally formidable are the potential benefits to students who graduate with the skills necessary to work in a patient-centered collaborative health care environment.

References

1. World Health Organization. (2010). *Practice, World Health Organization Framework for Action on Interprofessional Education and Collaborative.* Geneva. Retrieved June 18, 2018 from http://whqlibdoc.who.int/hq/2010/WHO_HRH_HPN_10.3_eng.pdf

2. Panel, Interprofessional Education Collaborative Expert. (2011). Core competencies for interprofessional collaborative practice: Report of an expert panel. Washington D.C.: Interprofessional Education Collaborative.

3. Abu-Rish, E. Kim, S. et al. (2012). Current trends in interprofessional education of health sciences students: A literature review. *Jounal of Interprofessional Care, 26*, 444-451.

4. Luke, R., Solomon, P., et al. (2009). Online interprofessional health sciences education: From theory to practice. *Journal of Continuing Education in the Health Professions, 29*(3), 161-167.

5. Wilhelmsson, M., Pelling, S., et al. (2012). How to think about interprofessional competence: A metacognitive model. *Journal of Interprofessional Care, 26*, 85-91.

6. Reeves S, Fletcher S, et al. (2016). A BEME systematic review of the effects of interprofessional education: BEME Guide No. 39. *Medical Teacher* [serial online]. July 2016; 38(7):656-668. Available from: MEDLINE with Full Text, Ipswich, MA. Accessed May 10, 2018.

7. Reilly,S., Planner, C. et al. (2013, May) Collaborative care approaches for people with severe mental illness. Cochrane Database of Systematic Reviews, Cochrane Database of Systematic Reviews 2013, Issue 11. Art. No.: CD009531. DOI: 10.1002/14651858.CD009531.pub2.

8. Reeves S. Pelone, F et al. (2017, June) Interprofessional collaboration to improve professional practice and healthcare outcomes. Cochrane Database of Systematic Reviews, Issue 6. Art. No.: CD000072. DOI: 10.1002/14651858.CD000072.pub3.

9. Baldwin, D. (2007, October). Some historical notes on interdisciplinary and interprofessional education and practice in health care in the USA. *Journal of Interprofessional Care, 21*(S1), 23-37.

10. Curran, V., Sharpe, D., et al. (2010). A longitudinal study of the effect of an interprofessional education curriculum on student satisfaction and attitudes towards interprofessional teamwork and education. *Journal of Interprofessional Care, 24*(2), 41-52.