Interprofessional teamwork: Professional cultures as barriers

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Abstract

Each health care profession has a different culture which includes values, beliefs, attitudes, customs and behaviours. Professional cultures evolved as the different professions developed, reflecting historic factors, as well as social class and gender issues. Educational experiences and the socialization process that occur during the training of each health professional reinforce the common values, problem-solving approaches and language/jargon of each profession. Increasing specialization has lead to even further immersion of the learners into the knowledge and culture of their own professional group. These professional cultures contribute to the challenges of effective interprofessional teamwork. Insight into the educational, systemic and personal factors which contribute to the culture of the professions can help guide the development of innovative educational methodologies to improve interprofessional collaborative practice.

Keywords: *Interprofessional relations, professional status inequalities, interprofessional education, health and social care, conflict, group behaviour.*

Introduction

Culture is defined as the social heritage of a community, meaning "... the sum total of the possessions, ways of thinking and behaviour which distinguishes one group of people from another and which tend to be passed down from generation to generation ..." (Parkes et al., 1997). Each health care profession has a different culture, including values, beliefs, attitudes, customs and behaviours. This culture is passed on to the neophytes in the profession, but it remains obscure to other professions (Schroeder et al., 1999). This paper explores the development of culture in health care professions, as well as the accompanying challenges culture brings to effective interprofessional teamwork.

The evolution of professions

A long history of class differences and gender issues underlies current challenges to collaborative teamwork in health care. In the 1750s, the industrial revolution moved society to a model of competitive capitalism. This economic and philosophical model contributed to the development of the "profession", defined as an occupational monopoly over the

provision of certain skills and competencies in a market for services (Witz, 1992). Ivan Illich, a radical critic of health care professionals, claims that professionals monopolize knowledge and mystify their expertise for purposes of power and control (Illich, 1970).

In the development of a profession, the professional group takes control of the occupation. Through exclusionary closure, the profession limits the number and type of entrants into its fold, thus enhancing the market value of the service. The profession then begins to monitor and regulate the labour of other occupations that provide related services to protect its market niche (Witz, 1992).

In her book *Professions and Patriarchy*, Witz (1992) recognizes that most health care in the pre-industrial era was provided by women to their families and neighbours, with little or no financial reward. During the industrial revolution, the medical profession established itself as the desired purveyor of care, delivered by male professionals for financial rewards. Cures of the professionally untrained healers and mid-wives (mainly women) were discredited. In 1858, Britain passed the Medical Registration Act, which required medical practitioners to pass examinations before practicing medicine. Only middle and upper class men could access university education. Although women were not excluded from taking the examinations, they were not allowed to attend the male dominated universities, which virtually excluded them from most professions. A small number of more wealthy women (e.g. Elisabeth Garret) found alternative approaches to studying in order to sit the exams. Men therefore dominated the medical profession, had significant resources and enjoyed the gender privilege of the patriarchal society.

In the 19th century, women's roles in society were seen in the private sphere of the home, with their children and as servants of men (Stuart, 1993). As women entered the work force in the latter decades of the 19th century, they were encouraged to go into nursing as it embraced the virtues of true womanhood (piety, purity, submission of self and domesticity) (Stuart, 1993). Nurses became the doctors' helpers (Kulys & Davis, 1987). As more formal nursing education became available, only women of families with money could afford to consider the training. Social class again became a factor in the development of the profession. Today, middle class women continue to make up the majority of the nursing profession (Stuart, 1993).

Gender and social class issues have been factors in the friction and conflict that has exisited between professions until present day. They colour the basic values and world view of all the professions. The organization of medicine itself has traditionally reflected the values of the middle and upper classes, with the delivery of care being organized around the needs and desires of health care professionals, particularly physicians (Ponte et al., 2003). Only recently are there moves to organize the delivery of care around the needs and desires of patients and families (Liedtka & Whitten, 1998).

Health care professions have struggled to define their boundaries. Nursing has evolved as a profession, such that nurses have become responsible for their own acts (Kulys & Davis, 1987). This openly challenges the authority and boundaries of medicine (McCallin, 2001). In social work, there has been much debate about restricting access to social work practice to those with recognized Social Work degrees (Loseke & Cahill, 1986). Gieryn (1983) describes boundary-work as a tool used by a profession to promote its ideology which then serves as a paradigm or framework for that profession's world view. Boundary-work heightens the contrast between rival professions or occupations in ways flattering to the ideologists' convictions, promoting expansion of the profession's authority. Boundary-work also fosters the exclusion of rivals by labeling them as frauds, amateurs or incompetents, and often blames scapegoats from outside when problems arise, exempting its own members from responsibility for consequences of their work.

This history reflects the evolutionary context of professions. Conflict and strain between professions still rise to the surface today, triggering gender and social class issues, as well as invoking the processes of closure and boundary-work (Fagin, 1992; Williams, 1992; McCallin, 2001). These factors contribute to the culture of each profession as well as to the barriers between the professionals on a team, even without their awareness.

Do you see what I see?

Different health care professions have evolved under their own and society's historic forces and ongoing sociological processes. Each profession has struggled to define its identity, values, sphere of practice and role in patient care. This has led to each health care profession working within its own silo to ensure its members (its professionals) have common experiences, values, approaches to problem-solving and language for professional tools. It is not only the educational experiences, but also the socialization process which occurs simultaneously during the training period that serves to solidify the professional's unique world view. At the completion of their professional education, each student will have mastered not only the skills and values of his/her profession, but will also be able to assume the occupational identity. This process is called ''professionalization'' (Loseke & Cahill, 1986). The professional neophytes will be able to ''. . . convince both others and themselves that they possess the expertise and the personal qualities of occupational incumbents' image of themselves . . .'' (Loseke & Cahill, 1986, p. 245).

Cognitive learning theory suggests that each profession may attract a predominance of individuals with a particular set of cognitive learning skills and styles (Hall & Weaver, 2001). Educational theory and the learning methods used to teach students in each profession, are linked to these underlying psychological theories (Cooper et al., 2001). Each professional school will use methods best suited to its learners, which will further reinforce the walls of the silo. This may have been reflected in Henley et al.'s study results (2000), where medical students rated nurse practitioner tutors low on expertise in subject matter and problem-solving compared to other areas, perhaps reflecting different approaches to clinical issues. The differences in learning environments for nurses and medical students may also reflect the homogeneity of the culture within each profession. Physicians traditionally learn independently in a highly competitive academic milieu. Nurses learn early in their career to work as a team, collectively working out problems and efficiently exchanging information across shifts to insure appropriate continuity of care for their patients.

Petrie (1976) suggests that each profession has a different ''cognitive map'' and that ''. . . quite literally, two opposing 'disciplinarians' can look at the same thing and not see the same thing . . .'' (p. 35). The cognitive map develops as a consequence of the educational and socialization experiences of the students of each profession, built on each student's own unique cognitive and constitutional make-up. This map is a major component of the culture of each profession. A major challenge facing proponents of effective interprofessional teamwork is to provide opportunities for team members to understand each other's cognitive maps.

Values

Incorporating the profession's value system into the individual professional's world-view is a subtle process and unfolds largely unspoken (Roberts, 1989). Physicians in particular are trained to take charge, and assume a role of leadership in many settings. Physicians are trained to assume responsibility for decisions. For them, learning to share leadership in an

interprofessional team setting is a challenge, as they may assume, or be expected by other team members, to take on the responsibility of the leadership role.

The culture of physician training has focused on action and outcome more than on relationships (Reese & Sontag, 2001). Traditionally, the physician-patient relationship tends to be authoritarian, whereas other professions, such as social work, have placed more value on patient self-determination. The emergence of bioethics has brought issues of patient autonomy to the foreground for physicians, and they now struggle to balance what they feel is best for a patient and the views of patients, families and other team members.

The main outcome valued by physicians is to save a patient's life, not a patient's quality of life. Traditionally, areas such as preventive health, care of mental illness, and care of chronically ill or dying patients have not held much attraction for physicians, as they do not have obvious life-saving outcomes, thus merit little attention (Roberts, 1989). Physicians also gain esteem for rare diagnoses, not for recognizing common, mundane problems, which pose little intellectual challenge. Thus care of chronic illness and every-day health concerns is not valued, as is cardiac or brain surgery. Chronic care, geriatrics, mental health and palliative care, however, are areas where patients' needs are so complex, interprofessional teams have become necessary to provide the full spectrum of care. If physicians do not value this type of work, or feel they are not valued for the work they are doing, they will not be enthusiastic members of a team.

Other professions will have different value systems similarly instilled during the training process. Clergy may have difficulty sharing information with a team, due to the tradition of confidentiality in the confessional. Nurses and social workers, for example, may value the patients' story and will not rely on objective data as heavily as do physicians (Roberts, 1989). Physicians will not easily listen to a patient's story from a nurse or social worker, but will expect hard data quickly to solve a patient's problem. Each of these professional values can create communication barriers between the professions.

Since values are internalized and largely unspoken, they can create important obstacles that may actually be invisible to different team members struggling with a problem. For a solution to be reached, the professional values must be made apparent to all professionals involved.

Educational systems

There has been an explosion of knowledge and information in health care in the past decades. Patient care has become complex, resulting in increased specialization in all the health care professions, and in-depth exploration of issues by each specific profession (Lary et al., 1997). However, this means that no one health care provider can meet all the complex needs of a patient and his/her family (Mariano, 1999). With increasing specialization, learners have fewer opportunities to interact with other disciplines and professions (Hall & Weaver, 2001), immersing themselves more and more in the knowledge and culture of their own professional group. Even the geographic locations of the schools within the university limit possible interprofessional interactions.

In many ways, the university itself has become a "multiversity", with multiple areas of specialization and departments – multiple silos under one governance (Kerr, 1982). This contributes to the fragmentation of academic knowledge and loss of opportunities for interaction with disciplines outside of health care, such as the humanities, which could contribute greatly to the education of all health care professionals (Dauphinée & Martin, 2000). The university system itself therefore contributes to the development of the student's cognitive map and further mortars the walls of the professional silo.

Even during clinical coursework, students rarely interact collaboratively with health care students in professions other than their own (Giardino et al., 1994). In addition, the students' faculty role models rarely collaborate with other professionals (Giardino et al., 1994), offering few glimpses of effective interprofessional teamwork in action. The system limits development of positive relationships between the learners of different professions and restricts understanding of and respect for others' roles. This perpetuates non-collaborative practices. The educational milieu needs to acknowledge and value the differences between professions (Hinton Walker et al., 1998), and to forge links of trust and respect which underpin successful collaborative work (Liedtka & Whitten, 1998).

A recent study by Leipzig et al. (2002) surveyed students in medicine (2nd year post-graduate), nursing (Nurse Practitioners) and social work (Master's level). Most respondents felt that the interprofessional approach benefited patients and was a productive use of time. However, the second year medical residents were significantly less positively inclined toward the constructs of interprofessional collaboration. The most marked interprofessional difference between the physicians and the other two groups regarded the physician's role on the team. The majority of the medical residents (80%) believed the physician had the right to change the team's patient care plans without the consent of the team and had the final word on team decisions, whereas only 35 – 40% of the nurses and social work students agreed with this viewpoint. The study identifies a national concern about the lack of interprofessional training and illustrates long-standing professional separatist cultures.

Interprofessional teamwork: Collaborative practice

The milieu for collaborative practice must foster a status-equal basis between the various team members (Ben-Syra & Szyf, 1992; Taylor, 2002). The benefit of sharing knowledge and skills between the team members is realized in a positive, synergistic influence on patient care (Way et al., 2000). Teamwork also facilitates creative solutions to challenging problems (Drinka et al., 1996). The history of professional cultures, however, has traditionally fostered a hierarchical power structure, with the physician in control (Witz, 1992). The power and authority of this hierarchy is challenged by the interprofessional team process (Liedtka & Whitten, 1998). Even within a collaborative practice setting, members can disagree about who is expected, competent and has the authority to render assistance as well as who actually renders it (Ben-Syra & Szyf, 1992).

In collaborative practice, individual team members assume profession-specific roles, but as a team, they identify and analyze problems, define goals and assume joint responsibility for actions and interventions to accomplish the goals (Counsell et al., 1999). Goals that are developed must be compatible with the priorities and values of each team member (Liedtka & Whitten, 1998). To interact meaningfully with each other and with the patient and/or family, team members must be familiar with the expertise and functions of the others' roles (Falk, 1977). Given the lack of common education and interprofessional experience (Reese & Sontag, 2001), this poses a real challenge to practicing teams.

Interprofessional team members have areas of overlapping competencies and must share varying degrees responsibilities. This often leads to ''role blurring'' (Falk 1977; Mariano, 1999) due to confusion as to where one's practice boundaries begin and end. Role blurring can result in some team members feeling underutilized (having their role usurped), or in some members feeling they are doing everything (needing to usurp), a process Falk (1977) calls ''role expansion''. Risks for conflict and burn-out are high unless good leadership and conflict resolution skills can rapidly address the issues. These skills are not routinely taught

in professional schools (Hall & Weaver, 2001). Communication skills that are taught to students usually focus on interactions with patients and families from the perspective of his/her profession, not on communication across professions. Profession-specific world-views merely prepare individuals to work within their own profession, not to communicate with individuals from another profession. They begin their careers with interprofessional barriers of unfamiliar vocabulary, different approaches to problem-solving, and a lack of common understanding of issues and values.

In addition to the challenges noted above, interprofessional teams are confronted by the stress of shifting health care systems driven by economic factors (Clark et al., 2002) and turnover of team members for a myriad of reasons. Lack of resources and ongoing education of new team members can drain the team's energy. Under normal conditions, individuals interact in a way that increases their self-worth. During conflict and stress, the focus of interactions shifts to preserve the individual's dignity and self-esteem by withdrawal or avoidance (Drinka et al., 1996). Fatigue and stress can therefore cause team members to retreat into their individual professional silos, where there is safety, clear limits, recognition of professional value and license to work autonomously. If the majority of team members choose to become autonomous, the ability to work together can be seriously impaired (Drinka et al., 1996), depriving patients and families of consistent, integrated care (Mystakidou & Tsilika, 2000).

The following collaborative skills are essential for effective teamwork (Norsen et al., 1995):

(1) Cooperation: Acknowledging and respecting other opinions and viewpoints while maintaining the willingness to examine and change personal beliefs and perspectives.
(2) Assertiveness: Supporting one's own viewpoint with confidence.
(3) Responsibility: Accepting and sharing responsibilities, and participating in group decision-making and planning.
(4) Communication: Effective sharing of important information and exchanging of ideas and discussion.
(5) Autonomy: Ability to work independently.
(6) Coordination: Efficient organization of group tasks and assignments.

These skills are tools each professional can use to begin to explore and understand his/her fellow team members' cognitive maps. In addition, specific leadership skills are required to manage an interprofessional team. These skills include the ability to recognize the challenges inherent not only in group dynamics, but in trying to blend the different professional cultures represented in the team (Weber & Karman, 1991). Individual personalities and characteristics also contribute to the team dynamics, often blurring the issues of professional conflict with personal ones.

To develop collaborative skills that can bring down the walls of the professional silos, health professional students need opportunities to spend time together, to learn and to work together in meaningful ways. Experiential learning is particularly important in *interprofessional* education (Clark, 2002). To introduce these opportunities to professional curricula, faculty members need skill, time and support. More often than not, universities have been remiss in valuing and helping faculty to develop the experience needed to move interprofessional education forward. Innovations that do occur are usually led by a few enthusiastic and energetic champions who struggle to overcome institutional barriers while continuing with their regular academic duties.

Opportunities

The importance of interprofessional teamwork is becoming increasingly recognized. Health care administrators are enthusiastic, as they perceive this approach leads to higher quality care for patients at lower costs (Sorrells-Jones, 1998), and this enthusiasm is seeping into academic circles. For practicing professionals, *interprofessional* teamwork may result in improved job satisfaction (Liedtka & Whitten, 1998). Teamwork is also seen as a method to better address the social accountability of the professions (Health Canada, 2001). The links to improved patient outcomes and to patients' perspectives remain unestablished (Leidtka & Whitten, 1998; Naiglie et al., 2002; Zwarenstein et al., 1998; Zwarenstein & Reeves, 2000).

Petrie (1976) has suggested that a clear and recognizable idea or goal must serve as the focus for team members in order for teamwork to succeed. He calls this ''idea dominance'', and it allows each member to shift from his/her specific professional focus to one requiring understanding of another's observations and interpretations. It requires the professional to interpret information in the light of his/her own learning and then share this with the other team members using appropriate collaborative skills. This interchange facilitates the development of a common language between team members (Cowley et al., 2002) and a common conceptual framework (Sands et al., 1990) based on common values which will transcend those of each specific profession. Each member will then have realistic expectations of the team's work. Each member can feel he/she is contributing to the success and achievement of the goals, and can perceive a sense of personal accomplishment. Interprofessional learning models are being tested and have shown that they do, in fact, foster positive attitudes between professions (Katz et al., 2001; McCallin, 2001). All of this depends on providing interventions early in the professional's education which serve to build bridges between the neophytes before the walls of their silos become so thick and high that reaching across the professions becomes too difficult.

Conclusion

This paper offers an insight into educational, systemic and personal barriers impeding interprofessional practice. Some hypotheses are proposed that may help guide the development of educational methodologies to advance the concept and practice of interprofessional teamwork. Although the barriers traditionally built between the professions are high, they certainly are not insurmountable.

References

Ben-Syra, Z., & Szyf, M. (1992). Status inequality in the social worker-nurse collaboration in hospitals. *Social Science and Medicine*, *14*, 365–374.

Clark, P. G., Leinhaas, M. M., & Filinson, R. (2002). Developing and evaluating an Interdisciplinary Clinical Team Training Program: Lessons taught and lessons learned. *Educational Gerontology*, *28*, 491–510.

Clark, P. G. (2002). Evaluating an Interdisciplinary Team Training Institute in Geriatrics: Implications for teaching teamwork theory and practice. *Educational Gerontology*, *28*, 511–528.

Cooper, H., Carlisle, C., Gibbs, T., & Watkins C. (2001). Developing an evidence base for interdisciplinary learning: A systematic review. *Journal of Advanced Nursing*, *35*, 228–237.

Counsell, S. R., Kennedy, R. D., Szwabo, P., Wadsworth, N. S., & Wohlgemuth, C. (1999). Curriculum recommendations for resident training in Geriatrics Interdisciplinary Team Care. *Journal of the American Geriatrics Association*, *47*, 1145–1148.

Cowley, S., Bliss, J., Mathew, A., & McVey, G. (2002). Effective interagency and interprofessional working: Facilitators and barriers. *International Journal of Palliative Nursing*, *8*, 31–39.

Dauphinée, D., & Martin, B. M. (2000). Breaking down the walls: Thoughts on the scholarship of integration. *Academic Medicine, 75*, 881–886.

Drinka, T. J. K., Miller, T. F., & Goodman, B. M. (1996). Characterizing motivational styles of professionals who work on interdisciplinary healthcare teams. *Journal of Interprofessional Care, 10*, 51–61.

Fagin, C. M. (1992). Collaboration between nurses and physicians no longer a choice. *Academic Medicine, 67*, 295–303.

Falk, H. S. (1977). Interdisciplinary education and implications for social work practice. *Journal of Education for Social Work, 13*, 30–37.

Giardino, A. P., Giardino, E. R., & Siegler, E. L. (1994). Teaching collaboration to nursing and medical undergraduates. In E. L. Siegler, & F. N. Whitney (Eds), *Nurse-physician collaborative care of adults and the elderly* (pp. 127–157). New York: Springer Publications.

Gieryn, T. F. (1983). Boundary-work and the demarcation of science from non-science: Strains and interests in professional ideologies of scientists. *American Sociological Review, 48*, 781–795.

Hall, P., & Weaver, L. (2001). Interdisciplinary education and teamwork: A long and winding road. *Medical Education, 35*, 867–875.

Health Canada (2001). *Social accountability: A vision for Canadian medical schools*. Ottawa, Canada: Health Canada Publications.

Henley, E., Glasser, M., & May, J. (2000). Medical student evaluation of family nurse practitioners as teachers. *Family Medicine, 32*, 491–494.

Hinton Walker, P., Baldwin, D, Fitzpatrick, J. J., Ryan, S., Bulger, R., DeBasio, N., Hanson, C., et al. (1998). Building community: Developing skills for interprofessional health. *Nursing Outlook*, March/April, 88–89.

Illich, I. (1970). *A celebration of awareness: A call for institutional revolution*. New York: Doubleday.

Katz, J., Titiloye, V. M., & Balogun, J. A. (2001). Physical and occupational therapy undergraduates' stereotypes of one another. *Perceptual and Motor Skills, 92*, 843–851.

Kerr, C. (1982). The idea of a multiversity. In: *The uses of the university*, 3rd ed. Cambridge, MA: Harvard University Press.

Kulys, R., & Davis, M. A. (1987). Nurses and social workers: Rivals in the provision of social services? *Health and Social Work*, Spring, 101–112.

Lary, M. J., Lavigne, S. E., Muma, R. D., Jones, S. E., & Hoeft, H. J. (1997). Breaking down barriers: Multidisciplinary educational model. *Journal of Allied Health, 26*, 63–69.

Leipzig, R. M, Hyer, K., Kirsten, E., Wallenstein, S., Vezina, M. L., Fairchild, S., Cassel, C. K., & Howe, J. L. (2002). Attitudes toward working on interdisciplinary teams: A comparison by discipline. *Journal of the American Society, 50*, 1141–1148.

Liedtka, J. M., & Whitten, E. (1998). Enhancing care delivery through cross-disciplinary collaboration: A case study. *Journal of Health Care Management, 43*, 185–203.

Loseke, D. R., & Cahill, S. E. (1986). Actors in search of a character: Student social workers' quest for professional identity. *Symbolic Interactions, 9*, 245–268.

Mariano, C. (1999). The case for interdisciplinary collaboration. *Nurse Outlook, 37*, 285–288.

McCallin, A. (2001). Interdisciplinary practice – a matter of teamwork: An integrated literature review. *Journal of Clinical Nursing, 10*, 419–428.

Mystakidou, K., & Tsilika, E. (2000). Team dynamics and the difficult patient. *European Journal of Palliative Care, 7*, 56–59.

Naiglie, G., Tansey, C., Kirkland, J. L., Ogilvie-Harris, D. J., Detsky, A. S., Etchells, E., et al. (2002). Interdisciplinary inpatient care for elderly people with hip fracture: A randomized controlled trial. *Canadian Medical Association Journal, 167*, 25–32.

Norsen, L., Opladen, J., & Quinn, J. (1995). Practice model: Collaborative practice. *Critical Care Nursing Clinics North America, 7*, 43–52.

Parkes, C. M., Laungani, P., & Young, B. (1997). Culture and religion. In C. M. Parkes, P. Laungani, & B.Young (Eds), *Death and bereavement across cultures* (pp. 10–23). London: Routledge.

Petrie, H. G. (1976). Do you see what I see? *Journal of Aesthetic Education, 10*, 29–43.

Ponte, P. R., Conlin, G., Conway, J. B., Grant, S., Medeiros, C., Nies, J., Schulman, L. et al. (2003). Making patient-centred care come alive. *Journal of Nursing Administration, 33*, 82–90.

Reese, D. J., & Sontag, M. A. (2001). Successful interprofessional collaboration on the hospice team. *Health and Social Work, 26*, 169–175.

Roberts, C. S. (1989). Conflicting professional values in social work and medicine. *Health and Social Work*, August, 211–218.

Sands, R. G, Stafford, J., & McClelland, M. (1990). 'I beg to differ': Conflict in the interdisciplinary team. *Social Work in Health Care, 14*, 55–72.

Schroeder, R. E., Morrison, E. E., Cavanaugh, C., West, M. P., & Fache, J. M. (1999). Improving communication among health professionals through education: A pilot study. *The Journal of Health Administration Education*, *17*, 175 – 198.

Sorrells-Jones, J. (1998). Practitioner response. *Journal of Health Care Management*, *43*, 203 – 204.

Stuart, M. E. (1993). Nursing the endangered profession? *The Canadian Nurse*, *89*, 19 – 22.

Taylor, J. W. (2002). Collaborative Practice: Shared responsibilities and outcomes. Excerpt from a Margaret J. Stafford Educational Research Lecture January 2002 at the Edward Hines Veterans Administration Hospital.

Way, D., Jones, L., & Busing, N. (2000). *Implementation strategies: Collaboration in primary care – family doctors and nurse practitioners delivering shared care*. Toronto, Canada: Ontario College of Family Physicians.

Weber, M. D., & Karman, T. A. (1991). Student group approach to teaching using Tuckman Model of Group Development. *American Journal of Physiology*, *261*, S12 – 16.

Williams, C. B. (1992). Everybody wants to play doctor. *Medical Economics*, Jan, 37 – 42.

Witz, A. (1992). *Professions and patriarchy*. London: Routledge.

Zwarenstein, M., Bryant, W., Bailie, R., & Sibthorpe, B. (1998). Interventions to promote collaboration between nurses and doctors (Cochrane Review). In the *Cochrane Library*; Issue 4. Oxford: Update Software.

Zwarenstein, M., & Reeves, S. (2000). What's so great about collaboration? We need more evidence and less rhetoric? *British Medical Journal*, *320*(7241), 1022 – 1023.