Prospects for Future Multi-disciplinary Collaboration

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Introduction

Multidisciplinary collaboration is not a recent phenomenon in research and service provisions. Intersectoral and multidisciplinary collaboration is becoming more prominent in all facets of government, health, social services, and scientific endeavors. In England, multidisciplinary teamwork has been an integral part of geriatric medicine since the 1970s, when health service providers recognized that no single discipline had the skills and/or the knowledge to deliver holistic care for elderly patients, whose problems are often complex (Barton & Mulley, 2003). In the United Kingdom, multidisciplinary teamwork has become one of the key processes through which care is currently managed in the British National Health Service. This has been particularly emphasized since the coming into power of the Labour government in 1997, which resulted in a radical change in health and social care policy to introduce a system based upon competitiveness, public private partnerships and collaboration (Atwal & Caldwell, 2005). In the United States (US), the government has long valued the input of multiple disciplines in practice and research. The US Agency for Healthcare Research and Quality (AHCPR) was established in 1989, with the following purpose (Agency for Health Care Policy and Research, 1998):

> *"to enhance the quality, appropriateness, and effectiveness of health care services, and access to such services, through the establishment of a broad base of scientific research and through the promotion of improvements in clinical practice and in the organization, financing, and delivery of health care services".*

In developing clinical practice guidelines to solve commonly occurring yet challenging problems, the AHCPR called upon panels of experts from different disciplines all over the country to pool their expertise.

The demand for multidisciplinary collaboration is especially prominent in the area of public health and community development (World Health Organization, 1997). One of the more important driving forces is the realization of the complexity of human health and social issues. No single sector,

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or any health discipline for that matter (italics are from the author), has the resources, expertise or jurisdiction to address such complex issues as substance abuse, poverty, pollution, obesity, inequitable health care, and disasters, solely on its own (Lasker & Weiss, 2003).

Within the scientific community, the limitations of the received view of scientific inquiry have gradually been recognized. To date, scientists as "seekers of knowledge" are becoming aware that there is no single version of the "truth," but that multiple truths exist. To incorporate others' perspective in the production of knowledge and in optimizing outcomes therefore becomes crucial, favoring the blooming of collaborative ventures among different disciplines.

To better utilize the existing resources by exploiting different economies of scale and scope is another drive behind multidisciplinary activities (Axelsson & Axelsson, 2006). The assumption is that health service quality can be enhanced by pooling skills and expertise from the different parties involved (Agency for Health Care Policy and Research, 1998). The fragmentation of responsibilities can be avoided through adopting a more holistic approach to service provision.

Increasingly, governments are strategizing the development of intersectoral and multidisciplinary collaboration through funding provisions. Studies on cancer, diabetes, mental health, stroke, dementia, and medicine for children (Department of Health, 2006) are some of the areas where huge networks have been created. Research programs on multidisciplinary and community participation can be found in various disciplines, including health sciences and social sciences, psychology, political science, public administration, education, business, and philosophy (Lasker & Weiss, 2003).

Integration and Outcomes

Intersectoral collaboration is usually organized in the form of multidisciplinary teams with overlapping boundaries of different organizations and sectors. An organization or center formed in this manner is not always stable, which indicates that a lot of management support will be required in order for it to survive (Axelsson & Axelsson, 2006).

Axelsson and Axelsson (2006) discussed three forms of inter-organization integration initially described by Williamson and Powell; their findings also have relevance for multidisciplinary collaborative endeavors:

1. the management hierarchy form, which refers to a top-down coordination of organizations (Williamson, 1975);

2. the market competition form, which stems from a contractual relationship between the organizations involved (Williamson, 1975); and

3. the network form, which means a voluntary co-operation between organizations that are not part of a common hierarchy or market (Powell, 1990).

A study funded by the United Kingdom National Health Services (Goodwin, Peck, Freeman & Posaner, 2004) also identified three types of network structure fairly similar to those described by Axelsson and Axelsson (2006):

i. enclave – based on shared commitment (*can be either the market competition form or the network form, depending on the nature of the commitment made between organizations);*

ii. hierarchical – with a regulatory organizational core (*similar to the management hierarchy form);* and

iii. individualistic – with a loose association of affiliates *(can be associated with the network form).*

Thomas, Graffy, Wallace and Kirby (2006)

reported that a top-down, hierarchical approach based on institutional alliances and academic expertise was stable and attracted more funding. The bottom-up, individualistic network was good at reflecting practical concerns closer to the community partners they worked with in research, while an enclave network demonstrated the power of shared projects in helping different parties to develop trusting relationships. Thomas et al. (2006) further identified a whole-system leadership network that was characterized by decentralization and good interconnection between subunits. It was able to bring together stakeholder contributions from all parts of the system. However, this network structure can be vulnerable to the influence of powerful stakeholders because of its poor institutional support.

Within all forms of integration and/or collaboration, the leader is pivotal in driving the team forward to attain its goals and aspirations. The significance of the role of the leader is paramount for a team to succeed. Leaders must challenge themselves to be prepared as they face this trend in health and social development. In the next section, how leaders should lead multidisciplinary teams forward should be discussed.

The Future – What Should Leaders Do

The impact of these factors on health service provision forced us to think about what is the preferred mode of team work when many different disciplines collaborate in research and development. In the literature, a number of terms have been used over time in the literature. The terms ‘multidisciplinary’ first appeared in the literature. Over time, the terms ‘interdisciplinary’ and then ‘transdisciplinary’ appeared. Do they carry the same meaning or do they have different meanings? To the author, the changing use of the terms is only a reflection of an ideology that has never quite materialized. Since multidisciplinary collaboration is the way of the future, we need to ask ourselves how one discipline should collaborate with another. More importantly, we need to ask ourselves, “Are we ready for the future?” In the following sections, a number of factors that require the attention of leaders and coordinators in order for projects to succeed will be discussed.

❑ Identifying a Common Vision

One of the main challenges in multidisciplinary collaboration is to bring all parties concerned together in a common pursuit under a shared identity. Different stakeholders’ needs must be respected in order for the drive to succeed to last. According to organizational theory, inter-organizational relations are more loosely bound than intra-organizational relationships because the different organizations (or disciplines) may belong to different management hierarchies (Weick, 1979). Therefore, sharing a common vision among different partners in the team is essential as a first step, in order to cultivate a sense of shared meaning and coherence.

❑ Building the Right Team

In large organizations, any multidisciplinary endeavors will mean that it is necessary to involve multiple departments in order to attain the anticipated outcomes. Disch noted that when those in charge of the department as well as their assistants understood the importance of a project, agreed with the objectives and methods, and

actively wanted to render the project a success, this project would run smoothly (Disch, 1988). If all of these pieces were not in place, he observed that efforts were often wasted and limited work done. Lasting teams share the characteristics of members knowing and trusting each other, working closely together and having similar interests, values and goals (Vangen & Huxham, 2003).

❑Creating Room for Autonomy and Personal Development

In a multidisciplinary project, accommodating diversity within team membership is essential. "Collaboration does not mean losing one's identity, one's right to think and write singularly or to rework the work of the other" (p. 14) (Glaser, 1991). To nurture trust, the team leader has to secure open channels of information flow, a fair distribution of power, and rewards and recognition within the team. Diplomatic effort may be required of the team leader (Vangen & Huxham, 2003). Success will require consensus regarding a set of workflow pathways, learning spaces, and feedback mechanisms that can channel the insights and efforts of stakeholders throughout the whole system (Thomas et al., 2006).

❑Engaging in the Use of Technology

Recent advances in mobile technologies have rendered the point-of-care clinical information systems viable tools to address the difficulties found in collaborative research. These systems can provide benefits such as information sharing with all team members including subunits of the team (Pinelle & Gutwin, 2002). If needed, immediate awareness of the activities of other team members is also feasible. Health disciplines are now in an era where changes in technology, demographics, politics, consumer knowledge and finance shape and influence the direction of our health sciences (Callaghan, 2006). Because large-scale multi-site cooperative studies, the trend of current collaborative studies, are even more difficult to monitor. We must be able to utilize new technologies to the profession's advantage.

❑Demonstrating Outcomes as well as the Impact of Collaborative Processes

Many of the evaluations on large scale collaborative projects have focused more on their ultimate goals than on the impact of the collaborative processes. There are no standard benchmarks by which to evaluate the effectiveness of the processes within a multidisciplinary project (Lasker & Weiss, 2003). By the nature of its design, the processes of broad-based collaborative interventions are interactive and evolving, thus difficult to control. Therefore, they are not good candidates for conducting randomized controlled trials, presumably the gold standard of outcome studies nowadays (Lasker & Weiss, 2003). However, it is essential to understand the effects underlying collaborative processes. Examination of the particular phenomenon (why would a particular intervention work for this individual/ group and not others) instead of looking for the general "truth" for all will facilitate a better understanding of the collaborative processes in relation to outcomes. This is where qualitative research will be able to make its impact.

❑Fostering Interprofessional Education and Understanding

The issue of professional dominance is always a challenging one in health and health care research. In collaborative endeavors, powerful disciplines (either in terms of number, level of institutional support, or extent of accessible resources) of one

discipline can easily displace the voice of a lesser represented group (Jones, 2006). To protect the roles and functions of their own disciplines, clinicians will attempt to protect their professional territory (Jones, 2006). In light of the trend toward intersectoral development, the various health disciplines must learn to work with each other. The best way to promote harmony and trust in a diverse team is to prepare the students of respective disciplines through interprofessional education. Medical and health educators are being challenged to ensure that medical and health students demonstrate competence in a variety of areas, including understanding the health system in which they practice (Echert, Bennett, Grande & Dandoy, 2000) and the ability to work within an interdisciplinary context.

Leadership in Multidisciplinary Teams

The leader of a multidisciplinary team can determine how a team operates (Atwal & Caldwell, 2005). Axelsson and Axelsson (2006) suggest that multidisciplinary teams need to go through four stages of distinct development: forming (contacts and communications), storming (conflicts and finding common goals and values), norming (building and sustaining trust), and performing (goal achievement). Before reaching maturation at the performing stage, the leader needs to be cognizant of the lengthy and arduous process of team building. The team may not be able to reach the productive stage of performing if conflicts are not resolved, or if shared goals and values are not identified. This speaks to the pivotal element of leadership in multidisciplinary endeavors. In taking up leadership roles, leaders must adequately prepare themselves.

Although the word "collaborate" is commonly used, the concept is in fact a complex phenomenon bordering on elusiveness (Callaghan, 2006), meaning different things to different individuals in a team. Yet the role of the leader in a multidisciplinary team is unambiguous. He or she has to lead its members towards the next level in their collaborative endeavors in practice and research. In learning how to move forward in collaboration, nurse leaders today must be able to articulate their own roles. The definitions of leader and leadership may be found in the root meanings of 'lead' and 'manage.' Kouzes and Posner noted that the root origin of 'lead' is a word meaning 'to go,' that is to travel from one place to another (Kouzes & Posner 1987). Leaders are those who would 'go first' in pioneering expeditions, and show others the direction that should be taken (Callaghan, 2006). Callaghan argues that the unique role of the nurse leader today is to take nurses on journeys to places that the profession has never been before.

As mentioned earlier, different ways of integration and networking can lead to different outcomes. Regardless of whether it is an enclave (shared commitment), hierarchical (management), or individualistic (network) type of collaborative model, positive outcomes can be derived if a leader can capitalize on the advantages inherent in the pooling of resources and expertise.

In order for multidisciplinary teams to mature and become productive, special kinds of leadership and management are required. This type of leadership and management is not merely conducting a program. The leader needs to be cognizant of the lengthy and arduous process of team building in studies that engage a multitude of disciplines. The team may not be able to perform if conflicts are not resolved, or if shared goals and values are not identified. This speaks to the pivotal

element of leadership in multidisciplinary endeavors.

In taking up leadership roles, leaders must adequately prepare themselves. A leader is expected to have patience, stamina, tact, and an open mind in order to move the team forward. A structure that rests upon a coalition of people and teams from a multitude of agencies and institutes to form one single unit is fragile as well as volatile (Axelsson & Axelsson, 2006). Leaders need to be adequately prepared for the challenge in order for the profession to have a future in multidisciplinary collaboration.

The Role of Individual Nurses

Research into decision making processes also points out that medical dominance renders nurses' roles unacknowledged and devalued (Coombs & Ersser, 2004). That nurses often lack organizational support in their pursuit of autonomy in practice and as advocates for patients is no doubt one of the factors preventing nurses from being vocal. Nurses are thus unable to substantially influence decision making (Coombs & Ersser, 2004). Ultimately, for nursing to have an active role in multidisciplinary collaborations, it falls to each individual nurse to speak up and act upon what nursing believes and represents in our quest for success. Medical dominance is recorded as both a historical and an ongoing aspect of Western health care (McGrath, Holewa, & McGrath, 2006). Yet, it is sad to note that in Atwal and Caldwell's (2005) study exploring the patterns of interaction in multidisciplinary team meetings, therapists, social workers and nurses are reluctant to voice their opinions. They were observed to be passively conforming to the rules of the game in its dominating culture. Even to date, studies are reporting that physicians dominate communication and endorse decisions in teams, while nurses in such studies lack the necessary confidence to voice their opinions (e.g., McGrath et al., 2006).

There will be no collaboration if there is a lack of confidence in what we do. There will be no prospect of participation in collaborative ventures if we conform to what is expected of us. To move ahead in this world that values multidisciplinary collaboration, we need leaders with the attributes required to build long-lasting multidisciplinary teams. We also urgently need nurses who are vocal, articulate, and prepared to work, not defensively, but collegially, with professionals from other disciplines, in research and in practice.

Conclusion

The presence of and demand for multidisciplinary collaborations in health care and health services research are not new. In advanced countries like the United Kingdom and the United States, interdisciplinary and intersectoral collaboration has been on the scene for decades, mainly in the areas of public health and primary and geriatric care. The most successful form of inter-organizational collaboration seems to be that in which stable multidisciplinary teams have been established and sustained over a longer period of time (Health Canada, 1999). In confronting the barriers to collaboration, the onus of course is on organizations to adopt a supportive and enabling culture that is conducive to transformational leadership (Callaghan, 2006). But it is also crucial that a leader organizes his/her team members so that they work jointly with each other. The leader needs first of all to build the right team with the right people, embrace a common goal with which team members can identify, and direct the team to move forward

through promoting trust and open communication. At the same time, the leader needs to provide space, autonomy and support to empower his or her members in order to channel their talents and expertise into productive activities while at the same time facilitating individual professional development. We therefore need leaders who are innovative, patient, and courageous in their convictions, to guide the nursing profession into the twenty-first century (Callaghan, 2006). This is a time of multidisciplinary collaboration in all aspects of government, academia, and scientific endeavors.

There is much for researchers and practitioners to gain by engaging in work with multidisciplinary teams, both in the short and long term (Thomas, Graffy, Wallace & Kirby, 2006). The road to success requires the leader to fashion road maps, create learning spaces, and provide feedback mechanisms in order to make the most out of the efforts of all parties within a multidisciplinary team. A transformational leader shapes, alters and elevates potential followers to the next level of accomplishment (Callaghan, 2006). More importantly, it is up to each individual nurse to take up active roles when collaborating with other health professionals in practice and in research. The prospect of multidisciplinary collaborations lies, first and foremost, in ourselves.

References

Agency for Health Care Policy and Research (1998). AHCPR Strategic Plan, United States Department of Health and Human Services. Http://www.ahcpr.gov/about/stratpln.htm. Accessed 3 August, 2007.

Atwal, A. & Caldwell, K. (2005). Do all health and social care professionals interact equally: a study of interactions in multidisciplinary teams in the United Kingdom. Scandinavian Journal of Caring Sciences, 19, 268-273.

Axelsson, R., & Axelsson, S. B. (2006). Integration and collaboration in public health – a conceptual framework. International Journal of Health Planning and Management, 21, 75-88.

Barton, A., & Mulley, G. (2003). History of the development of geriatric medicine in the UK. Postgraduate Medical Journal; 79, 229-234.

Callaghan, L. (2006). The use of collaboration in personal outcomes. International Journal of Health Care Quality Assurance, 19 (5), 384-399.

Coombs, M., & Ersser, S. (2004). Medical hegemony in decision-making – a barrier to interdisciplinary working in intensive care? *Journal of Advanced Nursing, 46,* 245-252.

Department of Health (2006). Best research for best health. A new national health research strategy. London, England: Department of Health.

Disch, R. (1988). The young, the old, and the life review: Report on a Brookdale project. Journal of Gerontological Social Work, 12 (3-4), 125-135.

Echert, N. L., Bennett, N. M., Grande, D., & Dandoy, S. (2000). Teaching prevention through electives. Academic Medicine, 75: S85-S89.

Glaser, B. G. (1991). In honor of Anselm Strauss: Collaboration. In D. R. Maines (Ed.), Social organization and social process: Essays in honor of Anselm Strauss (pp.11-16). New York: Aldine de Gruyter.

Goodwin, N., Peck, E., Freeman, T., & Posaner, R. (2004) Networks briefing – Key lessons for networks. London, England: National Health Services Service Delivery and Organisation

Programme.
Health Canada (1999). Intersectoral action towards population health. Report of the Federal/Provincial/Territorial Advisory Committee on population health. Health Canada Publications: Ottawa.
Jones, A. (2006). Multidisciplinary team working: Collaboration and conflict. International Journal of Mental Health Nursing, 15, 19-28.
Kouzes, J., & Posner, B. (1987). The leadership challenge. San Francisco, CA.: Jossey-Bass.
Lasker, R. D., & Weiss, E. S. (2003). Broadening participation in community problem solving: a multidisciplinary model to support collaborative practice and research. Journal of Urban Health: Bulletin of the New York Academy of Medicine, 80(1), 14-47.
McGrath, P., Holewa, H., & McGrath, Z. (2006). Nursing advocacy in an Australian multidisciplinary context: findings on medico -centrism. *Scandinavian Journal of Caring Sciences, 20*(4), 394-402.
Pinelle, D., & Gutwin, C. (2002). Supporting collaboration in multidisciplinary home care teams. Proceedings of the American Medical Information Association 2002 Annual Symposium, 617-621.
Powell, W. W. (1990). Neither market nor hierarchy: network forms of organization. Research Organisation and Behavior, 12, 295-336.
Thomas, P., Graffy, J., Wallace, P., & Kirby, M. (2006). How primary care networks can help integrate academic and service initiatives in primary care. Annals of Family Medicine, 4 (3), 235-239.
Vangen, S., Huxham, C. (2003). Nurturing collaborative relations: building trust in interorganizational collaboration. Journal of Applied Behavioral Science, 39, 5-31.
Weick, K. E. (1979). The social psychology of organizing (2nd ed.) Reading, MA.: Addison-Wesley.
Williamson, O. E. (1975). Markets and hierarchies: Analysis and antitrust implications. New York: Free Press.
World Health Organization (1997). Intersectoral action for health. A cornerstone for Health-for -All in the Twenty-first century. Report on an international conference held in Halifax. Geneva: WHO Publications.

Abstract

Prospects for Future Multi-disciplinary Collaboration

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Background

Intersectoral and multidisciplinary collaboration is becoming more prominent in all facets of government, health, social services, and scientific endeavors. An interplay of a multitude of driving forces moves multiple disciplines forward to achieve quality outcomes in health and social sciences services and research.

Aim

This paper aims at discussing the prospects for future multidisciplinary collaboration. If inter-organizational integration and multidisciplinary collaboration are the ways of the future in academia and the scientific world, it then becomes crucial to examine what lies ahead for the nursing profession,

Discussion

This paper argues that in order for multidisciplinary endeavors to succeed, the leaders in multidisciplinary teams shoulder the largest share of the responsibilities involved. In developing a lasting team constituting professionals from different disciplines, the leader needs to include the right individuals in the team, identify a common goal, build trusting relationships through open communication and interprofessional education, and empower members through creating room for autonomy and at the same time allowing space for personal development. The leader will need to utilize information technologies to manage communication issues in a large multi-site multidisciplinary project. Lastly, he or she must be able to demonstrate team productivity through process and outcome evaluation. It needs to be emphasized that it falls to each individual nurse to speak up and act upon what nursing believes and represents in our quest for success in multidisciplinary endeavors.

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Conclusion

The significance of the role of the leader is paramount for a team to succeed. Yet there is no prospect if only a handful of exceptional nurse leaders are moving ahead in multidisciplinary endeavors. Without the actualization of professional roles by each individual nurse, the profession will have no prospect in collaborations across disciplines.

Key words: Multidisciplinary, Interdisciplinary, Collaboration, Leadership, Future