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A Critique of Evidence-Based Practice in Nursing: Challenging the Assumptions

SARAH WALL[1,2]

[1]Department of Sociology, University of Alberta, 5-21, Tory Building, Edmonton, Alberta, Canada T6G 2H4. E-mail: swall@ualberta.ca
[2]International Institute for Qualitative Methodology, University of Alberta, 6-10, University Extension Centre, 8303 - 112 Street, Edmonton, Alberta, Canada T6G 2T4

The evidence-based practice movement has been underway in the health care sector for over two decades and is becoming an increasingly prominent approach to practice. Evidence-based practice, which generally refers to the direct application of scientific (understood as quantitative/experimental) research findings to professional practice, has arisen in nursing in response to an increasing focus on research utilization in the medical profession. There are, however, a number of powerful assumptions behind evidence-based practice in nursing that support the persistence of liberal humanist conceptions of subjectivity, marginalize nurses' ways of knowing, and perpetuate a belief in the superiority of experimental science. Feminist/post-structuralist theory offers a perspective from which to challenge these assumptions and question the appropriateness of evidence-based practice in the goals of nursing. This critique can form the foundation for nurses' resistance to dominant discourses in health care delivery.
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INTRODUCTION

Evidence-based practice, a movement toward an increased assimilation of newly generated research evidence into direct patient care delivery, has been underway in the health care sector for over two decades. Beginning with the medical profession (physicians), it has now taken hold in the discourse of other health professions and has become a prominent mode of thought in many nursing circles. The implementation of evidence-based practice in nursing is not, however, without its resisters and critics. By considering the historical context of nursing practice, including evidence-based nursing

practice, and examining the content of key publications on this topic, it is possible to uncover the assumptions that form the basis for the push toward an increased use of research in practice. When taken-for-granted, these assumptions support the continuing dominance of the evidence-based practice discourse. Feminist/post-structuralist theory offers a perspective from which to challenge these assumptions and question the appropriateness of evidence-based practice in the goals of nursing.

THE RISE OF EVIDENCE-BASED NURSING PRACTICE

For those who follow the historical development of nursing as a profession, it will not come as a surprise to know that the evidence-based nursing practice movement has arisen out of an increasing focus on research utilization in the medical profession. Foucault (1980) suggests that, in understanding how power, knowledge, and subjects are viewed, it is useful to develop a genealogy, which is a tracing of a historical context, a return to the past to understand the present. In its early history, nursing enjoyed a distinctive role and autonomy and independence from medicine. Although the professional distinction between nursing and medicine allowed nurses to contribute to health care in a unique way, this distinction was criticized because it perpetuated traditional perspectives on the role of women. In an effort to distance nursing from 'women's work', nursing leaders in the early part of the 20th century sought to formalize nursing education (Boutilier, 1994). Ironically, however, with the advent of hospital-based training programmes for nursing, nursing education came under the control of physicians. Nurses were taught 'complete subordination… absolute loyalty and unquestioning obedience to physicians' (Coburn, 1988, pp. 443–444). Today, nurses have been able to regain limited recognition for their professional distinctiveness. Strategies to accomplish this have taken two paths: legitimation by affiliation with medical modes of thought (eg moving into hospitals to practice) or re-establishment of the separateness of nursing (eg establishing nurse-run educational facilities and studying the philosophical basis for nursing). Nevertheless, nursing knowledge and purposes continue to be marginalized *vis-à-vis* medicine.

This is the historical context out of which the contemporary evidence-based practice movement emerges. The introduction and implementation of evidence-based practice in health care is credited to the Evidence-Based *Medicine* Working Group (Estabrooks, 1998), which called for greater reliance on rigourous scientific evidence to support physician decision-making and, in turn, a reduced dependence on intuitive and experiential practice knowledge.

Nursing, initially unable or unwilling to question the assumptions behind the evidence-based practice movement, took up the ideology for itself. Most likely, it would have been difficult for nursing to refuse to adopt evidence-based practice and, at the same time, maintain professional credibility. In nursing, evidence-based practice is often taken to be synonymous with research utilization, a conception that is reflected throughout the nursing literature (Estabrooks, 1998). Evidence-based practice, then, involves the gathering and use of *valid, relevant and scientific* research findings to support quality nursing care (Estabrooks, 1998). A broader understanding of how knowledge is used in 'good nursing practice' is not acknowledged. In fact, a well-known author on evidence-based nursing practice (Kitson, 1997) seems to suggest that nursing should enter into the evidence-based movement with a full understanding of the established rules of the evidence-based practice game, which favour medical diagnosis, clinical interventions, experimental research, and meta-analysis, in order to avoid being excluded from the movement by contributing poor research that is lacking in power and rigour. Further to this, Estabrooks (1998) notes that the term 'research use' is generally assumed to mean instrumental use – direct application of research findings into daily practice – made possible by the development of concrete products and tools such as 'procedures, clinical protocols, practice guidelines, [and] standard care plans' (p. 20). All in all, a very rational, traditional, bio-medical approach to research use/evidence-based practice has been adopted in nursing.

THE INDIVIDUAL AS RESEARCH USER

Strategies to promote research utilization among nurses have historically focused on individual provider behaviour in the adoption of new knowledge (Estabrooks *et al.*, 2003). Characteristics of individual nurses that influence the extent of research utilization in nursing care delivery have been explored by a number of researchers. Funk *et al.* (1991) created the well-known 'Barriers' to research utilization scale, which includes items related to the characteristics of the potential individual adopter such as: a lack of value of research for practice, unwillingness to change, undocumented need for change, isolation from knowledgeable colleagues, and lack of skills to use research (Funk *et al.*, 1991).

Further research, involving modelling of the individual determinants of research use, was conducted by Estabrooks (1999). In her literature review, she found that the main individual variables influencing research use were attitude toward research, autonomy, awareness of agency policy, educational

level, involvement in nursing research activities, and time spent reading professional journals. However, her model revealed only three key determinants of research use. These were belief suspension (willingness to use research that contradicts previous knowledge), attitude toward research, and frequency of attendance at 'inservice' educational sessions.

Estabrooks *et al*. (2003) found, in a recent systematic review, that the majority of the extant literature on research utilization focused on the individual determinants of research use. Six factors influencing research use by individual practitioners were extracted in the review, including beliefs and attitudes, involvement in research activities, information seeking, education, professional characteristics, and socioeconomic factors.

Research focusing on the individual as the adopting unit is discussed by Lemieux-Charles and Barnsley (2004) in their review of innovation diffusion in health care. In their discussion, individual adoption is heavily influenced by interpersonal connectedness and the extent to which information flows through individuals. While the tendency for an individual to use research in practice depends in part on socioeconomic status and personality variables, early adopters are usually more socially integrated than later adopters. '*Laggards*, [on the other hand]…tend to be individuals who are the most local and isolated in a social system' (p. 125, emphasis added).

These analyses of the role of the individual in research utilization have findings in common with each other. Personal and professional characteristics and socioeconomic factors are mentioned by Estabrooks *et al*. (2003) and Lemieux-Charles and Barnsley (2004). Attitude toward research (related to the Funk *et al*. (1991) item 'unwillingness to change') is a key factor presented by Estabrooks (1999) and Estabrooks *et al*. (2003). Educational variables such as level of education, in-services attended, and skills to evaluate research also have an influence on an individual's use of research in practice (Funk *et al*., 1991; Estabrooks, 1999; Estabrooks *et al*., 2003). Social integration or isolation is discussed by both Funk *et al*. (1991) and Lemieux-Charles and Barnsley (2004). What seems striking, however, about the lists of individual variables said to influence research use among nurses is the clearly contextual or structural nature of many of them. Where it becomes problematic to distinguish individual from contextual attributes is in the consideration of factors such as autonomy, social integration, the quality and nature of nursing education, time, awareness of agency policy and the documented need for change, and involvement in nursing research. These variables are highly related to the context in which nurses practice and, more broadly, the discourses to which a nurse has been exposed, both within the health care sector and society in general.

UNCOVERING THE ASSUMPTIONS BEHIND EVIDENCE-BASED PRACTICE

Despite the emergence of questions regarding individual nurses' capacities to adopt new research findings, the focus on the characteristics of individual nursing subjects remains strong and prevalent. Personal characteristics are inextricably intertwined with structural characteristics. Nurses who 'fail' to incorporate scientific research findings into their practices are labelled as 'laggards' and held accountable for factors beyond their control.

As well, a focus on 'barriers' to research utilization implies that there are obstacles in the way of a destination *to which nurses actually wish to travel*. While nurses do wish to practice in a professional, knowledgeable manner, it cannot be assumed that they wish to completely and exclusively embrace science-based practice. Women's ways of knowing and nurses' ways of knowing open up a range of possible sources of knowledge for practice that are not readily incorporated into the discourse of 'evidence-based' practice.

Related to this is the general societal assumption, reflected in health care discourse, that scientific knowing is superior to other knowledge forms. Knowledge, and how it is legitimated and used, is closely associated with the use of power. In health care, science has become a weapon of economic rationalization and traditional professional power, which, as might be expected, is not intended to serve the interests of a female-dominated occupation such as nursing.

Critiques of evidence-based practice, although they exist in the health care literature, are superficial and practically based. Estabrooks (1998) acknowledges that nursing has 'not yet developed a serious critique' (p. 18) of evidence-based nursing practice but goes on to suggest that sweeping condemnations based on nursing epistemology are not useful and that what is needed, instead, is a 'rational critique of the use of research in practice' (p. 18). It seems ironic that *rationality* would be favoured in critiques of a *rationalizing discourse* such as evidence-based practice. Clearly, most concerns about evidence-based practice are inadequately explored as they relate to more theoretical issues of subjectivity, power, knowledge, and politics. Although many who discuss evidence-based nursing practice would likely not utilize constructs from sociological theory to analyse their assumptions regarding nurses' uptake of research, this topic lends itself well to challenge by feminist/post-structuralist theories. On another topic, that of violence against women, Rosenberg (2005) observes that, despite a tremendous amount of research, support programming, and political activity, 'deep changes are barely apparent' (p. 48). To her, this 'must mean that there are hard(er) questions that haven't been faced and that demand our

attention' (p. 48). The applicability of this statement to issues in evidence-based practice in nursing is apparent. There is a need to analyze and critique more deeply the assumptions behind evidence-based practice in an effort to expose the dangers and correct the direction in which nursing is headed.

The nurse as a subject

Western philosophy and social organization presuppose an essence at the core of a subject that is fixed and coherent, making her what she is (Weedon, 1997). In this humanist (or individualistic) model of the person, having agency is equated with being human. Individuals who are able to stand out from the collective are held up as models of great agentic behaviour, although all liberal humanist actors are obliged to speak for themselves, accept responsibility for their actions, act rationally and unemotionally, and maintain a personal commitment to the moral positions implied in their choices (Davies, 2000).

The emphasis on the individual characteristics of nurses and their subsequent *success* in incorporating research into their practices fits neatly into the humanist conception of the subject. 'Personal' characteristics of individuals, such as educational level and socioeconomic status, are viewed as static, defining demographic facts rather than as socially and discursively produced categories (Denny, 1999). As well, holding nurses accountable for evidence-based practice based on their skills in conducting, acquiring and/or reading research, their attitudes toward research, and their willingness to change or suspend previously held knowledge (ie now 'proven' to be false) implies that they are independent actors, making decisions on the basis of complete and perfect information that is rationally processed.

Post-structuralist theory has developed in large part to challenge humanist theories of the subject (Weedon, 1997; Davies, 2000). Subjectivity and agency are no longer any of the things that are assumed to be in humanist thought. Post-structuralist subjects have no fundamental essence. Rather they are spoken into existence within the terms of prevailing discourses (Davies, 2000). A subject is 'produced historically and change[s] with shifts in the wide range of discursive fields [that] constitute them' (Weedon, 1997, p. 32). Complexity, contradiction, constraint, and constant change (discontinuity) characterize the post-structuralist subject (Weedon, 1997; Davies, 2000).

A post-structuralist perspective allows for a rethinking of the influence of nurses' individual attributes in evidence-based practice discourse. From this theoretical perspective, an individual's nature, rather than being innate, is *socially acquired*. Nurses' attitudes toward research and evidence-based practice, and their willingness to change and suspend prior belief, emerge as

an effect of the discourses that have prevailed on them prior to encountering the research/evidence-based practice discourse. 'The mobilization of a dominant discourse [such as that of research-based practice]…can undercut the subject's capacity to maintain the discourse within which s/he has previously been taken up' (Davies, 2000, p. 62). 'Having grown up within a particular system of meanings and values, which may well be contradictory, we may find ourselves resisting alternatives' (Weedon, 1997, p. 32).

The nature of nurses' resistant 'attitude' is linked to students' fear of theory as discussed by Simon (1992). Like Davies (2000) and Weedon (1997), Simon proposes that, since our subjectivities are constituted within multiple discursive practices, confrontation by a new discourse forces new ways of naming and claiming the world in relation to old, familiar ways. The reactions that result from this confrontation can include silence, anger, fear, resentment, and self-doubt. In other words, an encounter with a previously unknown discourse that demands a modification and/or displacement of existing knowledge (theory in Simon's case or research and evidence-based practice in nurses' case) can affect one's *attitude*. The appropriateness of a nurse's attitude is then judged as lacking by those situated within the dominant discourse (proponents of evidence-based practice), although these nurses simply have not been given access to (or time to assimilate) the new discourse (Davies, 2000).

Access to the prevailing discourse has, as has been noted earlier, been likened to playing a game (Kitson, 1997). Nurses are challenged to play the evidence-based practice game, by the established rules, but are then denied full participation in that very same game. Smith (1987 cited in Davies, 2000) uses the metaphor of a game to illustrate how certain subjects, such as women, are discursively constituted as non-agents. She explains that, in some games, there are more presences than players. The players toss the ball but the 'presences' merely support, facilitate, and encourage the action of the game without becoming part of it. This metaphor is easily extended to illuminate the situation of nurses in the evidence-based practice movement. While they are blamed for their personal unwillingness to embrace evidence-based practice, they are simultaneously excluded from the game. The lack of time that nurses devote to research acquisition, the limited skills they have for doing so, their lack of awareness of existing policy and specific needs for change, the minimal involvement they have in actual research projects, and the inadequacy of their attendance at informal educational sessions are the results of exclusionary organizational behaviour that positions nurses on the sidelines of the game. Chambliss, a sociologist who studied nurses over a 10-year period, observed the positioning of nurses (as women) relative to the game.

> Women's place is outside the ongoing action. To nurse the old, the sick, and the disabled is taking care of those who are temporarily or permanently retired; raising children is an involvement with those who are not yet in the main action…Women's other role, the biological production of the next generation, is deemed essential, but it also positions them outside of the action of their own generation. This is [what nurses/women] refer to when they say that feel they have lost touch with the 'real world' (Chambliss, 1996, p. 86).

Clearly, nurses' subject positions, or ways of being, are located at the margins of many dominant discourses, including the evidence-based discourse. However, nurses have offered some resistance to this (however unconscious) through the display of an 'irrational' element of subjectivity – *attitude* – that rejects the normative judgement from within the dominant discourse (Davies, 2000).

Feminine/nurses' ways of knowing

Somehow, nursing subjects are positioned just far enough inside the boundaries of the evidence-based practice discourse that makes it appear that they have made a choice to participate. They have been subjectively constituted to *want* to pursue evidence/research-based practice and are not always fully aware that there are any other lines of action available to them (Davies, 2000). Many nurses, however, whether consciously or not, are distressed by the imposition of evidence-based practice. This discomfort is linked, in part, to the feeling or awareness that evidence-based practice is incongruent with nurses' and women's ways of knowing about their world and their work.

The fact that nursing is primarily a women's occupation (even in 2002, nurses were still 95% women; CIHI, 2003) has had an enormous impact on the development of the profession and its body of knowledge. 'The female character of nursing in a patriarchal culture has been the dominant issue in the social history of nursing' (Turner, 1995, p. 145). The issues inherent in the femaleness of nursing suggest that a link between nursing and feminism would be useful. 'For feminist theory, nursing is *par excellence* an example of the subordination of women to patriarchy' (Turner, 1995, p. 146).

Women have cultivated, and learned to value, various powerful ways of knowing. Sadly, however, these ways of knowing have been 'neglected and denigrated by the dominant intellectual ethos of our time' (Belenky *et al.*, 1986). Evidence-based practice, as it is typically presented, is a concrete representation of the dominant intellectual discourse, which favours science, rationality, and objectivity. Evidence-based practice, embodied in the form of

protocols and standard care plans, is relevant primarily to the technical duties that are part of nursing care, which are typically carried out under the direction of physicians, and which are only a small part of the work that nurses consider to be *nursing* (Mitchell, 1997).

Nursing has been defined as 'caring in the human health experience' (Newman *et al.*, 2004, p. 317). Biomedical, intervention-based, technical research evidence does not serve nurses well in their goal of caring and does not provide any foundational knowledge or direction on how nurses can understand and support 'persons living with loss, despair, struggle, concern, fear, uncertainty, anticipation, restriction, or suffering. The realities of practice involve nursing encounters with complex human beings who are living out experiences that cannot simply be changed according to findings from research' (Mitchell, 1997, p. 154). How, then, can and do nurses know what they need to know to care in the human health experience?

In an original, influential, and oft-cited work, *Fundamental Patterns of Knowing in Nursing*, Barbara Carper (1978) gave 'attention to the question of what it means to know and what kinds of knowledge are held to be of most value in the discipline of nursing' (p. 13). She identified four ways of knowing in nursing, including empirics, esthetics, personal knowing, and ethics (p. 14), revealing that 'knowledge – genuine knowledge, understanding – is considerably wider than [the emphasis placed on empirical knowledge in] our discourse' (p. 16). Empirical knowing involves systematic, organized, and generalizable knowledge about the observable world. Ironically, while it is emphasized as critical in the development of nursing knowledge, empirical approaches to knowledge have not matured in nursing (p. 14). Esthetic knowing emphasizes the artful aspect of nursing practice. It involves an imitative form of learning and the 'acquisition of knowledge by accumulation of unrationalized experiences' (p. 16). It is creative, expressive, particular, and subjective and, unlike scientific constructs, does not lend itself to a description based on common properties (p. 16). Personal knowing 'is perhaps the most essential to understanding the meaning of health in terms of individual well-being' (p. 18). Because nursing is an interpersonal process involving interaction in the nurse–patient relationship, personal knowing allows the nurse to stand in relation to another and encounter the individual as a person, as a 'self' (p. 18–9). In this mode of knowing, tolerance for ambiguity, difference, and vagueness is possible (p. 19). Even more elusive than esthetics, personal knowing 'cannot be described or even experienced – it can only be actualized' (p. 18). Finally, ethical knowing encompasses the moral aspects of knowledge – what is good, what is right, what ought to be done (p. 20). Value judgements are not amenable to scientific validation

(p. 20) nor are all scientific findings useful in practice when ethical standards are applied (Mitchell, 1997).

Speaking more generally about women, Belenky *et al.* (1986) outline the ways in which women come to know, including received knowing, subjective knowing, procedural knowing, and constructed knowing. While the typology differs significantly from that of Carper (1978), linkages can be made between the findings of Belenky *et al.* (1986) and other authors who discuss nurses' knowing and knowledge. Received knowledge is gained by listening. This way of knowing features deference to external authority. Estabrooks *et al.* (2005) found that nurses rely very heavily on knowledge received in social interactions, especially in informal consultations with peers and physicians, and in more structured lecture-type learning activities. The receiving of knowledge by way of 'listening' to scientific findings (generated by experts) was found by Estabrooks *et al.* (2005) to be a very insignificant source of knowledge for nurses. This corroborates what Carper noted about the immaturity of empirical knowing in nursing. Belenky *et al.*'s (1986) subjective knowing relates to Carper's (1978) esthetic knowing, in which internalized knowledge comes to be trusted by the knower. Confidence grows through the accumulation of experiences. Estabrooks *et al.* (2005) found that nurses do depend on internal experiential and intuitive knowledge in the making of decisions in practice. Belenky *et al.* (1986) note that subjectivist women 'distrust logic, analysis, [and] abstraction…see[ing] these methods as alien territory belonging to men' (p. 71). Conversely, the procedural mode of knowing brings with it a critique of trust in one's own subjective knowledge and a return to the desire for criteria with which to validate one's knowledge. As with Simon's (1992) students who are learning about theory, being situated in this way of knowing is painful and confusing. This way of knowing seems to characterize the discipline of nursing as it is situated in the evidence-based practice discourse. Belenky *et al.* (1986) found that women in this mode were absorbed in the business of acquiring and applying procedures for obtaining and communicating knowledge. Estabrooks *et al.* (2005) found that nurses depend, to some extent, on policy and procedure guidelines, a genre of document that evidence-based practice seeks to expand. Dangerously, however, some women in Belenky *et al.*'s study treated their use of procedural knowing as a *game*, learning to play by the rules, formulating their questions to appeal to those in power, and speaking the dominant language. Daly (1973 cited in Belenky *et al.*, 1986) emphasizes that women who play this game participate in their own marginalization and make it impossible for them to acquire the knowledge they need. Constructed knowing is characterized by the integration of objective and subjective knowing, by the coexistence of rational and emotional thought (Belenky

et al., 1986). Much like Carper's (1978) esthetic, personal, and ethical ways of knowing, constructed knowing allows for passionate action, tolerance of ambiguity, the development of a relationship with another person in spite of differences, and ethical decision-making that accounts for the complexity of any given situation (Belenky *et al.*, 1986).

Many feminist authors have criticized male-oriented knowledge generation across the disciplines, claiming that a belief in objective, value-neutral, impersonal science is inherently biased against women (Rossides, 1998). This same criticism could be fairly applied to health care. Despite considerable richness in the sources of knowledge and ways of knowing on which women and nurses rely, the knowledge and purposes of importance to nursing are marginalized and rendered invisible by evidence-based practice discourse. Instead, what is favoured is knowledge that supports the completion of technical (support) tasks by nurses, which in turn supports the work and accomplishes the goals of more powerful actors in health care.

Evidence, knowledge, and power

The idea of evidence-based practice brings with it a sense of obviousness, which makes it difficult to argue against (Denny, 1999). Althusser (cited in Davies, 2000) describes *obviousness* as the taken-for-granted quality of a discourse that prompts subjects to recognize something as right and true. However, that which is obvious, and assumed to be true, is by no means innocent (Flax, 1992). 'Discourses represent political interests and in consequence are constantly vying for status and power' (Weedon, 1997, p. 40). Specifically, 'empirical research is related to the structure of social power' (Rossides, 1998, p. 20).

Through the analysis of discourses and discursive fields, feminist post-structuralism is able to explain the workings of power on behalf of specific interests that are in opposition to the means and ends of women (Weedon, 1997). 'A discourse is a set of sanctioned statements [that] have some institutionali[z]ed force, which means that they have a profound influence on the way that individuals act and think' (Mills, 1997, p. 62). Within the obviousness of evidence-based discourse, language is at work to create the ideology that supports its uptake. Single words can carry great weight in the evidence-based discourse, as illustrated by discussion that is occurring regarding the meaning of the word 'evidence'. Scott-Findlay and Pollock (2004) argue that 'evidence' should be taken to mean 'research' and note that attempts have been made to classify other sources of knowledge for clinical decision-making (experience, for example) as 'evidence' in order to increase their value. The broader use of the term 'evidence' is motivated by a desire to legitimate 'lesser', more suspect forms of knowledge against objective,

rational, proven knowledge that results from experimental research. Estabrooks (1999), perhaps inadvertently, illustrates the bias against nurses' existing knowledge (ie knowledge not yet modified by an encounter with new research evidence) by measuring nurses' ability to 'suspend belief' (set aside previously held knowledge in favour of new research findings). To label the extant knowledge of nurses as 'beliefs' is to imply that it is dubious, unfounded, and illogical and that it *should* be replaced by factual evidence.

Other words used to describe alternative sources of practice knowledge also reveal a bias against non-research forms of knowledge. For example, it has been said that 'arguing against the use of evidence in clinical decision making would appear to amount to an advocacy of witch[craft] and faith healing' (Norman, 1999, p. 139). These words conjure up stereotypical images of dark, primitive, tribal medicine, and snake oil healers, making research/evidence-based practice appear to be the only sane approach to clinical practice. Although nursing philosophers have described many sources of 'truth' including even spiritual or divinely given truth (Polifroni, 1999), history has shown that these sources of knowledge are not highly regarded and are, in fact, used against women as derogatory labels, as in the case of the women of Greenham, UK, who for their efforts in protesting nuclear weapons, were said to be practicing witchcraft (Weedon, 1997).

There is a concerted effort underway to marginalize non-research forms of knowledge and coerce participation in the evidence-based practice movement. However, the exercise of power and control by dominant players within health care is accomplished in ways that are much more systematic than the strategic use of vocabulary and for purposes beyond that of assisting practitioners to deliver high-quality care.

Foucault (1994) outlines a series of foundational points for the analysis of power relations, including: a system of differentiation, types of objectives, instrumental modes, degree of rationalization, and forms of institutionalization.

There is an elaborate system of differentiation at work within the discourse of evidence-based practice. Research evidence is classified according to a well-known hierarchy of evidence that ranks research designs according to the 'strength' of the findings they produce. Acceptable research designs in this hierarchy are quantitative in nature, with randomized-controlled trials holding the title of 'gold standard' (Sackett *et al.*, 1996). The use of population-based, experimental research designed to address biophysical problems in medicine has become the standard to which all health professionals must practice. A whole set of knowledge 'have been disqualified as inadequate to their task or insufficiently elaborated: naïve knowledges, located low down on the hierarchy, beneath the required level of

cognition or scientificity…such as that of…the nurse…parallel and marginal as they are to the knowledge of medicine' (Foucault, 1980, p. 82). Qualitative studies do not appear in the standard hierarchy of evidence despite their greater applicability to questions of caring in nursing (Estabrooks, 1998; Mitchell, 1997). The historical tension and differentiation between nursing knowledge and medical knowledge and the long-standing marginalization of nursing on the basis of knowledge and gender is perpetuated in the evidence-based discourse. Even the evaluation of strategies to improve evidence-based practice is accomplished from the scientific, quantitative paradigm (Estabrooks, 1998 cites many examples).

In further analyzing the power at work in the evidence-based practice discourse, it is useful to consider the 'types of objectives pursued by those who act upon the actions of others' (Foucault, 1994, p. 140). A philosophical approach to understanding the goals of science reveals that the choice of research questions, the funding of research, and the consequences (uses) of research are deeply structured by the interests and values of powerful groups, including the professions. What passes for objective research is a search for what elites want knowledge about (Rossides, 1998). 'The monopoly of medicine has led to a long history of blocking alternative ways of dealing with disease and disability… [including] proven ways of using emotional supports to facilitate recovery' (Rossides, 1998, p. 128). One goal of the evidence-based practice movement, then, is to perpetuate the dominance of medicine and medical knowledge in the health care hierarchy. However, contemporary health care has seen the rise of organizations as dominant actors. Increasingly, the most powerful 'person' in health care is not even a human being; rather it is an organization or an entire health care system (Chambliss, 1996). Evidence-based practice, with its emphasis on rationality, can be used to serve the organizational goals of efficiency, cost-effectiveness, and measured outcomes. Mills and Spencer (2003) raise an alarm about the risks inherent in evidence-based practice, arguing that administrators can co-opt evidence-based practice to promote efficiency through the rigid, research-based standardization of care. For nurses, the enemy is no longer only the discourse and goals of men/physicians, it is also the ever-expanding discourse and objectives of corporate capitalism (Rossides, 1998). Evidence-based practice has become part of the *episteme* of health care – the set of discursive structures within which the culture thinks and on which various knowledges are deemed to count or not (Mills, 1997).

Adherence to the principles of evidence-based practice is policed by employing various instrumental modes of the exercise of power. Power can be activated by implementing systems of surveillance, with or without archives (mechanisms that limit the form and content of what is said) (Foucault, 1994;

Mills, 1997). 'At this point of standardized scientific application, a form of surveillance becomes necessary' (Denny, 1999, p. 254) to ensure compliance with evidence-based standards. The patient record is the most salient example of a surveillance document, the form and content of which is highly specified, which includes sections that are more highly valued than others (physicians' progress notes *versus* nursing notes). The contents of the health care record, including standardized evidence-based care protocols, are extracted and reported in numerous ways to a variety of parties. 'Standards based on the concept of ''appropriate care'' supply parameters from which deviations can be easily identified, measured and eliminated' (Mills & Spencer, 2003, p. 235). Nurses are subjected to many other types of surveillance mechanisms, as well, including the reporting of errors and unusual incidences, bed utilization, and appropriateness of supply use. Data collection is highly rationalized, organized and efficient, making detailed and comprehensive surveillance possible.

Forms of institutionalization in health care include highly legitimated tradition with an ironically high level of responsiveness to trends (mimicry). Professions, such as medicine, are one form of institution that can exert powerful control within an organization by perpetuating highly legitimated conditions of control and delegation (Meyer & Rowan, 1977). As has been discussed previously, the traditional power of the physician in the health care system ensures that medical science will be the primary and most respected way of knowing in health care. Evidence-based medicine supports the science bias in health care delivery, fitting more easily with the biomedical approach to health and illness than the nursing/caring approach. When considering the evangelistic strength of the evidence-based practice movement (Denny, 1999), it is perhaps not a surprise that organizations are driven to incorporate the practices and procedures defined by this prevailing concept in order to increase their legitimacy and survival prospects (Meyer & Rowan, 1977). By promoting evidence-based practice, they can maintain harmonious relationships with traditionally powerful physicians *and* demonstrate their competitiveness by operating at the forefront of evidence-based innovation. The taken-for-grantedness [obviousness] of institutions minimizes the level of scrutiny to which institutions are subjected (Hall & Taylor, 1996), thereby ensuring the latitude they require to exercise power in their interests.

Knowledge and power cannot be separated. They work together 'to constitute a more or less systematic way of ordering the world with its own conditions of acceptability' (Butler, 2004, p. 215). The supremacy of scientific knowledge is maintained in the evidence-based discourse through systems of classification that elevate scientific research methods over other knowledges that are more appropriate to the purposes of nursing. Highly rationalized

surveillance mechanisms preserve both the traditional power of physicians and the emerging power of the health care organization, further marginalizing the knowledge and contribution of nurses in the delivery of care.

CRITIQUE AND CHANGE

The discourse of evidence-based practice rests on powerful assumptions about subjectivity, knowledge and knowing, and the taken-for-granted usefulness of scientific knowledge for practice. The political power behind the push for the use of scientific evidence in practice can be exposed, however, by an analysis of the workings of power in the maintenance of the evidence-based practice discourse. Yet, how is this analysis useful in an effort to transform social relations?

The work of Foucault, and post-structuralist theories in general, has met with hostility from some feminists; it appears to deny individual agency in its view of the subject. An acceptance of post-structuralist theories of the subject requires a certain tolerance for the inherent paradox; one's very formation as a subject is dependent on the power to which one submits (Butler, 1997). However, 'although the subject in post-structuralism is socially constructed in discursive practices, she none the less exists as a thinking, feeling subject and social agent, capable of resistance and innovations' (Weedon, 1997, p. 121). A post-structuralist understanding of the nurse's subject position can allow for another kind of agency – the 'subject can move within and between discourses, can see precisely how they subject her, [and] can use the terms of one discourse to counteract, modify, refuse, or go beyond the other' (Davies, 2000, p. 60).

A focus on the distinct responsibilities of individual women (eg nurses' responsibilities in the uptake of research evidence) can leave them feeling vulnerable and unconnected (Belenky *et al.*, 1986). However, through a post-structuralist analysis, those things that have been experienced as personal failings come to be understood as socially produced conflicts and contradictions shared by many others, giving rise to new hope for social change (Weedon, 1997).

Chambliss (1996) ponders the situation of women and nurses in a wonderful way; although they may feel out of touch with the real world, maybe theirs *is* the real world and it is the observers of it who have lost touch. 'For nursing as a profession, the great moral danger would be for nursing to lose its own center…If nurses want to be heard they will have to speak with their own authority, based on their own experience [and knowledge] and their own values' (Chambliss, 1996, p. 184). Social justice requires a

theoretical foundation (Gordon, 2004), although theory alone is insufficient for social and political transformation (Butler, 2004). The connection between knowledge and truth claims exists, regardless of whether it is acknowledged. Establishing truth claims, based on a perception of the innocence of feminist epistemology will not ultimately lead to the destruction of gender-based relations of power. 'Claims about domination are claims about injustice and…belong on the terrain of politics and in the realm of persuasive speech [and] action' (Flax, 1992, p. 459). Nurses must write themselves into the text by their own movement (Cixous, 1981 cited in Huntington & Gilmour, 2001). Starting with the questions raised by a feminist/post-structuralist analysis of evidence-based practice, nurses can begin to circulate their own discourse(s) and open up a discursive space from which to resist dominant ideologies (Weedon, 1997). Perhaps, this is a useful starting point toward the goal of feminist nursing as envisioned by Roberts and Group (cited in Rossides, 1998, p. 171), that nurses 'be given the authority to do their jobs, the respect and recognition for what they really [know and] do, [and] the freedom to do all they can do.'

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