COMMENTARY

Building Interprofessional Frameworks Through Educational Reform

Rahim Karim, DC, MBA, Centennial College and Texas Chiropractic College

The North American health care sector is being reformed to enhance collaboration among health care professionals to render patient care and improve outcomes. Changing educational frameworks will play a key role in achieving this goal. It is therefore important to gain an understanding of the application of interprofessional health care education and collaborative models of education. Chiropractic and other health care faculties would need to have an effective understanding and clarification of the characteristics of interprofessional care and its foundation in education from which appropriate educational and curricular models could be developed. (J Chiropr Educ 2011;25(1):38–43)

Key Indexing Terms: Collaboration; Curriculum; Education; Health Professional Curriculum; Interprofessional Education

INTRODUCTION

The health care sector in North America is being reformed to enhance collaboration and team building among health care professionals to render patient care. The key to achieving this transformation is to change the frameworks of our educational systems. A document produced in Canada by Health Force Ontario, *Interprofessional Care: A Blueprint for Action in Ontario* (2007), indicates that the main tool used to pursue a renewal is health care education that parallels and contributes to the collaborative, integrated, interprofessional model that policy makers seek to achieve in practice and service delivery. Building the foundation of systemic interprofessional and integrated health care services starts with the education system, which prepares professionals to succeed within such a working environment.[1] Training for new health care providers prepares them to provide care in collaborative contexts.[1] Existing curricula in universities and colleges are transformed to incorporate this practice model through appropriate educational models that are either new or revised.[1] For those who are already practicing, professional development programs train them to operate within collaborative and integrated teams, serving to maintain high standards of competency.[1]

One of the biggest challenges in terms of implementing the health care policy of integrated interprofessional care has been the dimension of education.[1] First, incorporating curriculum into health care education and training programs has been difficult, because the preexisting culture and curriculum are strongly entrenched.[1] Second, there is a lack of faculty necessary to teach interprofessional care according to appropriately interprofessional formats.[1] Finally, the process of accreditation for health care professionals does not always include interprofessional training and skills as part of the standards or criteria for qualification; indeed, "most professional development programs are not currently focused on training practitioners and caregivers to work together to enhance patient care."[1]

The Health Force Ontario document recommends first that an effective understanding and clarification of the characteristics of interprofessional care and its foundation in education be achieved, from which an appropriate educational and curricular model can be developed.[1] The sections that follow discuss the

The Journal of Chiropractic Education

Vol. 25, No. 1. Printed in U.S.A.
1042-5055/$22.00

literature that examines the application of interprofessional health care education and then review the literature on the collaborative model of education. This information is important for chiropractic and other health care institutions that are or will be developing their curriculum to include interprofessional education.

RESEARCH: INTERPROFESSIONAL AND COLLABORATIVE EDUCATION IN HEALTH CARE

Research indicates that interprofessional health care education occurs when two or more professionals in the areas of health and/or social services share a learning environment, where everyone contributes as well as learns from one another.[2] Alternatively, this kind of education can involve groups of students from diverse health-related areas of concentration or occupation, and with different educational backgrounds, to interact with one another in ways that enhance learning.[2] McKinlay and Pullon, who write about the application of interprofessional learning in New Zealand from a nursing perspective, celebrate its potential to produce innovation through subjective, active interaction between diverse students and educators.[2] It is not enough to simply have students from diverse areas or disciplines sitting in the same classroom together; nor is it acceptable for professionals to learn beside one another without discussing and exploring their roles, contributions, and perspectives.[2] While there is a focus on content, what is important to recognize here from a critical perspective is that it is how these encounters are taught, as opposed to just what is taught, that is of equal importance. This is clear as the authors state that the level of "learning about professional roles and interactions" and critiquing traditional roles as a means of determining new roles within the interprofessional context is as important as the clinical subject matter that health care professionals are presented with through their educational programming.[2]

In terms of the effectiveness of this approach in the New Zealand context, the authors cite several themes emerging from research findings. First, the initiative of interprofessional nursing and health care education in this setting has resulted in diverse health care workers recognizing the strength that other professionals contribute to the collaborative education and care team, which results in respect, trust, and communication within teams that translates effectively into care delivery actions.[2] Second, it was found that this approach to education contributed to the valuing of disciplinary differences, as each discipline brings something important from which other disciplines can benefit.[2] This is promising because it suggests that rather than homogenizing the health care work force into identical service providers, a truly comprehensive approach is being enabled where every discipline contributes its value in a way that allows for the whole (ie, the delivery of quality care) to be more than just the mere sum of its parts. Finally, these authors cite research indicating that in New Zealand, interprofessional education models have contributed to the fulfillment of collaborative clinical practice through training care providers to build and work effectively in teams.[2] These teams are made up of diverse care providers, but they are linked by common values, knowledge, and skill sets, but are also strengthened by difference and appreciation of distinct roles.[2] One of the significant benefits of this approach is its ability to change the attitudes and culture of care providers toward appreciation for the strengths of collaborative and integrated service provision.

An example of an interprofessional learning program is that of physical therapy. One group of researchers from Toronto studied physical therapists' experience within collaborative learning contexts in clinical placement settings.[3] These researchers compared students in the physical therapy program at the University of Toronto, to determine if there were any differences in educational outcomes associated with collaborative learning in comparison for traditional, noncollaborative clinical placement education.[3] Significantly, this empirical research found that there were observable, measurable benefits associated with a collaborative educational model, as those who worked in teams demonstrated higher rates of clinical competence.[3] Similar findings were generated by independent research conducted by one of the physical therapy authors above. Ladyshewsky demonstrated that the collaborative model of education was also more effective in promoting service productivity in acute care settings among physical therapists.[4] This is therefore valuable research that supports the enhanced development of health care providers' skills through educational models that are collaborative. When two or more students are able to work together in a clinical learning environment, it is clear from this

evidence that they can come away from that collaborative experience with a stronger set of skills and knowledge than they would have developed if they had engaged with this kind of learning totally alone.

Finch looks at a plan similar to the one being developed by Health Force Ontario that was being implemented by the National Health Service of the United Kingdom at that time.[5] The author states that while there are recognized benefits of integrating previously disparate elements of health care (such as midwifery, emergency room services, psychiatry, pediatrics, general practice, nursing, and intensive care), including enhanced flexibility and potential for substitution, it is also important to recognize some of the barriers that might confront those such as Health Force Ontario who seek to create an interprofessional educational system that is directly linked to the health care industry.[5] Significantly, the author identifies several potential problems in terms of logistics and institutional harmonization. First, the length of programs differs.[5] Second, each accrediting body has different requirements, which might present a problem in terms of integration.[5] What is considered a core principal in one discipline, for example, might be considered of minimal importance to another, which could lead to conflict when it comes to developing curricula. Entry level requirements are widely varied, which means that the level of knowledge and skill expected of a student in one discipline might not pair well with the level of knowledge and skill expected of a student from another discipline.[5] What is also important to realize is that interprofessional education does not just require cooperation and integration between educational institutions and the health care system, or between different divisions within the same educational institution; rather, it will inevitably require that institutions such as universities cooperate with one another.[5] There are also problems that could occur in terms of synching time tables among busy students, even if that were to take place within a single institution.[5]

However, perhaps more significant, the author also cites research evidence indicating that the benefits among interprofessional learning participants might not be equitable. We learn that in the United Kingdom, when a study was conducted comparing the learning experienced by midwives working with doctors, and vice versa, the midwives took much more away from the learning experience than their physician co-students.[5] This is an awareness that is significant because it calls into question the uniform effectiveness of these kinds of interprofessional learning interventions. It is clear that some are more useful than others and that some members of the educational relationship stand to gain much more than others through this approach.

Writing from a perspective of pediatric nurse education, Bradshaw et al further examine the effectiveness of interprofessional care from the perspective of family-based nursing.[6] These authors celebrate the ability for this approach to education to enhance nurses' ability to provide care that meets the preferences, priorities, and needs of families at the center of the health care encounter.[6] It is important that the research that is being presented here in this literature review comes from diverse sources. It seems that there is an agreement among health care providers that interprofessional education is something that contributes to the provision of enhanced services for the client of the health care industry. While Finch justly recognizes that there are barriers that are in place, the proven fact that service provision is enhanced, whether that is by physical therapists or pediatric nurses, demonstrates that this approach to education and service provision is aligned with best practices from an objective and multidisciplinary perspective.[5]

Bradshaw et al state that while there is a tendency for pediatric clients and their families to receive care from multidisciplinary caregivers, in the past this has been experienced as ineffective and even somewhat harmful, since the caregivers from various disciplines are not aware of each others' interventions or care plans, and the care is experienced in a way that is disjointed and confusing.[6] Education for interprofessional health care trains professionals to harmonize their care delivery and allows everyone to be on the same page, including the parents and families, which enhances their satisfaction with care.[6] As such, this is clear evidence that education for interprofessional health care is an essential tool for improving quality of care by allowing clients to experience care in a streamlined way.[6]

Fitzpatrick et al further support collaborative and interprofessional educational programming as a means of creating communities of care reflecting strong interpersonal dimensions, which they identify as relationship-centered care.[7] Like family-centered care as presented by Bradshaw et al, this approach to care emphasizes health from a social as well as medical perspective.[7] These authors argue that professionals learning together will result in them working together more effectively and will also

enhance participants' perspectives in terms of understanding the problems that clients face and the solutions that are appropriate.[7] This is a major reform in both education and in health care, because an emphasis on the human experience is being addressed as a priority rather than just the objective medical facts that various scenarios represent.

A final resource from the scholarly literature on interprofessional and collaborative education further supports this design in terms of its ability to transform care and health care practice. Jones presents further argument that quality care according to best practices is supported and enhanced by interprofessional education.[8] The author states that nurses and other health care professionals have a "duty of care" that involves a legal commitment to care in ways that are safe and characterized by competence.[8] Today, as all nurses in the United Kingdom are required to demonstrate the ability to work in interprofessional settings, that duty of care must also integrate interprofessional working skills and knowledge developed through an appropriate course of training and education.[8] It is therefore unethical for those training health care providers in the United Kingdom to not adequately prepare them for working alongside and in cooperation with diverse professions, as this has come to be understood as a component of quality care in today's health care environment.

COLLABORATIVE EDUCATIONAL THEORY

Ultimately, however, the concern of this literature review involves understanding how the research presents the educational model of collaborative teaching and learning as an appropriate means of fulfilling the goal of interprofessional health care. Although this review examines evidence that supports the use of the collaborative model in health care education,[3,4] the model of collaborative health care education is one that has been articulated in much more detail elsewhere in the scholarly literature.

According to Studdart, interprofessional education is highly compatible with a model characterized by various disciplines learning to work with one another with the goal of enhanced client care. "Interprofessional education helps professions to learn with, from and about each other to improve the quality of care. Collaboration helps different professions to achieve effective patient centred care."[9] A change in culture is necessary to facilitate this goal, and it is clear from this and other resources that this change in culture must begin with education before the rest of the health care industry can be expected to conform to its structures and models (9).

One of the ways that this has been accomplished among educators from different disciplines is through the creation of structures for dialogue, coordination and cooperation, to "create enduring interdisciplinary cultures that facilitate dialogue regarding teaching and learning among faculty."[10] This is an important research insight because it indicates that a transformation must take place in terms of educational philosophy and culture before the health care system can itself be transformed into a collaborative system characterized by interprofessional care provision.

One problem with interprofessional education that has been identified in the research is the lack of consensus on a suitable model for employing this kind of teaching and training.[11] Different models resulted in different outcomes, with the most effective being those characterized by high commitment of individuals, quality of the professionals supervising the program, and those supporting student characteristics such as the qualities of flexibility, cooperativeness, negotiability, and open mindedness.[11] The main challenge, however, that faces interprofessional education is the lack of a strong theoretical approach or model that has been proven for its particular effectiveness in achieving these goals. However, it has been found that when a strong model has been developed and applied, it has resulted in higher posttest approval scores for students engaging with and evaluating such a model, which involved a "collaborative clinical education model where students are integrated into the ward team and the team is responsible for student learning."[12]

In Australia, a model known as the Bronstein's model of interdisciplinary collaboration is applied to guide interprofessional health care education.[13] This is based on the theory that integrated services are more effective than services provided in isolation from each other, which is reflected by a model whereby students undertake services jointly.[13] The key elements of Bronstein's model are interdependence or the reliance on others to achieve goals together, newly created professional actions that are collaborative rather than individual, flexibility and role blurring, shared ownership of goals, and shared reflection on practice.[13]

Elsewhere, Murata provides the most useful model in terms of demonstrating how collaborative teaching models are aligned with best educational practices according to three distinct goals: emphasizing the coordination among educators as integral to the integration of curricula, integrating the curricula as much as possible upon introduction of the collaborative teaching model, and extending this to influence a long-term model characterized by continuity and coherence.[14] This helps to identify the structures and systems that have been installed to support and encourage different health care professionals to learn from each other (both pre- and in-service). Efforts have to initially be made to coordinate educators to ensure that a curriculum is established that is structured as a harmonized continuum rather than as a series of isolated encounters.[14] When teachers do get together to coordinate, they have to find common ground for integration as well as define their discipline-specific roles and contributions.[14] Then, the educators need to develop a long-term model, whereby these integrated teaching interventions can work toward shared goals at shared paces.[14]

Certainly, the application of such a model served to effectively address some of the barriers identified by previous authors, such as those cited by Finch.[5] The main issues that this author raised were concerned with the logistical and institutional challenges associated with teaching a curriculum that integrated multiple disciplines and indeed multiple educational institutions. By coordinating educators, who work closely together to coordinate curricula, and then extending that educational plan to include long-term shared goals and harmonized teaching interventions, this research suggests that many of these problematic issues are effectively addressed in ways that can move the system closer to the type of integration that has been found to promote quality of care and education according to best practices.

CONCLUSION

In conclusion, chiropractic and other health care faculties need to have an effective understanding and clarification of the characteristics of interprofessional care and its foundation in education from which appropriate educational and curricular models can be developed. The evidence is clear that a change in educational as well as health care culture is required for policies surrounding interprofessional care to succeed, as numerous references here have indicated.[9,10] These references have also indicated that such a change in attitudes, values, philosophy, and culture in health care must begin at the level of education. Education has traditionally been characterized by competitiveness and individual achievement[15]; however, as these models of interprofessional education are applied and fulfilled, this will change to a perspective whereby students of health services recognize that their achievements and the care interests of the clients who they will one day serve are inextricably woven together within the interprofessional health care relationship and environment.

CONFLICTS OF INTEREST

The author has no conflicts of interest to declare.

About the Author

Rahim Karim is Chair, School of Continuing Education at Centennial College, and an adjunct faculty member of the Texas Chiropractic College. Address correspondence to Rahim Karim, School of Continuing Education, Centennial College, PO Box 631, Station A, Toronto, Ontario, Canada, M1K 5E9 (e-mail: drrkarim@yahoo.com). This article was submitted May 6, 2010; revised August 9, 2010; and accepted August 18, 2010.

REFERENCES

1. Health Force Ontario. Interprofessional care: a blueprint for action in Ontario. Toronto: Government of Ontario; 2007.
2. McKinlay E, Pullon S. Interprofessional learning—the solution to collaborative practice in primary care. Nurs N Z 2007;13(10):16–18.
3. DeClute J, Ladyshewsky R, Deusinger SS, Emery MJ, Shapiro Gandy J. Enhancing clinical competence using a collaborative clinical education model. Phys Ther 1993;73(10):683–97.
4. Ladyshewsky RK. Enhancing service productivity in acute care inpatient settings using a collaborative clinical education model. Phys Ther 1995;75(6):53–60.
5. Finch J. Interprofessional education and teamworking: a view from the education providers. BMJ 2000; 321(7269):1138–40.
6. Bradshaw M, Coleman V, Smith L. Interprofessional learning and family-centered care. Paediatr Nurs 2003; 15(7):30–33.
7. Fitzpatrick JJ, Ryan S, Baldwin D, et al. Building community: developing skills for interprofessional health professions education and relationship-centered care. Nurs Health Care Perspect 1998;19(2):86–90.
8. Jones C. Learn side by side. Nurs Stand 2005;19(47):72.

9. Stuttard P. Honing interprofessional links: collaborative working is improving patient care. Nurs Stand 2007;21(27):61.
10. Weld J, Trainer J. A faculty interdisciplinary institute as liberator from stifling disciplinary mythology. Coll Teach 2007;55(4):157–63.
11. Davidson M, Smith RA, Dodd KJ, Smith JS, O'Loughlan MJ. Interprofessional pre-qualification clinical education: a systematic review. Aust Health Rev 2008;32(1): 111–20.
12. Henderson A, Heel A, Twentyman M, Lloyd B. Pretest and post-test evaluation of students' perceptions of a collaborative clinical education model on the learning environment. Austr J Adv Nurs 2006;23(4):8–13.
13. Copley JA, Allison HD, Hill AE, Moran MC, Tait JA, Day T. Making interprofessional education real: a university clinic model. Austr Health Rev 2007;31(3): 351–57.
14. Murata R. What does team teaching mean? A case study of interdisciplinary teaming. J Educ Res 2002;96(2): 67–78.
15. Johnson DW. Student-student interaction: the neglected variable in education. Educ Res 1981;10(1):5–10.