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Examining the facilitation of best practice knowledge utilization in long-term care using Rogers' theory of innovation diffusion: a focus on the change agent

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EXAMINING THE FACILITATION OF BEST PRACTICE KNOWLEDGE UTILIZATION

IN LONG-TERM CARE USING ROGERS' THEORY OF INNOVATION DIFFUSION:

A FOCUS ON THE CHANGE AGENT

by

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Abstract

Using facilitators to assist nurses' utilization of best-practice knowledge (BPKU) in long-term

care settings is considered important in bridging the research-practice gap. However, the role has

only just begun to be explored and understood. A theory that provides some insight into this role

is Rogers' Theory of Innovation-Diffusion. This qualitative secondary analysis examined the

roles and strategies undertaken by 10 facilitators of BPKU, and compared them to change agent

roles and success factors as conceptualized by Rogers. The single emergent facilitator role

involves dissemination of best-practice knowledge (BPKD), and the 6 strategies include knowing

the market, engaging the nursing staff, modifying the message, building a relationship, using

influential nursing staff, and involving nurse leaders. The findings provide preliminary support

for using Rogers' theory as a framework for nursing professionals engaged in BPKD. Further

research is needed to illuminate the connection and distinction between BPKD and facilitation of

BPKU.

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Chapter One: Background

Nursing practice is changing from that which was based on traditions to that which is grounded in best practice knowledge (BPK). With the rapid increase in the older person population due to aging baby boomers, it is imperative that LTC practice settings caring for a certain percentage of this population use BPK to enhance the quality of care received by this population group. Although numerous research studies are available in nursing literature providing information on the care of older persons, practice based on these research findings is not consistently evident in health care settings, including LTC facilities (Bostrom, Wallin & Nordstrom, 2006). A research-practice gap – the gap between the time of discovery of new knowledge and its application to practice – continues to exist.

In an attempt to understand and bridge the research-practice gap, nursing research thus far has identified factors that are barriers to and facilitators of best practice knowledge utilization (BPKU) (Bostrom et al., 2006; Brazil, Royle, Montemuro, Blythe & Church, 2004; Janes, 2006). Moreover, facilitators, or individuals who support nursing staff in changing their practice, have been recognized as a key link between BPK and nursing practice (Harvey et al., 2002; Milner, Estabrooks & Humphrey, 2005; Thompson, 2007). Despite the recognition of this resource, the issue of a research-practice gap still persists in LTC settings. This may be due in part to the absence of theoretical insight into the uptake and utilization of BPK and a lack of understanding with respect to the role of BPKU facilitators. Thus, the present study aims to explore the role of facilitators in LTC settings, from the perspective of the change agent element as described in Rogers' (1995) theory of innovation diffusion (ID).

Older Adults in Long-term Care Facilities

In 2005, the percentage of older persons in Canada aged 65 years and older, was 13.7% (Statistics Canada, 2008), and this percentage is expected to almost double over the next 20 years (Statistics Canada, 2006). Also, recent data shows that 6.7% of this older person population resides in health care institutions (Statistics Canada, 2005). These individuals experience multiple and complex chronic illnesses and functional disabilities that require specialized and individualized care (Titler & Mentes, 1999). However, regardless of the complexity of care, LTC facilities have traditionally been thought of as a place where older persons come to die, and where only technical and routine care is provided (McBride, 2000). Therefore, in order to avoid being stereotyped as such, it is essential for these facilities to provide quality care based on BPK.

The Nature of Best Practice Knowledge Utilization

The knowledge of best practice, or best practice knowledge (BPK), is gained from multiple sources such as research evidence, personal or shared clinical experience, patient values, experiences and preferences, and local context (Burns & Grove, 2005; Rycroft-Malone, Seers et al., 2004). The application of this BPK to inform and change nursing practice is referred to as knowledge utilization (Estabrooks, Thompson, Lovely & Hofmeyer, 2006), and will be more specifically referred to as best practice knowledge utilization (BPKU) in this paper. Other terms such as research utilization, knowledge translation, knowledge exchange, knowledge-to-action, knowledge implementation, knowledge dissemination, and innovation diffusion have also been used interchangeably in the nursing literature to refer to the same phenomenon (Estabrooks et al., 2006; Graham et al., 2006; Johnson, 2005).

BPKU is one way of improving the quality of care and enhancing patient outcomes (Ferguson, Milner & Snelgrove-Clarke, 2004; Goode & Bulechek, 1992). A positive link

between BPKU and quality of care has been illustrated in a frequently cited meta-analysis conducted by Heater, Beker, and Olson (1988). Their findings reveal that BPKU produce better patient outcomes than routine nursing care across practice settings, including LTC settings. In addition to benefiting the clients, BPKU has also been noted to have an indirect effect on economic savings, thereby benefiting the organization (Goode & Bulechek, 1992; Stratmann, Vinson, Magee & Hardin, 1997). Despite the numerous research studies available to advance nursing practice and the sufficient evidence in literature supporting the positive relationship between BPKU and enhancing quality of care and, to some extent, the organization's financial performance, BPK is not being consistently implemented in practice settings by nursing staff (Bostrom et al., 2006; Cullum, DiCenso & Ciliska, 1997).

Nursing Staff and their Sources of Knowledge in LTC Facilities

The quality of care received by residents in LTC facilities is primarily relegated to frontline health care practitioners including regulated nursing care providers that include registered nurses (RNs) and registered practical nurses (RPNs), and unregulated care providers such as personal support workers (PSWs). These staff provide a range of nursing services in LTC facilities and are collectively addressed as nursing staff in this paper.

In Ontario, unregulated PSWs constitute the majority of the nursing staff in LTC facilities. These staff have minimal educational preparation and are responsible for most of the direct care provided to residents with complex needs (Mitty, 1997). For example, the PSW certification program that is offered in one of the colleges in Ontario involves an eight month study period, including 252 hours of long-term care clinical placement and 152 hours of community clinical placement (Niagara College Canada, n.d.). It has been suggested that this minimum level of educational preparation limits their ability to access, evaluate and apply

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research findings to their specific client situation, and is linked to low BPKU in the sector (Bostrum et al., 2006). Furthermore, Janes (2006) and Janes, Sidani, Cott, and Rappolt (2008) suggest that the minimal educational background of unregulated care providers places them in a position to learn on the job, and to rely on human sources such as their peers to attain new knowledge. In attaining BPK related to dementia care for example, they indicated a preference for team sharing and experiential learning over scientific journals and in-services (Janes). Thus, due to this interpersonal learning style that is observed in LTC settings, researchers have reported the need for educational strategies that are social in nature (Bostrom et al.; Brazil et al., 2004).

As illustrated above, the availability of preferred sources of knowledge may be a key factor in low BPKU. The sources of knowledge that include social interactions and clinical experiences appear to be more influential in unregulated care providers' acquisition of BPK in comparison to empirical sources such as the research literature. Thus, different and multiple educational strategies may be required to meet the various needs of the staff working in LTC facilities and to advance their use of BPK. The limited understanding of the social learning involved in BPKU may be a contributing factor in the research-practice gap observed in LTC settings.

The Research-Practice Gap

Several nursing research studies exploring the research-practice gap have identified many contributing factors, including the barriers to BPKU as perceived by nursing staff in acute care settings. Among these barriers are the lack of awareness of available research literature, inadequate skills in critical appraisal, and lack of time, support and authority to implement change (Estabrooks, Floyd, Scott-Findlay, O'Leary & Gushta, 2003; Estabrooks et al., 2005;

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Fink, Thompson & Bonnes, 2005; Glacken & Chaney, 2004; Hommelstad & Ruland, 2004; Hutchinson & Johnston, 2004; McCleary & Brown, 2003). Similar barriers to BPKU have also been identified in the limited research conducted in LTC settings. These barriers include, and are not limited to, access to research due to lack of resources, such as libraries and computers, and lack of time and support (Brazil et al., 2004).

In the field of nursing research, the majority of studies on BPKU thus far have stopped at listing perceived barriers to and influential factors of BPKU (Bostrom et al., 2006; Brazil et al., 2004; Janes, Fox, Lowe, McGilton & Schindel Martin, 2005). The handful of literature that does explore the phenomenon further, identifies facilitators as valuable sources in overcoming some of the perceived barriers to BPKU and bridging the gap between research and practice. Individuals in this role act as "linking agents," and support the frontline staff in changing their practice based on BPK (Milner et al., 2005). However, studies concerning facilitators and BPKU in LTC settings are scarce. The dearth of information available in this area underlines the need for further research to enhance the promotion of BPKU by facilitators. Considering more than 70,000 residents currently live in LTC facilities in Ontario (Smith, 2004), addressing the research-practice gap and utilizing the resources of facilitators are essential to enhance nursing practice in these settings.

Chapter Two: Literature Review

A review of the literature reveals that education alone is not sufficient in promoting and maintaining best practice amongst nurses. Jackson and McCubbin (2007), for example, believe that continuous mentoring is required to put BPK into practice and to sustain the change that is based on BPK. The reason for this may be due in part to the complex process involved in the uptake and utilization of BPK. Rycroft-Malone, Harvey, et al. (2004), who developed the promoting action on research implementation in health services (PARIHS) framework, explored the various factors involved in implementing evidence-based practice, and concluded that "getting evidence into practice is complex, and does not follow a prescribed, logical and linear path" (p. 915). It is not a simple deductive process and it requires that practitioners take the time to think, translate and apply the findings to their particular client situations (Harvey et al., 2002). The individuals who can assist the practitioners in this process and enable them are those in the role of a facilitator (Milner et al., 2005). Although this role seems to be significant, it has only just begun to be explored and understood in nursing.

Thus, nursing literature related to BPKU and the role of facilitators is limited. What is mainly available on this topic to date are conceptual analyses of the role of facilitation (e.g., Harvey et al., 2002; Lambert & Glacken, 2005), metasynthesis of implementation studies on research-based practice changes involving nurses and the effectiveness of such implementations (e.g., Leeman, Baernholdt & Sandelowski, 2007), and suggestion of strategies for enhancing BPKU (e.g., Ervin, 2005). The following sections will present the key findings of these and other relevant studies from the literature review.

Facilitation, and the Role of Facilitators

In the context of BPKU, facilitation has been described as "the process of enabling (making easier) the implementation of evidence into practice" (Harvey et al., 2002, p. 579). The nurses who enable this process to occur are addressed by several titles, such as facilitators, intermediaries, clinical coaches and change agents, and are usually in the advanced nursing practice roles such as clinical nurse specialists (CNS) and nurse educators (Canadian Nurses Association, 2002; Ferguson et al., 2004; Jeffreys, 2005; Kohm & Milner, 2007).

According to a secondary analysis examining the determinants of BPKU among clinical nurse educators (Milner et al., 2005), these advanced practice nurses (APNs) are more aware of research and have a more positive attitude towards research than staff nurses. APNs in the facilitator role are also expected to have clinical credibility, along with good communication, leadership and interpersonal skills (Ferguson et al., 2004; Jeffreys, 2005). These attributes are believed to enable them to take on the role of facilitators, linking BPK and clinical practice.

As part of ongoing work related to the development and refinement of the PARIHS framework, Harvey et al. (2002) conducted a concept analysis of facilitation and revealed that multiple perspectives and interpretations of the concept of facilitation and the facilitator role in practice exist. The authors propose that the role of facilitators depend on the purpose of facilitation. When the purpose of facilitation involves achieving a specific goal or a task, facilitators take on a direct "hands-on" or "doing" role, providing practical help and support, and when the purpose involves developing and empowering individuals and teams, facilitators take on an "enabling" role. The latter involves a more complex multifaceted role where facilitators take on a "holistic" approach addressing the whole situation and enabling "individuals and teams to analyse, reflect and change their own attitudes, behaviour and ways of working" (p. 580).

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Although two sets of roles are presented here, the authors acknowledge that these roles are not mutually exclusive, and in reality a combination of approaches is used to effectively address different needs at the same time. Moreover, Harvey et al. do not explicate the specific strategies or techniques that entail enabling or model the holistic approach that they claim are essential to BPKU. This remains an important gap in the nursing literature, and in the promotion of BPKU.

Harvey et al. (2002) also propose that effective facilitation requires a diverse range of skills and personal attributes such as networking, teambuilding, empowering, local credibility, patience and commitment. The skills and attributes described here are only a few of the expectations of the facilitator role according to a single group of researchers, who also report that multiple perspectives and interpretations of facilitation and the possibility of a wide range of facilitator roles exist (Harvey et al.). Also, little evidence exists to support the relative importance of these different skills and attributes in successfully carrying out the facilitator role and to illustrate how the facilitation skills are developed and enhanced (Harvey et al.).

The research team that developed the PARIHS framework for implementing evidence into practice (Rycroft-Malone, Harvey, et al., 2004), conducted a study to explore the three elements that they identified as influential: (a) the nature of the evidence being used, (b) the quality of context, and (c) the type of facilitation required to enable the change process. Two focus groups ($n = 7$ and $n = 5$), and, later, 17 semi-structured interviews at two acute care site wards were conducted to explore these factors. The participants were volunteers and contained a variety of staff, such as practice development nurse, nurse manager, nursing sister, staff nurse, nurse practitioner, modernization agency representative and occupational therapist. What the authors found on the topic of facilitation, particularly on the role of project lead or facilitator, was that these individuals needed to have: (a) knowledge of the project, (b) status or credibility,

(c) management skill, (d) positive, enthusiastic approach, and (e) good communication skills. Again, these findings pertain to a single study that was set in acute care, had a small sample size and relied on self-report data. Additionally, the authors report that there was limited success in implementing evidence into practice by the two sites. These factors limit the implications that could be drawn from the findings.

Moreover, facilitators seem to be involved in other roles in addition to promoting the use of BPK among practitioners. This was evident in the above study, as well as from the demographic data that was collected from the participants involved in the primary study on which this secondary analysis was based (see Appendix A). Janes et al. (2005), who conducted the primary study, collected data on the experiences of facilitators in promoting BPKU in LTC. According to these facilitators' demographic data, they spent on average only about 52% of their time in the role of facilitation (Janes et al.). This can potentially limit their time and effort in affecting change based on BPK. Therefore, more research is needed to provide some insight and clarity into the facilitator's role, on how they face the challenges in their practice, and on how successful they are in implementing and sustaining change. The knowledge and understanding gained from such research could serve to enhance facilitator performance.

Preparation of Facilitators

Although some facilitators are Master's prepared APNs, and Thompson (2007) proposed that education at a graduate level provides CNS students with the opportunity to develop some of the skills that will aide them in the facilitator role, it is not clear in the literature whether graduate level preparation is necessary to function at the optimal level in the facilitator role. For example, only 32% of the facilitators from the primary study hold a graduate degree, and the remaining facilitators hold either an undergraduate degree (44%) or a nursing diploma (15%) (Janes et al.,

2005). Moreover, individuals who participated in the primary study were not all nurses. A physiotherapist was also interviewed suggesting the influence of other disciplinary members in nursing staff's use of BPK in LTC settings. Similarly, the explorative study conducted by Rycroft-Malone, Harvey et al. (2004) also included the interview of an occupational therapist. According to Harvey et al.'s (2002) findings, facilitators seemed to develop their clinical and facilitation expertise through experiential learning. The essential skills and working styles also seemed to be developed through this experiential process either informally involving trial and error or more formally through the use of models (Harvey et al.). Thus, the preparation and experiences of these facilitators may vary. Whether this variation has any effect on facilitators' performance in promoting BPKU is not yet clear. Thus, further research is needed to explore the relationship between educational background and experiences of facilitators, and their successful facilitation of BPKU among nursing staff.

Recently, an abstract of a study involving educational strategy for teaching the components of the change agent or facilitator role for CNS practice was presented at the National Association of Clinical Nurse Specialists (NACNS) conference in Phoenix, Arizona by Thompson (2007). The study involved CNS students and their involvement in evidence-based change projects. The author drew attention to the benefits of the CNS students' experience with the projects which allowed them to "practice" the work of the CNS and prepared them for the role of a facilitator, which is a major focus of CNS practice. Thompson theorized that this "practice" will build CNS students' confidence in their skills, such as the presentation and dissemination of information, and prepare them for future challenges. Also, as part of implications for practice, Thompson had stated that "the shared content of professional role and clinical expertise is important for CNS students to learn to function as a CNS" (p. 118). Thus, it

is evident from this study abstract that some components of a facilitator role can also be learned from others who are experienced and practicing in that role. However, further research is needed to identify the substantial components pertaining to the facilitator role, and to study the effectiveness of such components when put into practice.

In the review of literature conducted by Milner et al. (2005) for purposes of their secondary analysis examining the determinants of BPKU among clinical nurse educators, the authors uncovered that some nurses, such as clinical nurse educators (CNE) and clinical nurse specialists (CNS), in the facilitator role, are reported: "ill-prepared to fulfill the research aspect of their roles" and not feeling comfortable using BPK in practice (p. 900). Some researchers like Butler, and Hatcher and Tranmer (as cited in Milner et al.) identified the facilitator role itself as being a determinant of BPKU. Milner et al. attributed this assertion to (a) the expectation that facilitators use BPK, (b) their higher levels of education, (c) their more positive attitudes towards BPK than staff nurses or managers, and (d) their increased access to resources. These factors, along with some of the facilitators' curious nature, strong critical thinking skills and interest in research were believed to enhance their awareness of and influence their behaviour towards BPK (Milner et al.). Acknowledging the CNEs as "trusted and credible members of the nursing practice community" and as being in an ideal position to facilitate BPKU, Milner et al. identified the need for more intervention studies to assess the effectiveness of CNEs as facilitators of BPK (p. 900).

It is clear from the above findings that more research is needed to provide a conceptual clarity on facilitation and the facilitator role. Further research involving practicing facilitators is required to capture their experiences and practices in order to better understand what constitutes the process of facilitation and the facilitator role.

The primary study by Janes et al. (2005) captured the experiences of facilitators in promoting BPKU in LTC, but it did not aim to examine the data further to provide a conceptual understanding of the facilitator role. Hence the present study's interest is in further examining the data and comparing it to a theoretical framework as a preliminary step in understanding the facilitator role in the LTC practice setting.

To date, a frequently used theory to understand BPKU and the role of a facilitator, or change agent as referred to in the theory, is that of Rogers' (1995) theory of innovation diffusion (ID). This theory provides an in-depth understanding of the diffusion process in promoting an innovation, as well as the facilitator role and the social context they occur in (Tiffany & Lutjens, 1998). The following sections will provide a summary of the main elements in Rogers' theory of ID, and key findings from the literature review pertaining to Rogers' theory of ID, BPKU and facilitators, as well as the findings of studies that were set in LTC and used Rogers' theory to implement change.

Rogers' Theory of Innovation Diffusion

Rogers' (1995) theory of ID contains many interconnected elements. This is evident in Rogers' definition of diffusion itself: "the process by which an innovation is communicated through certain channels over time among the members of a social system" (p. 5). Embedded in this definition of diffusion are four key elements of his theory: innovation, communication channels, time, and a social system. The fifth element that links these four key elements and facilitates the flow of innovation to the clients is the element of change agent.

The innovation being diffused has been described by Rogers (1995) as "an idea, practice, or object that is perceived as new by an individual" (p. 11). It can either be a new technology (e.g., use of Doppler ultrasound machines to check residual urine volumes in incontinent

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patients) or new information (e.g., RNAO's best practice guideline on care-giving strategies for older adults with delirium, dementia and depression). As a potential adopter or user goes through a decision-making process to adopt or reject an innovation, the change agent plays a vital role by providing relevant information and positively influencing the potential adopter's perception of the innovation so that the chances of that innovation being adopted and diffused are high.

The means of relaying messages during the diffusion process are referred to as communication channels, which include mass media channels and interpersonal channels (Rogers, 1995). The internet, television, newspapers and journals are a few examples of mass media channels, while the exchange of information between two or more individuals defines interpersonal channels (Rogers). When these forms of communication channels are used effectively by the change agents, they can increase the rate of adoption of an innovation.

The third key element is the element of time, and is involved in the innovation-decision process and in the innovativeness of an individual (Rogers, 1995). The innovation-decision process is a five stage process comprised of knowledge, persuasion, decision, implementation and confirmation (Rogers). During this process, the potential adopters play an active role in seeking and processing information pertaining to the innovation, and the change agent functions as an information-rich resource for the potential adopters. Moreover, the innovativeness or certain characteristics of the adopters determine how early or late they will come to a decision to adopt an innovation.

The fourth key element in the theory of ID is the social system. It is defined by Rogers (1995) as "a set of interrelated units," represented by individuals, groups, or organizations, "that are engaged in joint problem-solving to accomplish a common goal" (p. 23). Since diffusion occurs within a social system, the social structure of the system (communication structure and

system norms) that gives stability and regularity to an individual behaviour, highly affects the process of innovation diffusion, and can either be a facilitator or a barrier to change.

Lastly, the element of change agent concerns the individuals who influence the "clients' innovation-decisions in a direction deemed desirable by a change agency" (Rogers, 1995, p. 27). Here, change agency refers to the "individuals who possess a high degree of expertise regarding the innovations that are being diffused" (p. 336). These are individuals who use the resourcefulness of change agents to diffuse an innovation among potential adopters. In the health care sector, change agency has been defined by Greenhalgh, Robert, Macfarlane, Bate and Kyriakidou (as cited in Stetler et al., 2006) as an "organisation or other unit that promotes and supports adoption and implementation of innovations" (p. 2). In order to accomplish this goal, organizations use change agents or facilitators to provide a communication link between innovations or BPK and frontline nursing staff.

Use of Rogers' Theory of ID in Nursing

Rogers' (1995) theory of ID has been used in nursing to understand the process involved in diffusing an innovation. To date, several studies that are mainly set in acute care have used Rogers' theory of ID to explore BPKU in nursing (e.g., Barta, 1995; Dooks, 2001; Fink et al., 2005; Kitson, 2001; Lee, 2004; Leeman, Jackson & Sandelowski, 2006; Milner et al., 2005; Pearcey & Draper, 1996; Shively et al., 1997). However, empirical studies concerning nurse facilitators and promotion of BPKU among nursing staff are scarce. There seems to be more anecdotal evidence and recommendations of strategies for facilitation (e.g., Ervin, 2005; Ferguson et al., 2004; Goode & Bulechek, 1992; Hilz, 2000; Leeman, Baernholdt and Sandelowski, 2007; Shirey, 2006), than empirical research.

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A few of the empirical studies that do use Rogers' work to address BPKU focus on the

implementation of research-based practice in general, rather than specifically exploring the role

of a facilitator in promoting BPKU. For example, Leeman, Baernholdt, and Sandelowski's

(2007) metasynthesis of 43 nursing empirical studies involving implementation of research-

based practice changes, and studies concerning the effectiveness of such implementation,

revealed that only 21 of those studies had described the involvement of a change agent. A

majority of these change agents were academic researchers initiating implementation as part of a

research project, and did not work within the organization where the change is being

implemented. Hence they were referred to as external change agents (Harvey et al., 2002;

Leeman, Baernholdt & Sandelowski). As a result of their short-term commitment, these external

facilitators may encounter distrust and may not always be successful in sustaining the change

(Leeman, Baernholdt & Sandelowski; Pearcey & Draper, 1996). Based on these findings,

Leeman, Baernholdt, and Sandelowski made recommendations for a designated workgroup or a

facilitator within the organization, that is, an internal facilitator, to promote and support the

change in practice.

Use of Rogers' Theory of ID in Studies Set in Long-Term Care

Apart from the studies set in acute care, so far there is only one study that has utilized

Rogers' theory to advance BPKU in a LTC setting, and which involved an external change agent

(Lekan-Rutledge, 2000). Other studies set in LTC, such as the one conducted by Kovach,

Morgan, Noonan, and Brondino (2008), used the five characteristics of innovation while

implementing a new protocol to study its effectiveness on patient care, and did not explicitly

explore the facilitator role.

In the study conducted by Lekan-Rutledge (2000), an academic research team was involved in implementing a best practice (BP). The study entailed the implementation and evaluation of a prompted voiding program based on Rogers' (1995) theory of ID. The program consisted of an educational protocol, a clinical protocol, and a quality monitoring protocol. The one-year project took place in a small LTC facility and involved 56 nursing staff. The participants included RNs, RPNs and health care aides (HCAs). The varied educational background and role of the staff were taken into consideration by the researchers and different questionnaires were administered to the regulated and unregulated health care practitioners to measure their knowledge of incontinence, the prompted voiding program, and staff communication. The contents and focus of the educational workshops also differed to meet the varying learning needs of the RNs/RPNs and HCAs. More role-play demonstrations and coaching that reflected the influence of Rogers' theory were utilized with the latter group. Here, the social process involved in the diffusion of an innovation and some aspects of the change agent roles as described in the theory were applied to the context of the study. Moreover, although all RNs and HCAs did well on the questionnaires, the RPNs performed poorly. This finding suggested the need to treat RPNs as unique from RNs and HCAs while designing interventions. The implementation of specific educational and training strategies was recommended to meet the needs of the RPNs (Lekan-Rutledge). Further research to address the role of change agents in LTC settings was also recommended by the author. Nevertheless, there was evidence of a successful adoption of the program based on Rogers' theory by the nursing staff. The program had eventually become part of the staff's daily routine.

While the above study was conducted by external facilitators, and consisted of a small sample size from one LTC facility, findings that demonstrated the effective and successful

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application of interventions based on Rogers' theory of ID to facilitate BPKU has implications for facilitators.

Summary of Related Literature and Direction of Present Research

A review of the literature has revealed that there is limited information available on the facilitator's role in promoting BPKU in LTC settings. However, the available research suggests that Rogers' (1995) theory of ID may be a useful framework to be further explored to illuminate the role of facilitators and to identify factors involved in successfully promoting BPKU.

Additionally, the social nature of acquiring and applying BPK by nursing staff, and the facilitator's role in promoting nursing practice based on BPK in LTC settings lend support to the choice of Rogers' (1995) theory of ID which has a social foundation. This theoretical framework is congruent with the present researcher's intent for this secondary analysis as it includes the element of change agent that will illuminate the facilitator role. Hence the present researcher's decision to further explore this phenomenon using Rogers' (1995) theory of ID, in particular the element of change agent.

Chapter Three: Methodology

In this chapter, the methods that were undertaken in conducting this qualitative secondary analysis are presented. The topics that are covered here include: purpose, research questions, theoretical underpinning, study design, ethical considerations, sample, data collection, data analysis and rigour.

Purpose

Despite the positive link between the utilization of BPK and quality of care, the gap between research evidence and practice continues to exist (Fink et al., 2005). This gap is present in LTC as well as in acute care (Bostrom et al., 2006; Fink et al., 2005). However, less attention is given to this issue in LTC than acute care, hence the limited information available in the literature on LTC settings. Yet, providing best care based on research to all patient populations, including the older person population, is significant to nursing practice.

What we do know of the research-practice gap in LTC facilities suggests that the process of BPKU may be social in nature, and facilitators are a valuable source in linking research to practice. However, the limited research conducted in LTC settings has mostly focused on exploring influential factors of BPKU and little is known about the role of facilitators in this setting. This calls for a theoretical examination in order to provide some insight into the role of facilitator. Rogers' (1995) theory of ID provides the theoretical framework through which to conduct such an examination. The process of diffusing an innovation, the social context in which it takes place, and the element of change agent, as illustrated in Rogers' (1995) work, provide a useful framework for understanding the role of facilitators in promoting change based on BPK among nursing staff.

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Consequently, the purpose of this qualitative secondary analysis study was to compare the roles and strategies undertaken by individuals who encourage BPKU among nursing staff in LTC settings to the change agent roles and success factors illustrated by Rogers (1995) in his theory of ID. The secondary analysis was conducted on data available from a primary study led by Janes et al. (2005). While the primary descriptive qualitative study provided good insight into the research-practice gap in LTC settings from the facilitators' perspective, it stopped at categorizing factors, and did not examine the data further (N. Janes, personal communication, January 9, 2007). The present study built on this work and explored the data further from a theoretical perspective. The data was approached with the presumption that there are similarities between strategies and success factors. Hence, the roles and strategies that emerged from the data were compared with Rogers' (1995) description of change agent roles and success factors in diffusing an innovation.

Research Questions

There were two fundamental research questions that guided the present study: (1) How do the facilitators' roles in LTC settings compare to the change agents' role as described by Rogers in relation to encouraging nursing staff's uptake and utilization of best practice knowledge? (2) How do the strategies used by the facilitator group reflect the change agent success factors as identified by Rogers for diffusing innovations?

Theoretical Framework

Rogers' (1995) theory of ID describes the phenomenon of how an innovation is spread within a social unit. This theory is grounded in the reciprocal interaction paradigm (Tiffany & Lutjens, 1998), which is one of the three categories of worldview created by Fawcett (as cited in Wills, 2006). According to this paradigm, (a) humans are viewed as holistic and active beings,

and interacting reciprocally with their environment; (b) reality is viewed as multidimensional, dependent of context, and relative; and (c) both qualitative and quantitative research methods are encouraged (Wills). Rogers' theory of ID reflects these elements of the reciprocal interaction paradigm, as well as the notion that change is a result of multiple antecedent factors (Wills). In Rogers' theory, the individuals or adopters are seen as part of a social system, with differing socioeconomic characteristics, personality variables and communication behaviour. They interact with others and actively seek information. During the diffusion of innovation, many factors like the social context, adopters' characteristics and prior conditions are considered to account for the multidimensional aspect of reality. These factors, along with the quantitative and qualitative research findings that Rogers had used to construct his theory, are in line with the reciprocal interaction paradigm.

Furthermore, characterizing a middle range theory, the theory of ID is comprised of a limited number of concepts that are operationally defined and propositions that can be empirically tested (McEwen, 2006). Chinn and Kramer (as cited in Tiffany & Lutjens, 1998) defined middle range theory as a "theory that deals with a relatively broad scope of phenomena but does not cover the full range of phenomena that are of concern within a discipline" (p. 234). According to Tiffany and Lutjens, two major areas of research in the field of planned change were excluded by Rogers. These areas include factors concerning the influence processes such as attitude change, group behaviour and organizational behaviour, and change that occurs without the presence of an innovation.

Rogers drew from over 400 study findings to explain the diffusion of innovations and to construct his theory of ID (Tiffany & Lutjens, 1998). Although the process of ID had been previously explored, Rogers was the first person to integrate the concepts of ID to formulate a

theory and see it as a social process (Tiffany & Lutjens). In particular, it was originally designed to explain the diffusion of agricultural innovations. Now, it is widely used across many disciplines, such as nursing, medicine, social sciences and information technology, and translated into many other languages (Tiffany & Lutjens) suggesting its broad scope.

The theory of ID has implications for nurses who plan to implement change. As nursing knowledge increases with research, the new knowledge needs to be incorporated into practice in order to benefit from the research evidence. However, introduction of new knowledge and change in practice are often met with resistance (McPhail, 1997; Tiffany & Lutjens, 1998), and resistance from staff is a major reason why organizational change initiatives fail (Porchask et al. as cited in Melnyk, Rycroft-Malone & Bucknall, 2004). Rogers' theory of ID provides useful ways to address this resistance and implement change. It helps nurses understand the dynamics of change, tells them how to work with others in a change situation, offers viewpoints to analyze the context of a change situation, and provides a conceptual ordering that help nurses choose, develop and sequence activities necessary to plan and implement a change (Tiffany & Lutjens).

For the purpose of this secondary analysis, the present researcher explored the change agent element inherent within this multifaceted and widely used theory. Change agent roles and their success factors as outlined by Rogers' (1995) in the theory of ID were explored and used to construct a table of categories to later compare with the findings from the data analysis. The conceptual and operational definitions for each category identified from Rogers' work are provided in Appendixes B and C. The conceptual definitions were drawn from Rogers' work, whereas the operational definitions were the present researcher's interpretation of the conceptual definitions created for the purpose of this study. The operational definitions were developed

through a reflective process grounded in my clinical experiences, my understanding of Rogers'

theory, and the knowledge acquired from a substantive review of the literature.

Change Agent Roles

Rogers (1995) described seven roles that a change agent undertakes during the process of

innovation diffusion. These roles (see Appendix B) were described in sequence by Rogers, and

include: (a) developing a need for change, (b) establishing an information-exchange relationship,

(c) diagnosing problems, (d) creating an intent to change, (e) translating an intent to action, (f)

stabilizing adoption and preventing discontinuance, and (g) achieving a terminal relationship.

Change Agent Success Factors

Rogers (1995) also identified factors that are involved in change agents' successfully

diffusing an innovation. These success factors include: (a) change agent effort, (b) client

orientation, (c) compatibility with clients' needs, (d) change agent empathy, (e) formative

evaluation, (f) goal setting, (g) audience segmentation, (h) entertainment education, (i)

interpersonal communication strategies, (j) mass media communication strategies, (k)

demonstration, (l) identifying networks, (m) change agent credibility, and (n) change agent aides.

The conceptual and operational definitions for each of these success factors are provided in

Appendix C.

It was the present researcher's interest to extract evidence related to the roles of

facilitators as well as the strategies they used to encourage nursing staff's uptake and utilization

of BPK, and compare them to change agent roles and success factors as identified by Rogers

(1995). This comparison was intended to determine the degree of congruence between these two

groups' roles and strategies, and determine whether the widely used Rogers' theory of ID is

indeed a useful framework through which nurses can understand their role in facilitating BPKU.

The results of this study may help to move toward a specific theory of BPKU as undertaken in the LTC context.

Study Design

This secondary analysis used a retrospective interpretation approach, where pre-existing data from a primary study are examined to answer a new research question (Thorne, 1994). The data that were used for the purpose of this study came from a descriptive qualitative study conducted by Janes et al. (2005). This primary study was guided by the following research question: "What are the factors that impact on the facilitation of nursing staff's utilization of best knowledge in LTC settings?" In order to answer this research question, the primary investigators had collected data that reflected participants' satisfying and frustrating experiences with promoting the use of BPK among nursing staff in LTC settings (see Appendixes D and E).

According to Thorne (1994), a fit must exist between the secondary research question and the theme or the topic addressed by the primary research in order to conduct the secondary analysis. This ensures that the data set to be used from the primary study represents the topic of interest for the secondary analysis, and establishes the data's suitability for conducting the secondary analysis. As the primary study was concerned with the participants' experience in promoting BPKU among nursing staff in LTC, it was reasonable to assume that the primary data would provide evidence to support the present study which aimed to extract the roles and strategies undertaken by those participants in promoting BPKU. Thus, this fit justified the undertaking of this research study.

Ethical Considerations

A full Research Ethics Board (REB) review was completed for the original study conducted by Janes et al. (2005). Accessibility to this data was obtained by adding the present

researcher's name as a co-investigator to the original protocol. This exempted a separate review for the present study by the REB at the present researcher's academic institution.

In the primary study, informed written consent was obtained from all participants. In keeping with the original consent (see Appendix F), anonymity of the participants and confidentiality of the data was ensured. All identifying information, such as names of persons and of facilities, were removed and not included in the quotes used to support this study's findings. During the study, all data were kept on present researcher's password-protected personal computer. Upon completion of this study, all data will be transferred to a compact disc and erased from the computer.

<div align="center">Sample</div>

Qualitative studies contain rich in-depth data and seek to capture the "emic's" or insider's view (Streubert-Speziale & Carpenter, 2003). For this reason, the participants of the primary study were selected using a purposive sampling technique by the primary investigators for their ability to inform the phenomenon of interest (Milne & Oberle, 2005). The sample included 34 participants with experience in facilitating nursing staff's utilization of BPK in LTC facilities. They were recruited through professional nursing organizations and through word of mouth. The facilitator groups in the primary study included APNs, nurse educators, public education coordinators for the Ontario Alzheimer Society, psychogeriatric resource consultants, and a physiotherapist (Janes et al., 2005). The demographic data of the participants who provided their stories are provided in Appendix A.

<div align="center">Data Collection</div>

Data in the primary study was collected through formal semi-structured interviews conducted over the phone or face-to-face, and through on-line questionnaires. The interview

guide and the questionnaire for written submissions from the primary study are provided in Appendixes D and E, respectively. It is important to note that the on-line questionnaires used the same questions that were used to guide the interviews, and adds to this study's rigour.

Participants provided critical incidents from their practice in relation to their role in encouraging nursing staff's utilization of BPK on two separate occasions. On each occasion they were asked to provide two critical incident stories: one satisfying and one frustrating. The interviews were tape-recorded and transcribed verbatim. The data from the on-line questionnaires were downloaded verbatim for analysis (Janes et al., 2005). There were a total of 30 online submissions, 14 phone interviews, and 11 face-to-face interviews. In total, the primary study contained 123 critical incident stories as some participants provided more than two stories.

For the purpose of this secondary analysis, a subset of data was used. I received an electronic version of the transcripts from 23 of the original participants from my thesis supervisor, who happened to be a co-investigator in the primary study. I read through all of the transcripts and selected the critical incident stories that were rich and sufficient. The final data set to be used in this secondary analysis study was confirmed with my thesis supervisor, and contained critical incident stories of 10 participants. As a result of discussion with my thesis committee members, it was decided that data from 10 to 15 participants would be a reasonable number of sets to handle (Creswell, 1998). Among the data of the 10 participants that I had selected, 7 participants had provided either a face-to-face or a telephone interview, and 5 of these 7 participants had been interviewed at two occasions. This gave me a total of 12 interviews. The remaining 3 participants had provided online submissions. Although the online submissions were short, some of them contained rich data.

Data Analysis

Initially, I approached the data using a deductive form of analysis in order to answer the research questions addressing the change agent role and success factors from Rogers' (1995) theory of ID. That is, a directed qualitative content analysis, which entailed the used of theories or relevant research findings to establish initial codes, was used to approach the primary data set (Graneheim & Lundman, 2004; Hsieh & Shannon, 2005). Concepts related to the change agent from Rogers' (1995) theory of ID were used to formulate the initial coding categories (see Appendixes B and C).

After producing a paper version of the transcripts with wide margins and familiarizing myself with the entire data subset, I selected a single transcript to start the deductive analysis process. I first read through the transcript and looked for evidence in the data that could be coded for the first category, "identifying needs." As I came across a data segment that reflected the first category, I marked the data segment using a coloured pencil, and wrote down the number "1" in the right hand margin and circled it to represent the first category, "identifying needs." I repeated this process for the remaining 20 categories. Once I completed this process on the paper version of the transcript, I opened a Microsoft Word document file for each of the 21 categories, added the categories' conceptual and operational definitions, and cut and paste the identified data segments from the electronic version of the transcript under each of the corresponding categories. Using a different coloured font, I added comments including my rationale for selecting that data segment. I shared some of these documents with my thesis supervisor to check for accuracy in coding strategy.

During the subsequent committee meeting and discussion with the committee members, it became apparent that the deductive form of data analysis might not be the best approach for the

purpose of this study. If I continued using the deductive form of analysis, the experiences of the participants would be "forced" to reflect Rogers' (1995) categories, and the study results would not truly reflect how well the data supported Rogers' conceptualization of facilitator roles and strategies. The purpose of this secondary analysis was to first identify the roles and strategies undertaken by the facilitators without any preconceived notion, and then demonstrate the degree of congruency between what I had extracted from the data and Rogers' categories. For this purpose, an inductive form of analysis, whereby the data are synthesized through the process of identifying categories (Morse & Field, 1995), was agreed upon by the thesis committee members. This form of analysis also helps to bring knowledge into view, rather than drawing from previous knowledge (Morse & Field). That is, while existing work is used to form the coding categories in deductive data analysis, inductive data analysis tries to capture the authentic experiences of the participants as they were communicated by them and brings this knowledge into light.

Thus, using an inductive data analysis approach (Grbich, 2007; Morse & Field, 1995), the steps that I undertook to arrive at the final seven categories included open coding, grouping of like aspects into single categories, collapsing these categories, addition of data segments illustrating the corresponding categories, and definition formation. Also, the use of conceptual mapping and a block and file approach in combination, helped to reduce the data into meaningful groupings and facilitated data management (Grbich, 2007). Conceptual mapping constituted the collection of brief words and phrases that I used to identify or represent the data segment, some of which later became properties or subcategories (Creswell, 1998; Kelle, 2007), and were used in the definition formation of each category. The block and file approach involved my cutting and pasting of large chunks of data under each corresponding category to keep the context intact.

For the purpose of inductive analysis, I produced another paper version of the selected transcripts with a wide right margin, and read the transcripts multiple times to try to immerse myself in the data without the influence of Rogers' (1995) theory. I used the right hand margin of the paper transcripts to note down ideas, comments, questions, and reflective thoughts related to the research topic.

I also used notebooks and Microsoft Word documents to maintain a record of my thoughts, ideas and decisions made throughout the data analysis process. These entries were made in sequence, with dates indicated. Moreover, any feelings, beliefs, reactions, and presumptions or biased thoughts induced by the data were also recorded in a notebook. Such self-awareness helps to analyze and understand important issues in the research project (Smith, 1999), and can then be used for drawing out evidence for an audit trail. The latter involves the maintenance of an adequate record of the research process (Lincoln & Guba, 1985; Smith). For example, one such entry that was made during my initial reading of the transcripts included: "I am wondering whether I will find enough data to fit into all of the categories." This clearly reflects the incorrect approach that I had initially taken while conducting a deductive analysis of the data. At the same time, this comment captured my thought at that time, and later helped me to question my intent behind data analysis for the purpose of this study. These measures helped establish trustworthiness and contributed to the rigour of the study (Wolf, 2003). Additionally, the paper version of the transcripts, along with printouts of the entries made on Microsoft Word documents, were filed in a loose-leaf binder and kept with the notebooks as part of the audit trail.

After familiarizing myself with the entire subset of data, I first selected five transcripts as recommended by the thesis committee members to conduct the initial coding using an inductive approach. I selected these five transcripts based on their richness, reread them, and started to

conduct open coding (Grbich, 2007). At this stage, I read the transcripts line by line and identified codes that resonated with me in answering the first research question related to the roles undertaken by the participants. I used the right hand margin of the paper transcripts to note down these codes or headings beside the corresponding data segments. This reflected conceptual mapping. Then, I reread the transcripts and identified codes related to strategies in order to answer the second research question.

While engaged in this analysis process, I experienced difficulty classifying a category as a role or a strategy. During the subsequent committee meeting, it was suggested that definitions be formed for roles and strategies to facilitate the analysis process. As I referred to Rogers' (1995) work to see how he had defined these terms, I realized that Rogers did not define roles, and had only listed and described the seven change agent roles. Drawing inferences from Rogers' work, and using the thesaurus and Encarta dictionary available in Microsoft Word, I formulated the following definitions for facilitator roles and strategies:

1. Role is defined as the responsibilities undertaken by the facilitators in encouraging the use of BPK among the nursing staff in LTC practice settings.

2. Strategy is defined as a plan of action, an activity, an approach or a technique used by the facilitators to operationalize their role(s) and to achieve their goals in encouraging nursing staff's utilization of BPK in LTC practice settings.

As I was coding, I omitted data segments that were irrelevant to the purpose of my study. Field and Morse (as cited in Burnard, 1991) referred to this as "dross" data, which "were considered not to be categorisable nor considered to add to the general understanding of the field under consideration" (p. 464). For example, since I was interested in the facilitators' role, I omitted the data segment where one of the participants recalled an incident when she was in an

administrative role. Keeping in line with my definition of strategy, I also omitted data segments that pertained to the attitudes or characteristics of the participants.

Once I had labeled the codes in relation to the two research questions, I entered those codes onto a Microsoft Word document, and shared the refined list of 35 codes with my thesis supervisor. Then, I engaged in grouping similar codes and collapsing them into broader categories (Grbich, 2007).

In order to formulate definitions for each category, I used the words and phrases under conceptual mapping to compile synonyms. These definitions, continued to evolve and change as I further collapsed and refined my categories, and helped in determining whether the categories were mutually exclusive. This step was enhanced by the addition of all data segments (block and file approach) illustrating the respective categories (Grbich, 2007). I carried out this step by copying the identified data segments from the electronic version of the transcripts and pasting them into corresponding Microsoft Word documents that I created for each category. Lastly, I further analyzed and collapsed the categories, and noted down my rationale for including each of the data segment while I updated them.

Upon completion of this initial data analysis phase using five of the interview transcripts, I conducted a peer-check with my thesis supervisor as well as the other committee members to ensure accuracy and appropriateness of the coding strategy. Committee feedback was considered for revisions to the coding strategy and refinement of the categories, and to further aid the analysis process.

After the peer-check, I conducted subsequent readings on the remaining transcripts from seven of the participants which included 7 interviews and 3 online submissions. Again, open coding was done to identify codes that resonated with me while I searched for evidence related to

facilitator roles and strategies used by the participants in encouraging the use of BPK among

nursing staff. The previously identified code labels were used to identify data segments that

resonated with those labels. Then, I grouped the codes, categorized them, and compared these

categories with previously established categories that emerged from the data in the first five

transcripts. I formulated definitions for the new categories and refined the definitions of the

existing ones. I added corresponding data segments to the categories, and reread the earlier

transcripts to identify data segments that resonated with the new categories. Following this step, I

further analyzed and collapsed these categories, refined the definitions further, and updated the

data segments. Another peer-check was done after the completion of the above data analysis

process, and suggestions were made to consider further collapsing the categories so that they

were mutually exclusive.

Burnard's (1991) work on thematic content analysis was used to further guide the in-

depth analysis of the data. The 14 stages of analysis that Burnard outlined were adapted from

Glaser and Strauss' grounded theory approach, as well as from various works on content

analysis, and it aimed to capture the themes present in interviews in a systematic way and

produce a reasonably exhaustive category system (Burnard). The 14 stages of analysis described

by Burnard include, (a) note taking and memo writing, (b) reading the transcripts and immersing

in the data, (c) open coding, (d) collapsing the categories, (e) checking categories for repetitions

and producing a final list of categories, (f) enhancing validity of the categorising method (by

having two colleagues generate separate lists of categories and agreeing on final list of

categories), (g) re-reading transcripts with final list of categories, (h) colour coding the

transcripts for each category, (i) cutting and collecting data of each code together, (j) organizing

and pasting the data under each code on sheets, (k) member-checking, (l) filing all sections

together to facilitate write-up of findings, (m) writing up of the findings, and (n) linking the finding to the literature.

I went through these stages of analysis and identified the stages that were completed thus far and the stages that needed to be undertaken. Stage one involved writing memos and taking notes about the topics that were addressed in the interviews (Burnard, 1991). These were available from the primary investigators. However, in order to approach the data that were gathered from face-to-face interviews, phone interviews and on-line submissions objectively, I had omitted the subjective notes made by the primary investigators.

For stages two through five (Burnard, 1991), I had read through the transcripts several times, conducted open coding and generated categories, collapsed the categories, and further revised and collapsed the categories to produce a final list. I had also coded the transcripts, and gathered the data segments together under respective categories electronically using Microsoft Word document. These steps reflected Burnard's stages eight through ten.

The sixth stage involved inviting two colleagues to generate separate lists of categories, and agreeing on a final list of categories in order to enhance validity and avoid researcher bias (Burnard, 1991). For the purpose of enhancing validity, I shared my list of categories with my thesis supervisor who was one of the co-investigators for the primary study and familiar with the data set. The discussions served to assist me in revising categories, based on her feedback. This stage reflects the notion of peer-checking (Sanders, 2003), where analysis and findings are presented to others for peer evaluation.

For stage seven, as described by Burnard (1991), I reread the transcripts alongside my list of categories to ensure that all aspects of the interviews were covered. I then revisited my categories and engaged in further collapsing and refining the categories to arrive at the final set

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of mutually exclusive categories that describe the roles and strategies that were undertaken by the participants in promoting the use of BPK among nursing staff in LTC settings.

Stage eleven involved member-checking, which require that the appropriateness of the categories be checked with a selected few participants (Burnard, 1991). Since I was conducting a secondary analysis, and did not readily have access to the participants of the primary study, I validated the categories with my thesis supervisor. The last three stages described by Burnard were related to the writing up of the findings.

Finally, in order to answer the research questions, the 7 categories that emerged from the data were compared with the 21 categories pertaining to the change agent roles and success factors that were identified from the chapter discussing the element of change agent in Rogers' (1995) *Diffusion of Innovations* (see Appendixes B and C). This allowed me to check the degree of congruency between the participants' experience with promoting BPKU in LTC and the change agent element present in Rogers' theory of ID.

Rigour

Rigour involves trustworthiness of a study, and answers the question, "Do the data reflect the truth?" (Polit & Beck, 2006, p. 332). Although many criteria have been explored in nursing literature to establish rigour of qualitative data, the most commonly used criteria in nursing include credibility, dependability, confirmability, and transferability (Lincoln & Guba, 1985). In other words, when considering rigour in a qualitative study, it is necessary to determine whether the study is believable, accurate, useful and applicable outside the context of the study (Sanders, 2003). The following sections will clarify these concepts and provide details on how they have been used in the present study to ensure rigour.

Credibility

Credibility concerns the truth value of the data, and involves the ability of the study to capture and represent the insider perspective accurately (Milne & Oberle, 2005). It is established when the purpose of the study is accomplished. In this case, evidences related to facilitator role and strategies were extracted from the data and compared to the change agent roles and success factors as conceptualized by Rogers (1995), and the usefulness of Rogers' theory of ID in understanding facilitation of BPKU among nursing staff in LTC was determined.

The purposeful sampling technique used in the primary study had added credibility to the data. The facilitators' roles were captured through these participants who represent the population of nurse facilitators in LTC settings. In addition, the data used in this study constitutes the original data of the participants' experience, and direct quotes from the transcripts were used to illustrate the findings.

My clinical background working in a LTC facility, and my personal interests in the use of BPK and Rogers' theory, could have influenced data analysis and study findings. Thus, the use of direct quotes assisted to avoid biasing the categories that emerged from the data. This step further helped to minimize potential researcher bias and its impact on study findings, and to produce an accurate interpretation of the data.

Dependability

Dependability concerns the consistency and reliability of the data over time and conditions during the data collection and analysis process (Graneheim & Lundman, 2004; Polit & Beck, 2004). This criterion was ensured in the primary study during data collection through the consistent use of the same questions and probes in the interview and in the on-line

questionnaires, and contributed towards the dependability of the data that was used for secondary analysis in this study.

The maintenance of an audit trail enhanced the dependability of the present study (Rolfe, 2006). The audit trail captured my decisions and thoughts during the data analysis process, and allowed me to track and verify the steps taken throughout the research process. It was most useful when considering collapsing of categories and in keeping categories mutually exclusive. I was able to refer to these comments to recollect my rationale for forming the categories at that time. I kept a record of this information on Microsoft Word document files during data analysis, and it helped to enhance the dependability of this study.

Confirmability

Confirmability is the objectivity or neutrality of the data, and was established through peer checking in this study (Lincoln & Guba, 1985; Polit & Beck, 2004). Burnard's (1991) description of analysis stages six and eleven were adapted for this study, and multiple peer-checks were conducted with my thesis supervisor and the thesis committee members to obtain feedback on the coding strategy and the findings. This process ensured that my findings were not subjected to personal bias and were neutral. Thus, enhancing the confirmability of the categorizing method.

Transferability

Transferability involves applicability of study findings to another similar context or situation (Tuckett, 2005). Since the goal of qualitative research is to produce an in-depth understanding and knowledge of a phenomenon, a researcher must provide sufficient descriptive data in the report so that readers can make decisions about the applicability of the data to their practice settings (Polit & Beck, 2004).

A research report should include clear descriptions of the characteristics of the participants, the data collection method, the process of data analysis, and the study findings with appropriate and illustrative quotations (Graneheim & Lundman, 2004). I provided these details, along with illustrative quotes, to facilitate transferability of the study findings.

The trustworthiness of this study was enhanced by meeting the above four criteria. As stated by Rolfe (2006), the uniqueness and specialty of qualitative studies do not call for generalizable findings, but rather allow the reader to judge its applicability to other situations based on his or her insight and experience. Thus, the details of this study were clearly presented with the inclusion of the study's limitations to facilitate this subjective process of transferability.

Chapter Four: Findings

This chapter explains my study findings, which include demographic descriptions and a full description of the seven categories that emerged from the data. Overall, one facilitator role and six facilitator strategies emerged from the data. The single role that was undertaken by all facilitators was the dissemination of BPK. The strategies undertaken by these facilitators that served to disseminate BPK include: (a) knowing the market, (b) modifying the message, (c) engaging the nursing staff, (d) building a relationship, (e) using influential nursing staff, and (f) involving nurse leaders. A discussion of these categories using their properties and example quotes are provided in this chapter. It should be noted that the term "nursing staff" is used throughout this document to collectively address registered nurses and unregulated health care providers.

Demographic Descriptions of the Study Participants

As described in chapter 3, a sub-sample of 10 individuals from the primary study who had experience facilitating nursing staff's utilization of BPK in LTC facilities was selected for the purpose of this qualitative secondary analysis. The details with respect to demographics are presented in Table 1.

Table 1

Demographic Data of Participants Included in the Secondary Study

	Facilitators		
	(*n*=10)	Average	Range
Age (years)		45.7	37 – 55
Gender			
Male	1		
Female	9		
Ethnicity*			
Caucasian	7		
Other	2		
Highest degree obtained*			
College diploma	1		
Undergraduate degree	5		
Graduate degree	3		
Years in present position		3.6	0.5 – 6.5
Years in prior facilitator positions		1.2	0 – 5
Employment status			
Full-time	9		
Part-time	1		
Number of LTC facilities covered		18.6	1 – 79
Role in facilitation (%)		41.8	10 – 75

*Missing subject data, total less than 10

The facilitator group, whose critical incident stories were used for the purpose of this qualitative secondary analysis, consisted of one male and nine females. The average age of these facilitators was 45.7 years. Nine of these facilitators were nurses, while one was a physiotherapist. Also, seven of these facilitators were Caucasians, two were non-Caucasians, and the ethnicity of the remaining one facilitator was not available.

The highest degree obtained by these facilitators included College diploma ($n = 1$), undergraduate degree ($n = 5$), and graduate degree ($n = 3$). The detail pertaining to one of the facilitator's educational background was missing. On average, these 10 facilitators were present in their current position for 3.6 years (with a range of 0.5 to 6.5 years), and were in prior facilitator positions for 1.2 years (with a range of 0 to 5 years).

Nine of these facilitators were employed full-time and one facilitator was employed part-time at the time of data collection. The number of LTC facilities that they were responsible for ranged from 1 to 79, with an average of 18.6. The percentage of time that participants spent in facilitation of BPKU also had a wide range of 10 to 75 percent, with an average of 41.8 percent.

The role expectation of these participants' employers was presumed to be the facilitation of BPKU among nursing staff that consisted of registered nurses as well as unregulated health care providers. However, it was evident from the data that some of the facilitators had additional responsibilities. One facilitator, for example, reported her direct involvement in assessing geriatric clients in the community along with clients in LTC. Additionally, based on referrals from a physician, she was also expected to assess clients in hospitals who were being discharged to LTC. Thus, some participants had added responsibilities in addition to facilitating BPKU among nursing staff in LTC settings.

Description of Facilitator Role and Strategies

The data analysis resulted in the emergence of one role and six strategies (see Table 2)

undertaken by the facilitators who were striving to encourage nursing staff's uptake and

utilization of BPK. The role and strategies were closely related, in that the facilitators used these

strategies to operationalize their role. This relationship is apparent in the discussions of these

categories. Each of the seven categories is substantiated by illustrative quotes from the

transcripts of the 10 facilitators. In order to maintain anonymity, randomly assigned codes,

namely "F1" to "F10" are used to represent the ten facilitators, that is, "Facilitator 1" to

"Facilitator 10," respectively.

Table 2

Role and Strategies Undertaken by Facilitators in Encouraging Nursing Staff's BPKU

Facilitator role	Facilitator strategies
Dissemination of BPK	Knowing the market
	Modifying the message
	Engaging the nursing staff
	Building a relationship
	Using influential nursing staff
	Involving nurse leaders

Facilitator Role

Data analysis led me to ultimately define one single facilitator role, having first gone

through a process that involved several iterations. Initially, I synthesized the data to identify two

roles, (a) bringing awareness of BPK to nursing staff and (b) encouraging or supporting nursing

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staff in the application of BPK. Further reflection comparing roles with strategies, however, helped me to come to the realization that all BPK activities of the facilitators sampled for this study could be represented under the umbrella of one single role. Although I had initially identified a second role, *encouraging or supporting nursing staff in the application of BPK*, I noted that these activities actually took place during the educational sessions and involved the encouragement or reinforcement of nursing decisions or interventions that reflected utilization of BPK. None of the facilitators reported specific activities that involved the coaching, mentoring, guiding or supervising of staff in the direct application of new knowledge during interactions with patients, clients or residents. Further analysis of the activities captured within the initially identified two roles made me realize that the limited distinctions between them, if any, were subtle to the degree that continuing to separate these activities into two roles was not warranted.

Thus, in the process of encouraging nursing staff's utilization of BPK, one key facilitator role was identified from the data: dissemination of BPK. According to the study participants, communicating information on BP to nursing staff, in a form that was most meaningful to them, was critical to the promotion of BPKU. Educating nursing staff and bringing an awareness of BPK among them meant that the facilitators not only transferred the information on BP to nursing staff, but also taught them how BPK could be applied.

Facilitator 1, for example, described herself as "the big translator" or "the middle man," whereby she translated all the information from best practice guidelines and relevant research so it could be incorporated into frontline nursing staff's "tasky list." Hence her focus had been in disseminating the BPK from guidelines and research in a form that was useable by the nursing staff.

The dissemination of BPK allowed facilitator 6 to establish a "common language" among nursing staff which facilitated future teaching. For example, after providing an overview of a specific assessment mnemonic, P.I.E.C.E.S., facilitator 6 was able to provide consultation through the phone using the "common language" that the consulting nursing staff easily understood. Facilitator 2 also stated that she looked for opportunities to provide some education to nursing staff about managing disruptive behaviours in clients. These actions of the facilitators illustrate that their main goal is to transfer the information on best practice (BP) into the hands of frontline nursing staff in a useful form.

This single BPK facilitator role, dissemination of best practice knowledge, that emerged from the data, is inextricably linked to strategies of dissemination. Therefore, this role is best illustrated through the discussion of strategies that the facilitators used to operationalize this role. For example, conducting case-based discussions in formal educational meetings and during on-site face-to-face counseling was one of the ways through which facilitators engaged nursing staff while disseminating BPK. Thus, engaging the nursing staff has been identified as one of the strategies that facilitators use in disseminating BPK. Discussion of these strategies is provided in the following section.

Facilitator Strategies

Overall, six facilitator strategies (see Table 3) emerged from the data. These strategies include: (a) knowing the market, (b) modifying the message, (c) engaging the nursing staff, (d) building a relationship, (e) using influential nursing staff, and (f) involving nurse leaders.

Table 3

Strategies Undertaken by Facilitators in Disseminating BPK

Categories	Facilitators (%)
Knowing the market	90
Modifying the message	80
Engaging the nursing staff	100
Building a relationship	80
Using influential nursing staff	60
Involving nurse leaders	70

Facilitator Strategy #1: Knowing the Market

Overall, ninety percent of the facilitators demonstrated an undertaking of the strategy, knowing the market. Three properties emerged from the data that illustrated the information or conditions that the facilitators focused on and tried to gain an understanding of in order to plan for disseminating BPK. These included an awareness of (a) the nursing staff's needs and circumstances, (b) the reasons behind the failures of existing interventions, and (c) systemic barriers.

When facilitator 1 was asked to share what the critical incidents have taught her about the factors that influence the facilitation of nursing staff's knowledge utilization in LTC, she replied:

> There's lots of things. I think for sure, understand your nurses. Understand who you have. Because if you are going to facilitate, then you need to facilitate it at a point that's most meaningful for them. So *know your target market* [italics added]. I know that's sort of business lingo, but know who they are, understand who they are. And, you'll have better success at facilitating if you know who they are . . .

Facilitator 1 further demonstrated being aware of a nursing issue and nurses' circumstances as illustrated by the following quote:

> There's a lot of people that have continence issues in [LTC], and to get everybody to a toilet, five minutes after they've had breakfast . . . that's a tall order, and that's part of good continence management, is getting people to the bathroom, once the urge is there, and you and I know is [sic] that that's a near impossible task for, it's just a pure volume issue, you've only got so many hands and you've got this need. [F1]

As part of knowing the market, facilitator 5 embarked on finding out the reasons behind the lack of adherence to an evidence-based program to manage contractures. As a new member to the organization, this facilitator wondered, "why is it not working?" and went to speak to the nursing team to find out the reasons:

> I started talking to the other nursing staff, whether it's the RPN or the PSW. "Why is it not being done? Is there any particular reason?" They're saying, "You know what? It doesn't work because you've put in so many pillows, they pop out in five minutes, the person moved, and it never stayed", or "We don't even have pillows and you're suggesting like using three pillows for the whole set up and she's got like two and somebody else need to have two so where do we get the material? That's why it doesn't work." And then I realized, okay you know what if that's the case . . . they have a valid point.

Similarly, facilitator 1, in her interview, commented on why she believed most of the programs based on BP failed. She demonstrated an awareness of the background of her target audience:

> [PSWs are] not abstract thinkers . . . they're very concrete people . . . they can't innately translate all this information, whether it is a guideline or an article, or, whatever it is, into their hand. . . . and my experience has been if we come at it from a program standpoint, it fails quite often. A lot of people have gone through lots of work to create beautiful binders, a wound program, skin program, a continence program . . . they're all programs. They're all sort of seen, like, a higher level of activity of doing.

Moreover, an awareness of systemic barriers was also demonstrated by the facilitators. These systemic barriers hinder nursing staff's acquisition and use of BPK. The following two

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quotations illustrate the absence of a relaxing environment for the nursing staff to learn in, and

lack of compensations for nursing staff to encourage BPKU:

> . . . looking at the staff in long-term care, is that they are – because of the stress level, they are not as relaxed when they come to the sessions. . . . So you know, it is a deterrent as well. If they were not thinking about getting back on to the floor . . . we could have a relaxing – a more relaxing environment for them to learn in. [F4]

> . . . in all of the homes I know that the staff are pressured for time, that they have a large number of residents to look after. A lot of things to do, and they're not getting compensated for doing things outside that list of tasks that they have. [F6]

Facilitator Strategy #2: Modifying the Message

Modifying the message was a strategy where BPK was modified into simple and

meaningful messages, and doable processes. The use of this strategy was articulated by 80

percent of the facilitators from this sub-sample.

The various educational background of nursing staff in LTC settings contributed to the

use of this strategy. Facilitators 5 and 6 demonstrated being cognizant of the different

educational background of nursing staff, and used simple terminologies and examples to ensure

that message based on BPK was received by everyone, especially the PSWs who provide most of

the resident care. Facilitator 6, for example, modified the technique used to track the behaviours

of residents on a nursing assessment tool, dementia observation sheet (DOS), and presented it in

a way that would be perceived by the nursing staff as simple and meaningful. She showed them

how to use colours, instead of numbers, to track the behaviours of the residents. This new simple

technique had an immediate and positive impact on nursing staff's understanding of residents'

behaviours, as illustrated by the following quote:

> And we showed them a colored example and how much more clear that colored example showed the behavior. . . . This thing that they thought was just for writing numbers on finally made sense to them. . . . they got really excited about such a simple little tool and all it took was to show them the difference between just writing the numbers down and coloring it.

In addition to simplifying the language and the tool, facilitator 1 also commented on the importance of contextualizing the message, reducing the steps, and finding a good fit with the nursing staff's current practice, so that BPK was not seen by nursing staff as a dramatic change process, but as a simple doable process.

> I think we need to make sure it can get [to] them in digestible pieces. . . . the fewer the steps . . . the better the uptake. And the better it fits with their current steps, the better the uptake again. . . . So, if they have a procedure in place . . . and you're taking a look at a guideline or information . . . they can keep a lot of their process in place, but it's maybe taking out a few steps, and injecting a few new ones. Then I find the uptake is much, much better. . . . Because they are not having some sort of readjust dramatically. So, it's sort of like a [*sic*] baby steps. [F1]

Facilitators also ensured that messages based on BPK were not only simple, but also meaningful to nursing staff. Sometimes, a best practice technique to manage residents who are agitated is to use a familiar object to distract them from that disruptive behaviour. Hence, when educating nursing staff, naming the object or the activity that could be used as a distraction, instead of simply asking them to use distraction, was reported to be more effective. For example, facilitator 2 illustrated how she modified the concept of "distraction" for the nursing staff into a meaningful activity, such as using an "object or a memory book or something like that which the person would be interested in." These meaningful messages allowed nursing staff to relate to them and apply them. Facilitator 2 identified these items as "tangible" items, which was more meaningful and concrete for the PSWs to grasp or understand.

By being cognizant of LTC nursing staff's varied background, facilitators were able to modify the information from BPK into simple and meaningful messages, and demonstrate them as doable processes. This strategy enabled them to disseminate BPK.

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Facilitator Strategy #3: Engaging the Nursing Staff

The use of strategy, engaging the nursing staff, was demonstrated by all of the

facilitators. There were five properties that emerged from the data that illustrated the ways

facilitators tried to involve, inspire, attract and sustain attention of the nursing staff while

disseminating BPK. These properties were: (a) using case-based teaching, (b) creating a

comfortable learning atmosphere, (c) drawing on empathy, (d) reinforcing positive behaviour,

and (e) getting buy-in.

Using Case-based Teaching

In the case of the first property, using case-based teaching, facilitators used familiar case

scenarios to make the formal educational sessions more "interactive" (F8) and to "[peak nursing

staff's] interest" and initiate discussions (F7). The various teaching modalities the facilitators

employed, such as the use of videos and powerpoint presentations, were all supplemented with

case-based scenarios to engage the nursing staff.

Thus, the use of case-based scenarios appeared to be a very common approach among the

facilitators. Case-based education was identified as "the best education" by facilitator 7, who

further stated that the "case based approach is . . . meaningful to people . . . it's what they live

and who they have to work with." Furthermore, facilitator 10 recalled how she used case-based

scenarios while conducting in-services to demonstrate problem-solving and to engage nursing

staff:

> Often, before I start an in-service, I will ask the staff who have arrived first . . . to tell me
> about a particular resident that they find challenging. As I move through the material
> during the presentation, I will reflect back on this challenge. . . . I use the additional
> information and the dialogue to illustrate problem-solving as I move through the material.
> The end result is that they have not only received the information, they have also
> interacted with it and applied it before they get up out of their chairs.

Facilitator 2 recalled an incident during a dementia course where a PSW brought in a case to discuss, and then as a class, they brainstormed various non-pharmacological strategies such as "hand massage and talking" to manage the disruptive behaviour of that particular resident. The PSW had taken this BPK back and had successfully applied it in her practice setting with that resident.

Moreover, facilitator 6 reported the use of a series of videos which "[showed] examples of aggressive behaviour, [discussed the] triggers, and then [showed] the same scenario over again using techniques to help deal with all these different scenarios." These scenarios presented specific cases that the nursing staff could relate to, and reflected case-based education.

The case-based approach was also used in face-to-face counseling that was done on-site while discussing a particular resident's case and problem-solving. Facilitator 5's comment further illustrates the use of this case-based approach:

> When we work with day shift we don't have any major lectures or grand rounds or stuff like that. But we would go in, PT and OT would invite the nurse and say, 'Look. We know we have a problem with this patient or the patient has a clinical issue that we perhaps can deal with. How can we do proper positioning? And this is what we know from literature.' So at bedside we do a team consultation and we trial [sic] what we think is the right thing to do.

Facilitator 10 reported that case-based discussions allow facilitators to show nursing staff a different way of interpreting an event or a situation that staff, themselves, have experienced, and allow staff to "interact" with the information and apply it. Facilitator 10 further provided an example where she was consulted by a charge nurse regarding a resident who presented many types of challenging behaviour including pounding on the door, agitation during showers, sun-downing, and rearranging furniture. This facilitator went over each of the behaviour with the charge nurse and educated her on BPK related to dementia, which gave her a better

understanding of the resident's behaviours. Together they were able to identify interventions and formulate a care plan:

> . . . with the new understanding of how to integrate [resident's] past history, his inabilities from the dementia, and to extrapolate from these to his own understanding of his present circumstances, [the charge nurse] was rapidly able to help the [nursing staff] develop new more effective approaches to his care.

These examples depict the case-based teaching as a useful approach in engaging nursing staff and in disseminating BPK.

Creating a Comfortable Learning Atmosphere

The second property, creating a comfortable learning atmosphere, was evident in the data as facilitators (a) shared their own experiences and misconceptions, (b) validated nursing staff's feelings, (c) encouraged respect and participation during formal educational meetings, and (d) used humour. This facilitated a "stress free learning environment," enhanced the "receptiveness" of the staff, and engaged nursing staff in the uptake of BPK (F9).

In order to create a comfortable environment, facilitators 6 and 7 shared their years of experience caring for residents with aggressive behaviour with nursing staff so that they are perceived as credible. Furthermore, facilitator 10 shared her own mistakes and misconceptions, and experiences that revealed the process of her internal growth in order to create a comfortable learning environment:

> I also use examples of my own nursing experience in both acute and long-term care. In particular, I describe mistakes that I have made, or misconceptions that I used to have, to illustrate to them the process of internal growth in knowledge and experience. . . . I think that this teaches the nursing staff that there is pride to be found in having recognized one's inadequacies and acting to strengthen knowledge and practice.

Other than sharing information about themselves, facilitators were also focused on addressing nursing staff's emotional needs. For example, a video on "vicarious trauma," which focused on caregiver stress and quality of life, provided facilitator 7 an opportunity to give

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nursing staff a chance to talk about their feelings and to validate those feelings. Of the six educational sessions that she held, this session which was held last elicited the most response from the nursing staff who were present. Based on this response from her audience, facilitator 7 stated in her stories that she rearranged the order of the educational sessions so that the video on vicarious trauma will be presented earlier next time. This modification would help engage nursing staff earlier in the educational sessions, and facilitate the dissemination of BPK.

During educational meetings, facilitator 6 encouraged respect for and participation from everyone, and also set "ground rules around behavior in the class." These rules were mainly laid to discourage any staff with a negative attitude from distracting the sessions. Facilitator 7 also used "self-deprecating humor" and brought in snacks in order to make the nursing staff comfortable. As demonstrated by these facilitators, a key piece to engaging the nursing staff involved establishing a trusting and non-judgmental environment.

Drawing on Empathy

The third property, drawing on empathy, was used by the facilitators to draw on nursing staff's empathy for residents and have them relate with the residents. For example, after showing a video where nurses were trying to provide a shower for a resident who became combative in the process, facilitator 4 attempted to relate the situation to the nursing staff. She tried to explain to them that the resident might not comprehend where he was being taken and asked staff to picture themselves in the resident's situation:

> We would often say, you know, just picture yourself going into a room and you are not quite sure of why you are going in and somebody is saying, "step in, step in", you would be a little bit reluctant and a little bit feisty, just "I'm not going in there" kind of thing. So we tried to talk to them in that respect . . .

The following statement made by facilitator 6, further illustrates this property as facilitators try to engage nursing staff:

So I said to these [nurses], I said do you ever think on a personal level, think about what kind of care you'd want if you were here or if your mother was here, your grandmother was here, is that what you want for them . . . ? Do you want them to be just treated as you know a sheep herded into the shower or the bath and rushed through in 10 minutes and back out the door again . . . ?

Reinforcing Positive Behaviour

The fourth property, reinforcing positive behaviour, involved the reinforcement of

behaviour that was based on BPK and of information seeking behaviour. The facilitators

provided "positive feedback" (F9), commended and praised nursing staff for their successes in

implementing BPK, and "[rewarded] those that participate and implement the education" (F8).

These actions by the facilitators helped to engage nursing staff and disseminate BPK. The

following quote captures how facilitator 6 encouraged nursing staff who were persistently being

negative during an educational session to share their clinical experiences, and then drew these

nurses' attention to the behaviours that demonstrated BPKU to illustrate that they have also been

practicing BP, reinforcing those positive behaviours:

> . . . they were actually able to overcome some of their own negativity and think of incidents where they really had managed to be more flexible than they thought they were. And so there was some accommodation and we were able to kind of encourage that kind of thinking, well here's some examples so you are more flexible, you do do good things, you know you just didn't see it maybe in . . . a way we laid it out to start with.

Getting Buy-in

The fifth property of engaging, getting buy-in, was another vehicle that facilitators used

to engage nursing staff. This involved instilling interest in BPKU by pointing out "what's in it

for [them]" [F5].

> "What's in it for me? Why do I have to join you in doing that?" And we explained on many occasions to the staff, "You know what? If they don't have that much contracture, it's probably easier for you to care for this person. . . . Well if you do that down the road you can do less . . . " So that's the theory core to their own benefit.

Here, facilitator 5 tried to get the buy-in of nursing staff by pointing out that the application of BP would ease their work. This implied saving time, decreasing workload and preventing injury – factors that would be of interest to nursing staff in today's stressful work environment, and therefore, would get their buy-in of BPK. The following quote provides another example from facilitator 8's stories that further illustrates this property related to saving time:

> I said okay so if you're struggling with someone, [and] if this lady hits you then what do you have to do? . . . You have to go get [ice or] a bandage. . . . you have to document, you have to fill out an incident report, the nurse has to call the family. I go . . . if it's actual time you're talking about, like the minutes and seconds, you're probably better off by approaching slowly because it's going to take you more time with all the follow up.

Facilitator Strategy #4: Building a Relationship

The fourth category under facilitator strategies is "Building a Relationship." The undertaking of this strategy was evident among the stories of eighty percent of the facilitators. Here, three properties illustrate the way the facilitators tried to build trust, develop rapport and create a connection through interpersonal relationship with the nursing staff that allowed them to collaborate with staff and disseminate BPK. These properties include (a) listening, (b) taking a caring approach, and (c) maintaining a professional manner.

Facilitator 1 commented on the benefit of building a relationship with the nursing staff as follows: "it gave me a chance to continue to build my relationship with the nursing team, which then allowed me an open door for future things that I brought into the home." In other words, building a relationship with the staff made it easier for this facilitator to disseminate BPK in the future.

It was also evident in facilitator 7's stories that building a relationship strengthens the comfort level between facilitators and nursing staff:

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. . . within the first couple of sessions we felt very comfortable with them. . . . People would talk to us in the hallways after that six months. You would meet staff that were at the educational opportunities and they would feel comfortable talking to us . . . And so the relationship was really strengthened between the geriatric team as well as the staff . . . So now when we go in to do an assessment, you know, there's a much more comfortable relationship with them and us and [they are] much more willing to listen to some of the things we recommend . . . or in turn they're wiling to tell us situations . . . that they've done on their own, they've worked out on their own . . .

Listening

The first property of building a relationship, listening, enhances intercollegial relationships and consequently staff uptake of BPK. For example, facilitators 2 and 5 acknowledged nursing staff's voiced needs and ideas by bringing in equipment such as a bath trolley and a mesh sling that benefited both the nursing staff and the residents, and promoted BP.

When nursing staff see that they are listened to and their input are being valued by the facilitators, it helps to build a trusting relationship and allows a two-way information exchange to take place. Facilitator 7 reported that "there was a trust built up because [she] listened to their recommendations" around, for example, when it was best to provide the education. This trusting relationship and open communication could further facilitate dissemination of BPK and promotion of BPKU.

Taking a Caring Approach

Facilitators' use of the second property, taking a caring approach, promoted the development of good relationship with nursing staff. The following quote by facilitator 10 illustrates the effect a caring approach taken by this facilitator had on nursing staff, and consequently on residents.

My emotional outlook toward the staff is very important. When I am talking to them, I consciously try to feel emotionally supportive and caring about them . . . I believe that if we want staff to care about the residents, then we have to care about the staff. I believe that when a person feels cared about, it gives them the strength to pass this caring approach on to others that they care for, the family members, and their fellow staff.

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Maintaining a Professional Manner

The third property, maintaining a professional manner, also nurtured the relationship

between facilitators and nursing staff. For example, facilitator 8 commented on the importance of

"[staying] professional" and "not [taking] behaviors so personally." Furthermore, withholding

any frustration or negative emotion towards the nursing staff in order to build the relationship

was reported by facilitator 2: "I find in my role you can't show your frustration with [nursing

staff] because that's not . . . effective and it's certainly not going to nurture any relationship."

This facilitator had recognized the importance of maintaining a professional manner in order to

nurture the relationship, which would facilitate dissemination of BPK.

Facilitator Strategy #5: Using Influential Nursing Staff

This fifth strategy, identified in Table 3, involves the identification of influential nurses

within a facility in order to encourage dissemination of BPK among their colleagues and support

them in the continued application of BPK. Sixty percent of the facilitators commented on the use

of this strategy for disseminating BPK.

Facilitators sought out keen, well respected and enthusiastic nurses with a "positive

attitude" and a "commitment to affect culture change" to assist with delivery of BPK message

(F9). Facilitator 3 reported how these influential nurses were first mentored by her in order to

conduct peer-to-peer training while implementing an initiative related to lift and transfers, which

was "very well received initially . . . and the staff continued their role afterwards as sort of

trainers or support people in the home."

The following quote includes the comment made by facilitator 6 who identified these

influential nursing staff as resources for disseminating BPK within a facility.

> Well I think if you find a staff that's enthused and interested, encourage them all that you
> can and encourage them to kind of be the go between within their organization to help

facilitate education [italics added] within the organization because sometimes they can do from within what we can't do from without [sic]. . . . And you know especially if you can get a staff member that's fairly well respected within the facility, they can go a long way to getting that *knowledge disseminated* [italics added] within the facility.

Facilitators did not only recognize the importance of these referent leaders from within available staff, they also understood the need to provide these individuals with some sort of infrastructure that could help them sustain the use of BPK. In order to attain this support for staff, facilitators collaborated with organizational leaders and got them supporting the BPK message.

Facilitator Strategy #6: Involving Nurse Leaders

The sixth and final strategy used by facilitators is involving nurse leaders. Seventy percent of the facilitators had recognized the importance of involving and engaging management and the administrative team in order to gain support for dissemination and application of BPK. Their buy-in of BPK and involvement in its dissemination and application were observed by facilitator 6 to have an impact on nursing staff, who in turn demonstrated interest in the uptake and use of BPK: "I think that in long term care facilities where there's a good relationship with management and management is supportive and encouraging, the staff are more interested [in BPKU]."

The following quote by facilitator 4 illustrates the importance of having the support of nursing leaders in order to facilitate the uptake of BPK among nursing staff by using educational modalities that meet individual learner's needs:

We need the support of workplace leaders to facilitate the knowledge to the nurse by the best method which differs for each person. Some like peer to peer, some like e-learning, others are more comfortable at workshops. They should get credit for all learning and should be evaluated on the effectiveness of the learning in the workplace. [F4]

Also, facilitator 1 formed a workgroup consisting of director of care (DOC) and educators in order to identify pressing issues at their LTC facilities and to disseminate and implement BPK to address those issues in an individualized manner. She had understood that it was difficult to disseminate BPK and sustain its use at the bedside without the support of these nurse leaders. The following quotes illustrate her view:

> Well, [the nursing staff] really have to be supported by the management team. If they really feel the management team is sort of throwing it [BPK] at them, and it's sort of the flavour of the month, or the flavour of the year, but management doesn't provide all that support around it, then I think it's really going to fail. And they feel like, why bother, if management doesn't really care . . . on management's part, or an administrator's part there has to be tremendous role modeling, so if you are wanting them to use a protocol, then you have to speak that protocol so that's part of the reinforcer.

> I think you . . . have to as an administrator or DOC or whoever you are, educator, you have to live and breathe whatever it is that you are trying to get them to move forward on. You just can't let up. At all.

Facilitator 7 used the opportunity when she was invited to conduct a presentation on gentle persuasive approach (GPA) to disseminate this knowledge, and bring awareness among administrators about the need to further disseminate this knowledge to their nursing staff. The following quote illustrates her experience:

> [The administrators] did recognize the need for the education and they did see a . . . gap when their P.I.E.C.E.S. nurse left, and I think what they saw most of all was that . . . you shouldn't always rely on one person to be expert for everything because they may leave, and it's better to transfer that knowledge and information and education on to others.

Facilitator 2 reported in her stories how she involved administrators, and got their support in obtaining an equipment that was suggested by nursing staff in order to facilitate their practice which reflected BP. She further encouraged nurse leaders to acknowledge nursing staff's input.

> I did reinforce with [the administrator and the DOC] that it was staff's idea and I make special note, like write a special letter to the administrator to acknowledge the input of the staff as well . . . you know when they called me and said thank you so much I would reinforce that this wasn't my idea, it was staff and they really need to be commended . . .

So I know with this particular administrator she does take the time to thank the staff and I think that's a key as well, recognition. [F2]

Thus, the significance of involving nurse leaders in the process of disseminating BPK and promoting BPKU among nursing staff is evident here.

In summary, this chapter has described the single facilitator role and the six facilitator strategies necessary to implement this role that emerged from the data. The following chapter will provide an interpretation and discussion of the study findings while comparing them to the change agent categories identified from within Rogers' (1995) theory of ID. Through interpretation of the findings, the two research questions will be addressed, and the discussion will be concentrated around the relevant evidence found in the literature. Implications of findings and limitations of this study will also be presented in the next chapter, along with a concluding statement.

Chapter Five: Discussion and Implications of Findings

The following topics will be covered in this chapter: a review of the main purpose of this study; presentation of the two research questions that guided data analysis with discussions of the study findings and how they compare with Rogers' (1995) conceptualization of the change agent role as well as the literature; implications of the findings as well as the limitations of this study; and concluding remarks.

The main purpose of this study was to gain a conceptual understanding of the role of facilitator in promoting BPKU in LTC. Although individuals who practice in the role of a facilitator have been identified by some researchers as a valuable source in bringing awareness of BPK to nursing staff and encouraging them in its application to practice, there is a significant gap in the nursing literature in relation to empirical evidence, particularly pertaining to the facilitator role in LTC practice settings.

With an increasing number of older persons who are ill, do not have support at home, and who depend on the expert care of the nursing staff in LTC settings, it is essential that quality care based on BPK is provided to these elderly clients. The nursing staff who provide care for these elderly clients face many barriers, such as their own educational preparation and available resources, which limit their access to and utilization of BPK. Thus, individuals in facilitator role have been identified as the key link to assist nursing staff in acquiring knowledge based on BP and in applying it to their practice.

These facilitators are often referred to as change agents in nursing literature, suggesting a link to Rogers' (1995) theory of ID that provides an insight into the various social factors involved in a change episode. The social foundation of the theory encouraged me to explore one of the major elements within the theory, the element of change agent, in gaining a conceptual

understanding of the role of facilitators in LTC settings in relation to linking BPK to nursing practice. Through this study, I sought to explore the different roles and strategies that were undertaken by a set of facilitators practicing in LTC settings, and compare these roles and strategies to those undertaken by the change agents as illustrated in the theory of ID (Rogers). In addition, an major intent of this study was to understand how similar the roles and strategies undertaken by today's practicing facilitators are to the related concepts identified by Rogers, and whether Rogers' theory is indeed a useful framework for the nurses in the facilitator role in understanding and guiding the change process that accompanies the implementation of BPK.

Two research questions were posed to explore the role of facilitators and the strategies undertaken by them while encouraging the nursing staff's uptake and utilization of BPK, particularly in the LTC settings: (a) How do the facilitators' roles in LTC settings compare to the change agents' roles as described by Rogers in relation to encouraging nursing staff's uptake and utilization of best practice knowledge? (b) How do the strategies used by the facilitator group reflect the change agent success factors as identified by Rogers for diffusing innovations?

As I address the above questions, the degree of congruency between the study participants' experience and Rogers' work, and conceptualization of a facilitator role and various facilitator strategies will be provided. I will also provide insights constructed from the initial literature review, as well as additional literature used to help place the findings in scholarly context.

Statement of Findings

As a result of inductive data analysis, one facilitator role and six facilitator strategies emerged from the data (see Figure 1). These categories reflect my understanding of the facilitator roles and strategies and how I interpreted the data.

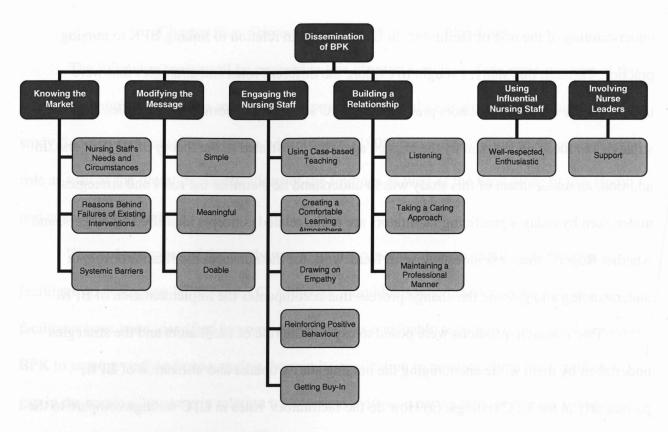*Figure 1.* One facilitator role operationalized through six facilitator strategies. Category of strategies supported by corresponding properties.

A Comparison of Facilitator Role and Change Agent Roles

In this section, a discussion of the key role that emerged from the data, and a comparison of that role with the seven change agent roles will be provided. Table 4 lists these two sets of roles.

Table 4

List of Facilitator Role and Change Agent Roles

Facilitator role in promoting BPKU (from secondary analysis)	Change agent roles in diffusing an innovation (Rogers, 1995)
• Dissemination of BPK	• Developing a need for change • Establishing an information-exchange relationship • Diagnosing problems • Creating an intent in the client to change • Translating an intent to action • Stabilizing adoption and preventing discontinuance • Achieving a terminal relationship

As described in chapter 4, a single role emerged from the data: dissemination of BPK. During the undertaking of this role, facilitators made sure that information based on best practice were delivered to the nursing staff in meaningful messages, and that its applicability was clearly understood by them. Facilitators took care in providing BPK in a useful and practical way. For example, when conducting educational sessions, they used case-based examples to illustrate how BPK could be applied. Such examples were more real to nursing staff and they were able to connect better with the use of BPK. Facilitators used many strategies, such as the one described above, in disseminating BPK. These strategies are discussed in the next section.

Interestingly, the main role of a change agent, as identified by Rogers (1995), is "to facilitate the flow of innovations from a change agency to an audience of clients" (p. 336). Here, the change agent is seen as a link between the change agency system and the client system, and plays a key role in ensuring that innovations reach clients. In this process of "introducing an innovation in a client system," Rogers had identified seven roles for change agents (p. 336). These roles are listed in Table 4.

In describing one of the change agent roles, achieving a terminal relationship, Rogers (1995) talks about increasing clients' technical competence and their ability to evaluate potential innovations, so that clients can develop their ability to be their own change agent and be self-reliant. To some extent, some facilitators from this study also try to enable self-reliance among nursing staff when disseminating BPK by modifying the message contained in BPK into simple, meaningful, and useful messages. In this form, BPK could be easily understood and used by nursing staff. Furthermore, facilitators also use case-based examples to demonstrate to staff and help them apply the knowledge to real cases and problem-solve nursing issues. By translating the BPK for nursing staff, facilitators aim to enable the staff apply that knowledge to their own practice.

For example, facilitator 10 described in her stories how she problem-solved with nursing staff in identifying an alternative way of providing bath to a disruptive client. She helped them to think outside the box while encouraging person-centered care. She stated, "It was exciting for me to feel the staff becoming empowered to move beyond the norm to do what was appropriate in each individual circumstance." This emotional response suggests that enabled staff is the outcome that this facilitator wished to generate.

Another facilitator had mentioned in her stories the confidence a PSW had built from attending one of the dementia courses, and took back what she had learned to her practice setting and successfully applied that knowledge. The BPK that she gained from taking the course and the reinforcement she received in the classroom had enabled her to enact a decision that was grounded in BP.

The above discussion does not infer that the change agent role, achieving a terminal relationship, was present in the data. As the title of that role suggests, it is the last role undertaken by a change agent in order to discontinue the relationship with the client, which was not articulated by the facilitators as they continued to provide their services to nursing staff at the time the data was collected. Nevertheless, the notion of enabling was noted in few of the facilitators' intentions.

The other six change agent roles identified by Rogers (1995) include developing a need for change, establishing an information-exchange relationship, creating an intent to change, translating an intent to action, and stabilizing adoption and preventing discontinuance. Some similarity between these roles and the categories that emerged from the data or their properties exists. The following section speaks to these similarities.

The change agent role, creating an intent to change, involves motivating the clients' interest in an innovation (Rogers, 1995). This reflects the property, getting buy-in, that augments the facilitator strategy, engaging the nursing staff. Similarly, the change agent role, translating an intent to action, involves influencing clients' behaviour based on their needs while working indirectly through opinion leaders. The facilitator strategy, using influential nursing staff, also serves similar purpose. Next, the change agent role, stabilizing adoption and preventing discontinuance, involves "freezing" the new behaviour through reinforcing messages. Again, the

property, reinforcing positive behaviour that augments the strategy, engaging the nursing staff, carries similar purpose. Moreover, the change agent role, establishing an information-exchange relationship, includes developing rapport or building a relationship with clients. This concept was categorized as a strategy, instead of a role, in this study. Nevertheless, the idea present in this category is very similar in this study as well as in Rogers' work. All of the strategies described here are actions or activities undertaken by the facilitators for the purpose of disseminating BPK. By disseminating BPK, facilitators help nursing staff acquire this knowledge. However, acquisition of knowledge does not always translate into utilization of that knowledge. Nonetheless, dissemination of BPK seems to be a prominent and essential role undertaken by all facilitators in promoting BPKU.

In order to determine the degree of congruency between the single role that emerged from the data and the seven change agent roles described by Rogers (1995), the purpose and the categorization of the roles were taken into account. Overall, when examining the role of facilitators and change agents, a transfer of information or innovation from a source system to a client system is taking place, thus, outlining a common purpose. However, the way the facilitator role was categorized in this study differs from that of Rogers' categorization of change agent roles. Rogers had identified one key change agent role that involves facilitating the flow of innovation from the source to the users, and described the other seven roles as means of diffusing that innovation to the users. A possible interpretation here then is that the seven change agent roles that Rogers had described might actually be strategies to operationalize the key change agent role. The similarities that were noted between the seven change agent roles and some of the strategies that were undertaken by the facilitators support this interpretation. Based on these factors, one can presume that comparing the main role of the facilitators in this study with those

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of the change agents described in Rogers' work resulted in the identification of some similarities, at least to some degree. When facilitators from this study spoke about disseminating BPK, they took care to ensure that nursing staff understood how to apply the knowledge that they received. In this way, dissemination of BPK by these facilitators involved not only the mere transfer of knowledge, but the transfer of knowledge in a useful manner. While the overall aim of these facilitators' dissemination of BPK was to ensure its application to practice, the majority of their time was spent in educating staff by providing them with BPK. There was less evidence of facilitators following up with the staff on the unit or making recommendations to ensure continuous application of newly acquired BPK based on observation or direct coaching of staff during practice episodes. This remains a gap and results in the identification of key differences between the BPK role as played out by the facilitators of this study as compared to Rogers' theory of ID. The two change agent roles, stabilizing adoption and preventing discontinuance, and achieving a terminal relationship, reflect this notion of sustaining change, and may be explored further in informing facilitator roles.

A Comparison of Facilitator Strategies and Change Agent Success Factors

This section begins with a discussion of the strategies that were extracted from the data, and compare them with the change agent success factors (Rogers, 1995). These strategies and success factors are listed in Table 5.

Table 5

List of Facilitator Strategies and Change Agent Success Factors

Facilitator strategies in disseminating BPK (from secondary analysis)	Change agent success factors in diffusing an innovation (Rogers, 1995)
Knowing the market	Change agent effort
Modifying the message	Client orientation
Engaging the nursing staff	Compatibility with clients needs
Building a relationship	Change agent empathy
Using influential nursing staff	Formative evaluation
Involving nurse leaders	Goal setting
	Audience segmentation
	Mass media communication strategies
	Interpersonal communication strategies
	Entertainment education
	Change agent credibility
	Change agent aides
	Identifying networks
	Demonstration

A list of facilitator strategies and change agent success factors are presented in Table 5, and a comparison of these strategies to the success factors are presented in Table 6. The facilitator strategies listed in the first column of Table 6 are matched with comparable categories from Rogers' (1995) work in the second column. For example, the first facilitator strategy,

"Knowing the Market," is comparable to the category "Diagnosing Problems" from Rogers'

theory of ID. The sections following Table 6, further illustrate this comparison.

Table 6

Comparison of Categories Pertaining to Strategies and Success Factors

Strategies from secondary analysis	Success factors from Rogers' (1995) theory of ID
1. Knowing the market	1. Diagnosing problems*
2. Modifying the message	2. Compatibility with clients' needs, Audience segmentation
3. Engaging the nursing staff	3. Client orientation, Entertainment education, Change agent credibility, Demonstration
4. Building a relationship	4. Change agent empathy, Establishing an information-exchange relationship*
5. Using influential nursing staff, Involving nurse leaders	5. Identifying networks

*Change agent role

Knowing the Market

As illustrated in Table 5, six strategies related to disseminating BPK among nursing staff

emerged from the data. Through the use of the first strategy, knowing the market, facilitators

demonstrated awareness of the nursing staff's needs and circumstances, reasons behind failures

of existing interventions, and systemic barriers. Such awareness assists facilitators in further

planning and conducting individualized activities that can facilitate the dissemination of BPK

among nursing staff. For example, as facilitator 5 had described, it is important to examine and understand why an existing program is not successful. This awareness will allow facilitators to modify or replace an existing program based on staff's needs. Rogers (1995) had identified this concept as diagnosing problems. As change agents undertake this diagnostic role, they analyze the problems, determine why existing alternatives are not useful, view the situation from clients' perspective, and arrive at diagnostic conclusions. The similarities between these two strategies are evident here (see Table 6).

Involving Nurse Leaders

One strategy that many of the facilitators used to overcome some systemic barriers was to involve nurse leaders such as nursing administrators and directors of care. Including them in educational sessions and keeping them in the loop while problem-solving a clinical situation were two of the means by which the facilitators obtained the support of nurse leaders who played a major role in nursing staff's uptake and use of BPK. A LTC facility where the management team had a good relationship with nursing staff and were supportive and encouraging had a positive impact on nursing staff's attitude towards BPKU. Nurse leaders' commitment to BPKU and role-modeling best practice, and recognition of staff for their BPKU were all articulated by the facilitators to be important to nursing staff's uptake and use of BPK. However, it was not consistently evident in the data that facilitators deliberately used the resources of these nurse leaders to not just disseminate BPK, but to promote and sustain BPKU among nursing staff. This strategy somewhat reflects the change agent success factor, identifying networks, whereby influential individuals are sought out by change agents for the purpose of diffusing an innovation.

Modifying the Message

The second strategy that emerged from this secondary analysis was modifying the message. It was mentioned by 80% of the facilitator group and was also addressed by Rogers (1995) in the change agent success factor, compatibility with clients' needs. During this process, facilitators identify practice that is based on traditions and replace it with simple and meaningful take home messages based on BPK. They encourage these messages to be transmitted to the front line nursing staff using simple language and tangible examples, and try to facilitate the implementation of new message into nursing staff's current knowledge without it being perceived as a dramatic change process. In order to facilitate the uptake of BPK, it is also necessary to contextualize the message and find a good fit. Audience segmentation (Rogers), which involves dividing a heterogeneous audience into homogenous groups and using different strategies to meet their unique needs, was evident to some degree during the undertaking of this strategy as facilitators modified the terminologies they used when consulting with PSWs and registered staff.

Thus, the category, modifying the message, is similar to Rogers' (1995) success factor, compatibility with clients' needs. In Rogers' term, ideas are re-invented and programs are modified to suit the clients' needs. When using this strategy, the facilitators specifically referred to the knowledge piece of BP. Whereas compatibility with clients' needs, according to Rogers, extended to an entire program and tended to overlap with change agents being client oriented. In fact, according to Rogers' definition of client orientation (see Appendix C), this success factor encompasses the following two categories: (a) compatibility with clients' needs and (b) establishing an information-exchange relationship. An overlap within change agent success factors as well as between a change agent success factor and a change agent role is evident here.

Overlaps such as this among Rogers' categories imply that his concepts are not mutually exclusive. In fact, this overlap contributed to some of the challenges that I faced while conducting deductive analysis.

Through data analysis, I recognized the relationship between roles and strategies, and recognized strategies as tools being used by facilitators to operationalize their role. This connection is also evident to some degree in Rogers' (1995) categories. However, Rogers does not explicitly assign success factors to change agent roles.

Engaging the Nursing Staff

The third facilitator strategy that emerged from this secondary analysis, engaging the nursing staff, had many properties that were similar to some of the change agent success factors. For example, during educational sessions, facilitators used various teaching aides such as powerpoint presentation, video series and demonstration, combined with discussions using case-based scenarios. This use of case-based scenarios was reflected in all of the facilitators' stories. Relating educational materials to familiar clinical situations appeared to be a useful tool in engaging the nursing staff while disseminating BPK. The change agent success factors, the use of entertainment education and demonstration, are reflected in this category.

Also, the importance of fostering a comfortable, trusting and non-judgmental learning atmosphere in order to engage nursing staff and facilitate uptake of BPK was also demonstrated by the facilitators. Validating nursing staff's experiences and feelings, using humour, and fostering a non-judgmental learning environment can facilitate nursing staff's uptake of BPK. Facilitators also shared their own clinical experiences with staff to establish credibility. This notion is reflected to some degree in the success factor, change agent credibility, where change agents are perceived as competent and safe by the target audience.

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Another means by which facilitators engaged the nursing staff are by drawing on empathy, encouraging and reinforcing their positive behaviour, and getting their buy-in for BP. Actions such as giving positive feedback, providing encouraging words, and commending small successes all helped to engage the nursing staff both in formal educational meetings and during on-site face-to-face interactions. Instilling an interest in BP, by pointing out its benefits to staff, further engaged nursing staff and facilitated dissemination of BPK.

Some of these properties involved in engaging the nursing staff have some similarity to the change agent success factor, client orientation. According to Rogers (1995), client orientation has a broad scope. It implies, (a) being sensible to the needs of the clients, (b) being feedback-minded, (c) having closer rapport with clients, and (d) basing the diffusion activities on clients' needs. The first and the last factors were demonstrated in one of the facilitators' stories. This facilitator had observed the positive response that she received during a video session, became sensitive to their needs, and planned to use that video earlier in her educational sessions in order to engage the staff more.

Although there are some differences between the activities described by the facilitators and the ones outlined by Rogers (1995), the overall goal of such activities is one: to engage the audience to disseminate BPK.

Building a Relationship

Another facilitator strategy that emerged from the data involves building a relationship. Facilitators listened to nursing staff's ideas, took a caring approach towards them, and maintained professional manner in order to connect with nursing staff and build a trusting relationship. This close affiliation facilitated the dissemination of BPK. The success factor, change agent empathy, had similar functions to the caring approach that was undertaken by

facilitators in building a trusting relationship with nursing staff. Rogers (1995) had also identified a category similar to building a relationship, titled, establishing an information-exchange relationship. Developing rapport with clients by empathizing with their needs and problems, and by being perceived as credible, competent and trustworthy are means by which Rogers suggests that change agents build rapport with clients. He identified this category as a role. As I interpreted building a relationship as a venue or a tool, rather than the responsibility of facilitators, in disseminating BPK, I had categorized it as a strategy using the definition that I formulated for strategy while conducting data analysis. For the purpose of data analysis, I had defined facilitator role as a "responsibility", and facilitator strategy as "a plan of action, an activity, an approach or a technique" undertaken by facilitators to operationalize their role(s). Regardless of it being labeled as a strategy or a role, the goal of building a relationship was to disseminate BPK or diffuse innovations.

Using Influential Nursing Staff

The use of influential nursing staff was another strategy that emerged from the data. Nurses who were enthusiastic about the application of BPK, committed to culture change, and who were well respected within the practice setting were sought by the facilitators to influence those nurses' colleagues. In the change agent success factor, identifying networks, these influential individuals are referred to as opinion leaders by Rogers (1995), and appear to be a valuable source for disseminating BPK. One facilitator mentioned that these nurses continued to function in that role and provided support as the change was being implemented even after the facilitator's role ended after disseminating the knowledge. This strategy appears to be useful in sustaining change. However, the strategy's long-term effect is not clear from the data.

Summary of Facilitator Strategies and Rogers' Categories

All of the facilitator strategies mentioned above were addressed to some degree by Rogers (1995). Success factors that were unique to Rogers (1995) include: (a) change agent effort, which involves the notion of purposefully seeking and contacting clients who most need the support of change agents; (b) use of formative evaluation, which involves pretesting the effectiveness of messages and ideas with a sample from the target group; (c) goal setting; (d) use of mass media communication strategy; and (e) use of change agent aides or paraprofessional aides, who are "less than fully professional change [agents] who intensively [contact] clients to influence their innovation-decisions" (Rogers, p. 351). Moreover, the essence of interpersonal communication strategy from Rogers' work was embedded in all of the facilitator strategies, and was not identified as a separate category in this study.

In summary, all of the facilitator strategies are congruent with the change agent success factors to some degree. Even though Rogers' (1995) work has not been updated in the past decade, the change agent success factors are still reflected in the work of practicing facilitators today for the purpose of disseminating BPK. Other than the change agent element, the element of innovation with its perceived characteristics as described by Rogers has been successfully applied in other intervention studies set in LTC, such as the one conducted by Kovach et al. (2008). These researchers have also highlighted the importance of context or the organizational culture. With its social foundation, Rogers' theory can provide more insight into the various factors involved in BPKU. Therefore, Rogers' work is a useful framework on which nurse researchers can build knowledge with respect to facilitating BPK and promoting BPKU in the clinical field.

The concept of enabling, which was discussed as facilitator role was compared to change agent roles, was also evident in the literature. Stetler et al. (2006) for example, identified two key components of the external facilitator role from their evaluative studies. These components were interactive problem solving and support.

The first component was made up of two elements: interactive and problem solving. The external facilitators from Stetler et al.'s (2006) study interacted with their clients as they collected formative data, and used that data in identifying, and in some instances, resolving the problems. Facilitators in this study also interacted and collaborated with nursing staff as they problem-solved clinical issues in the process of disseminating knowledge.

The second component, support, involved encouraging and helping. Harvey et al. (2002), in their concept analysis of facilitation, also talk about facilitators providing practical help while taking on a task-oriented approach, and enabling individuals while taking on a holistic approach. The latter involves "enabling individuals and teams to analyse, reflect and change their own attitudes, behaviour and ways of working" (Harvey, p. 580). The authors also report that facilitators move from a supporting role to an enabling role as they develop skill and confidence with experience. Furthermore, Harvey et al. refer to their findings from the literature that emphasize experiential learning, critical reflection and changing practice cultures in order to enable change. However, it is not apparent in their study how these components of enabling can be operationalized. Although I had made an inference earlier that some facilitators try to enable self-reliance among nursing staff by modifying the message as they disseminate BPK, the term "enabling" was not present in the data. Thus, what entails enabling strategies is not apparent in the literature or the data used for this secondary analysis.

In addition to facilitation, the element of evidence and context, were also discussed by Rycroft-Malone, Harvey, et al. (2004). The nature of the evidence and the practice context also play a significant role in the promotion of BPKU. Harvey et al. (as cited in Rycroft-Malone, Harvey et al.) report that facilitators "have a key function in enabling the translation and particularization of evidence into practice by working with individuals and teams to develop their practice and shape their local contexts" (p. 923). This notion is very similar to the facilitator strategies, modifying the message, using influential nursing staff and involving nurse leaders. Although the exploration of these two elements, evidence and context, is beyond the scope of this study, their influence on facilitating BPKU is highlighted in the literature and suggest a holistic approach to the facilitation of BPKU.

In facilitation, as both of the key facilitator and change agent roles suggest, getting the information or BPK into the hands of the clients in a useful form might be the first important step in promoting BPKU. However, this initial step does not guarantee that the clients are indeed going to use the information that they have acquired. Expansion of the BPK facilitator role to include frequent follow-up on the unit and coaching during direct care episodes might be a means of ensuring continuous application of BPK. However, this type of activity was not evident from the data. It appears that facilitators are limited in their attempts to encourage BPKU to a level that only goes as far as educating the staff and providing the knowledge in a useful form – that is, dissemination of BPK (BPKD). Facilitator strategies, such as using influential nursing staff and involving nurse leaders, might be further explored to sustain change based on BPK. However, the data itself does not reveal the long-term effect of these strategies in sustaining change.

Empirical studies concerning facilitator strategies are scarce. The available research does demonstrate the effectiveness of two of the strategies or success factors: (a) using influential nursing staff, and (b) audience segmentation. According to the study done by O'Brian et al. (as cited in Thompson et al., 2006), interventions that used opinion leaders or influential people seemed to be fairly effective. The use of audience segmentation was also evident in the implementation study conducted by Lekan-Rutledge (2000), and had a positive outcome.

Also, some researchers suggest that facilitators require certain skills and personal attributes in order to conduct their role (Harvey et al., 2002; Thompson et al., 2006). Among these skills and attributes are communication skill, interpersonal skill, local credibility and commitment (Harvey et al.). These skills and attributes are evident to some extent within the strategies used by the facilitators in my study. For example, the importance of communication and interpersonal skills are evident in the facilitator strategies of engaging the nursing staff, building a relationship, using influential nursing staff and involving nurse leaders.

Researchers suppose that skills and working styles are acquired by a facilitator informally through trial and error or more formally through related models (Harvey et al., 2002). My study provides a comparison of the strategies that emerged from the experience of facilitators of BPK working in LTC facilities in Ontario with change agent success factors that were identified from Rogers' theory of ID (Rogers, 1995). Strategies from both informal and formal sources are presented here to further the practice.

Implications of Findings

The findings of this study have implications for (a) nursing practice and professional development, (b) further research examining the facilitator role, and (c) theory development.

Implications for Nursing Practice and Professional Development

Knowledge and experience contribute to nursing professionals' growth. The knowledge of roles and strategies undertaken by facilitators who participated in the primary study, along with those illustrated in a theoretical framework (Rogers, 1995), provide a toolkit for individuals in the facilitator role. This awareness can add to the knowledge and performance of the facilitators who seek to enhance their practice while promoting the uptake and use of BPK.

Facilitators who are involved in projects that include disseminating BPK in a LTC practice setting can benefit from the different roles and strategies outlined in this study. For example, in consideration of the different educational backgrounds of the nursing staff in LTC facilities, information on BP can be modified into simple and meaningful messages and case-based teaching approaches can be undertaken to ensure that BPK reaches nursing staff, especially PSWs who spend the most time with residents providing direct care.

Educational programs in the health care setting can benefit from the use of case-based teaching approach. In fact, this approach to teaching is currently established in Ontario's nursing curriculum (Rideout, 2001), as well as worldwide (Uys & Gwele, 2005). This style of teaching will allow learners to apply theoretical knowledge to practical situations, build problem-solving and critical-thinking skills, and illustrate the application of BPK (DeMarco, Hayward & Lynch, 2002; Uys & Gwele). Such illustrative examples and discussions can be more effective than didactic conferences as nursing staff show a preference for interpersonal and interactive method of learning.

A culture change is also important in facilities where traditional practices are present and more frequent. In such instances, extending the strategies such as knowing the market, involving nurse leaders, using influential nursing staff, building a relationship, and engaging the nursing

staff, where a team effort is put into place to bring about change can help establish a work culture that is based on best practice. As the study by Rycroft-Malone, Harvey, et al. (2004) suggested, context or the environment where the change is taking place, is also a significant influential factor in the promotion of BPKU. Thus, the culture of the work environment is also important.

Also, data suggested that facilitators who are not employed within the organization where they are implementing BP, will benefit greatly from the help of influential registered nurses and unregulated health care providers. These are individuals who are well respected by the fellow nursing staff, and who are enthusiastic about bringing change based on BPK. Thus, familiarizing oneself with the organizational culture, knowing the actual needs of the nursing staff, and being aware of the systemic barriers can assist in planning for disseminating and promoting BP in the practice settings.

Implications for Further Research

In this section, possible research topics for future research are presented. These topics arose from my insight into the shortcomings of this present study, as well as my growing understanding of the implications of Rogers' (1995) theory of ID for nursing practice.

Only the change agent element from the theory of ID (Rogers, 1995) was examined here for the purpose of this study. However, there are four other interrelated key elements that form the theory of ID. These elements include: innovation, communication channels, time, and a social system. Within each of these four key elements, there are many interconnected concepts that contribute to the success of the diffusion of an innovation. Hence, further research that tests the theory in its entirety in relation to the facilitation of BPKU can be considered to understand the full potential contribution of the theory of ID to nursing.

For example, within the element of time, Rogers (1995) describes a five-stage cognitive innovation-decision process that a potential adopter undertakes. The stages are knowledge, persuasion, decision, implementation and confirmation. Depending on the stage that a potential adopter is at, change agents take on different roles to obtain a favourable outcome. This concept speaks to the flexibility of the role, and research designed to explore this concept will provide more insight into the need for various facilitator roles depending on where the nursing staff is at in the innovation-decision process. The different adopter categories may also be an important concept to explore for the dissemination of BPK and facilitation of BPKU, and in the development of a related midrange nursing theory. The importance of adopter categories or nurse factor in facilitating BPKU has been recognized in the field of knowledge translation (McPhail, 1997). However, considering the many interconnected elements and sub-elements that are present in the theory of ID, conducting a study that tests the entire theory may be challenging.

Further research may be conducted to explore the relationship between dissemination of BPK (BPKD) and facilitation of BPKU. Although facilitators from this study talked about promoting BPKU, the stories they shared and activities they undertook all suggested their involvement in BPKD. This suggests a relationship between these two concepts, and in fact, BPKD can be interpreted as a stage or step in facilitating BPKU. Further research is needed to clarify these concepts.

One factor that has been discussed in this study and has been identified as a gap is the need to study the long-term effect of some of the facilitator strategies in sustaining change among nursing staff. Facilitators from this study spoke to disseminating BPK, but did not clearly articulate their role in ensuring that BPKU is practiced consistently by the nursing staff and the

change based on that BPK is sustained. Thus, a longitudinal research design to examine this concept may be necessary.

Also, further empirical studies are required to test the effectiveness of the strategies and success factors, and the context in which they are successfully employed. However, such studies where each of the strategies or success factors is explored for effectiveness, may be timely and costly. A quality improvement approach may be an alternative method to test the desired strategy at individual organizational level, which may contribute to the development of practice theories.

Moreover, the data set from the primary study, which is rich with facilitators' experience in facilitating BPKU among nursing staff in LTC, can be used to conduct further secondary analyses. For example, a secondary analysis can be conducted to extract evidence related to facilitator skills and attributes from the primary data, and compare with those identified in the literature. Also, as the notion of enabling was noted in few of the facilitators' intentions, an analysis of the entire data set from the primary study may shed more light on this topic. In addition, research similar to the primary study can be repeated to explore the same phenomena in other practice settings. The findings can then be compared to examine transferability.

Implications for Nursing Theory Development

In addition to developing its own theories, the discipline of nursing has also historically borrowed theories from other fields such as the sociologic sciences (Bielkiewicz, 2006), behavioural sciences (Kuhns, 2006), biomedical sciences (Frazier, 2006), and administration and management (Oberleitner, 2006). One such borrowed theory is Rogers' (1995) theory of ID. However, this theory has been adapted and used in nursing without testing its applicability to nursing. Rogers originally developed this theory to diffuse agricultural innovations, and it was later adapted to other innovations suggesting the theory's use in diffusing various innovations.

The theory also represents a didactic communication system, where the aim is to spread or diffuse a new technology or information to the users. The applicability of such communication or diffusion strategy might not be successful in sustaining BP in nursing as it exists today. The mere "pushing out" of information in itself is not effective in the promotion of BPKU (Rycroft-Malone, Seers, et al., 2004).

As the data illustrates, case-based education, where teachers and learners are engaged in a two-way information exchange process, as well as in building a relationship are essential to the dissemination of BPK and promotion of change. Other strategies such as knowing the market, modifying the message, engaging the nursing staff, using influential nursing staff and involving nurse leaders all take the user into account and reflect the importance of taking an interpersonal approach, contextualizing, and providing a support system. Thus, this study provides an insight into dissemination of BPK in LTC settings, from which a practice theory may be developed. In order to contribute to the development of nursing knowledge, studies such as the primary study and the present study are needed. Additional work, such as a case study, that further explores the strategies involved in promoting BPKU will allow for a comparison to be made between the strategies that the facilitators in this study used to disseminate BPK and the strategies for promoting BPKU. Such empirical work will contribute to the development of a conceptual framework that is grounded in nursing research, and which address today's nursing issues related to BP.

Limitations

Facilitators who participated in the primary study provided their services to LTC facilities, and therefore, transferability of the study findings to other settings needs caution. Furthermore, the facilitator strategies presented here reflect strategies used by a subset of 10

facilitators who are currently practicing. Since any approach or action taken by a facilitator in order to operationalize his or her role in promoting BPKU can be considered a strategy, the strategies identified here are limited to these particular facilitators' experience at this particular time, and therefore the list of strategies can be expected to evolve or expand with time and sample size. Since strategies presented here are not tested empirically, their effectiveness may be context specific.

Nevertheless, I have endeavoured to provide sufficient information, in terms of methods, findings, demographic detail and illustrative quotes to enable readers to formulate a judgment as to the rigour of the approach and transferability of findings to other settings.

Conclusion

Rogers' (1995) theory of ID has been used in many nursing studies to understand the process involved in implementing change based on best practice. However, the theory itself has not been tested to determine its fit in implementing change in the health care sector, particularly in nursing. The findings of this study reveal that there is some congruency between the facilitator role and strategies and the change agent roles and success factors, and that Rogers' theory is indeed a useful framework in understanding the role of facilitators. As borrowed theories provide a foundational knowledge and understanding of a concept that has not been explored fully in nursing (McEwen, 2006), the theory of ID provides a conceptual framework of and insight into the facilitator role and the planned change process that takes place during BPKU. However, in using such borrowed frameworks, it is important that nursing scholars also be attentive to the effects and consequences that occur outside of the ones proposed by the framework (Rycroft-Malone, 2007). For instance, the concept of identifying networks or opinion leaders from Rogers' work included both influential nursing staff and nurse leaders in this study. This information will

illuminate the variable or the topic being studied in the context of nursing, and facilitate the development of practice or micro theories to guide nursing practice. Also, qualitative studies such as this identify concepts from the experience of the practitioners on which theories could be built.

The findings, which include the identification of one facilitator role and six facilitator strategies, resonate to some degree with the change agent roles and success factors. The purpose of the main role of facilitators and change agents is to disseminate BPK or diffuse an innovation. That is, to transfer the information or message from a source to clients. In this case, the aim of the facilitators was to get the information on BPK into the hands of nursing staff. The strategies these facilitators used to disseminate BPK also resonated to some degree with change agent success factors in diffusing an innovation. By providing an insight into the experiences of facilitators, this study has added to the knowledge and understanding of disseminating BPK. Although the importance of some of these facilitator strategies may appear to be obvious in disseminating BPK to some practitioners, capturing these concepts in a rigourous study strengthens the transferability of these strategies and enables them to be studied further and, subsequently, be used in the construction of nursing theories.

Thus, the findings of this study comparing facilitators' experience with the element of change agent from Rogers' (1995) theory of ID provide a conceptual understanding and add to the foundational knowledge of the facilitators' role in promoting BPKU in LTC settings. The findings also call for clarification of the relationship between disseminating BPK and facilitating BPKU, and can be used to further the research in this area and advance future work related to the design, implementation and testing of interventions for facilitators to disseminate BPK and promote BPKU in LTC settings. This advancement in nursing practice would consequently

benefit everyone involved, including the clients, nursing staff, and the organizations within which they live and work.

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

Appendix A

Demographic Data of Participants from Primary Study

		Facilitators	
	(*n*=34)	Average	Range
Age (years)		47.5	
Gender			
Male	2		
Female	32		
Ethnicity*			
Caucasian	29		
Other	2		
Highest degree obtained*			
College diploma	5		
Undergraduate degree	15		
Graduate degree	11		
Years in present position		3.7	0 - 7
Years in prior facilitator positions		4.2	0 - 16
Employment status*			
Full-time	30		
Part-time	3		
Number of LTC facilities covered		13.4	1 - 79
Role in facilitation (%)		52.2	10 - 85

*Missing subject data, total less than 34.

Appendix B

Concept Definitions of Change Agent Roles

Concept	Conceptual Definition	Operational Definition
Identifying Needs (Developing a Need for Change*)	Assessing the clients' needs and helping them become aware of the need to change behaviour.	Facilitators identify the problematic areas in current nursing practice in their practice settings, and address these issues with the staff and/or policy decision-makers to make them aware of the need to change the practice or condition.
Developing Rapport (Establishing an information-exchange relationship*)	Developing rapport with the clients by empathizing with clients' needs and problems, with the goal of being perceived by the customer group as credible, competent, and trustworthy.	Facilitators empathize with the nurses' needs and problems, and state their relationship with the nursing staff and how having empathy has been purposefully demonstrated to staff so that they are being perceived by these staff as credible, competent and trustworthy, so that BPK knowledge can be shared.

Concept	Conceptual Definition	Operational Definition
Diagnosing Problems*	Analyzing the problems, determining why existing alternatives are not useful, viewing the situation from clients' perspective, and arriving at diagnostic conclusions.	Facilitators describe the problem as they understand from nurses' perspective, and report why they believe nursing staff are not able to correct their practice based on what's already available, and identify alternative solutions based on BPK.
Motivating for Change (Creating an Intent to Change*)	Creating an intent in the client to change, and motivating their interests in the innovation.	Facilitators discuss BPK (e.g., significance and effectiveness) with nursing staff in order to create an interest in the nurses to change their practice.
Promoting Action (Translating an Intent to Action*)	Influencing the clients' behaviour based on their needs while working indirectly through opinion leaders and activating near-peer interpersonal networks.	Facilitators influence for change based on the nurses' needs and identify "opinion leaders" or influential nurses through whom they indirectly diffuse this change among these nurses' peers.

Concept	Conceptual Definition	Operational Definition
"Freezing" Behaviour (Stabilizing Adoption and Preventing Discontinuance*)	"Freezing" the new behaviour through reinforcing messages.	Facilitators use reinforcing messages, and encourage and support the nursing staff in continuing the utilization of BPK.
Enabling Self-Reliance (Achieving a Terminal Relationship*)	Increasing clients' technical competence and their ability to evaluate potential innovations, thus developing their ability to be their own change agent and be self-reliant.	Facilitators enhance nursing staff's research skills, that is, their ability to retrieve, critique, and apply BPK to their client situation, as well as other skills related to the BPK they are promoting in order to enable the nurses to be their own resources for change.
Other Roles		Other roles undertaken by the facilitator group to promote BPKU and not captured in the above categories.

* Rogers' terminologies

Adapted from *"Diffusion of Innovations,"* by E. M. Rogers, 1995, p. 336-337, 357.

Appendix C

Concept Definitions of Change Agent Success Factors

Concept	Conceptual definition	Operational definition
Change Agent Effort*	The extent of the change agent effort in contacting and communicating activities with clients, and assisting clients who most need their help.	Facilitators make the effort to contact and promote BPKU among the staff, and spend more time with the staff who they identify as most needing their help in applying BPK to practice.
Client Orientation*	Being sensible to the needs of the clients, rather than the needs of the agency or the organization in which the clients work. This includes being feedback-minded, having closer rapport with clients, and basing the diffusion activities on clients' needs.	Facilitators build a close relationship with the clients, obtain feedback from them, and base activities related to BPKU on their needs, rather than strictly enforcing the organization's expectations.

Concept	Conceptual definition	Operational definition
Re-inventing Ideas / Modifying Programs (Compatibility with Clients' Needs*)	Being aware of the clients' felt needs and adapting the change program to them.	Facilitators contextualize the BPK or modify the intervention to meet the needs of the nurses.
Change Agent Empathy*	Empathizing with clients' circumstances and needs.	Facilitators empathize with the nursing staff and express their understanding of the nurses' situations and needs.
Formative Evaluation*	Pretesting the effectiveness of messages/ideas with a sample group from the target audience.	Facilitators first test the educative materials related to BPK with a few staff to evaluate the effectiveness of the materials before using them to promote change among others.
Goal Setting*	Setting specific, reasonable and achievable goals.	Facilitators set specific, reasonable and achievable goals related to the implementation of BPK.

Concept	Conceptual definition	Operational definition
Audience Segmentation*	Dividing the audience and using different (communication) strategies to meet their unique needs.	Facilitators address RNs, RPNs, and HCAs/PSWs as a unique group of staff needing individualized promotion strategies, and are selective in transmitting relevant information to the different groups.
Mass Media Communication Strategies*	Use of internet, television, newspaper and journals to relay the message or information to a large group.	Facilitators use non-personnel sources of information (e.g., printed information and internet) to share information related to BPK with staff.
Interpersonal Communication Strategies*	Exchange of information between two or more individuals to promote the adoption of the innovation.	Facilitators discuss BPKU with nursing staff in person and facilitate further discussion among nursing staff.

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Concept	Conceptual definition	Operational definition
Entertainment Education*	An educational idea is put in an entertainment message.	Facilitators make use of videos or other means of entertainment that demonstrate and promote BPKU.
Change Agent Credibility*	Being perceived as competent (knowledgeable and expert), and safe (trustworthy).	Facilitators are perceived by the nursing staff as knowledgeable or experts, and as trustworthy.
Change Agent Aides*	Use of "aides" who are homophilous or similar to the clients in most aspects (e.g., socioeconomic status, formal education and ethnicity) in diffusing an innovation.	Facilitators use the "train-the-trainer" method, and train a few of the nurses to promote BPKU among nursing staff.

Concept	Conceptual definition	Operational definition
Identifying Networks	Use of opinion leaders – individuals who are able to influence the attitudes or behaviours of others – in diffusing innovation.	Facilitators promote BPKU among nurses who they identify as influential. These nurses then influence the attitudes and behaviours of their peers in changing practice.
Demonstration*	The notion of learning by observing is implemented. Demonstrations are particularly effective when conducted by opinion leaders, and they help the potential adopters evaluate the innovation in use under conditions similar to their own.	Facilitators or "opinion leaders" serve as role models, and demonstrate how to apply BPK to practice.

* Rogers' terminologies

Adapted from "*Diffusion of Innovations*," by E. M. Rogers, 1995, p. 17-19, 339-357.

Interview Guide of Primary Study

EXPLANATION AND STATEMENT REGARDING THE STUDY:
I'm interested in learning about the factors that influence the facilitation of nursing staffs'
utilization of best knowledge in LTC practice settings. I would like to hear about these factors
by listening to descriptions of incidents from your practice as a facilitator that were particularly
satisfying and those that were somewhat frustrating. I am interested in what supports the efforts
of facilitators of knowledge utilization and what interferes with efforts to enhance nursing staffs'
utilization of best knowledge. I would like to learn about these things from your perspective.

Question #1 (for first interview only):

Let's start by talking about your experiences as a facilitator of knowledge utilization in general.
Can you tell me what has struck you most about working with nursing staff in LTC facilities as a
facilitator of knowledge utilization?

Probes for question #1:

What else has struck you? (repeat as often as responses are forthcoming)

Question #2:

Think back and identify an incident you remember as a particularly satisfying experience related
to your work of encouraging nursing staff to utilize best knowledge. Can you describe, as
completely as you can, the incident and what made it satisfying?

Probes for question #2:
- What type of knowledge was involved in the facilitation experience/incident?
- What were the circumstances that led up to this incident?
- When and where did it occur?
- Who was involved in the incident? (*roles of persons*)
  - What exactly did (*person identified above*) do?
  - How did you respond to (*person identified above*)?
  - How did (*person identified above*) actions affect your behaviour?
- What was particularly significant about the incident to make you feel satisfied?

Can you remember another incident that you would like to share? (if yes, repeat probes as
identified above)

Question #3:

Think back and identify an incident you remember when "things didn't go so well." Think of an incident when you experienced a sense of dissatisfaction or frustration in relation to your responsibility for enhancing nursing staffs' utilization of best knowledge. Can you describe, as completely as you can, the incident and what made it dissatisfying or frustrating?

Probes for question #3:
- What type of knowledge was involved in the facilitation experience/incident?
- What were the circumstances that led up to this incident?
- When and where did it occur?
- Who was involved in the incident? (*roles of persons*)
  - What exactly did (*person identified above*) do?
  - How did you respond to (*person identified above*)?
  - How did (*person identified above*) actions affect your behaviour?
- What was particularly significant about the incident to make you feel dissatisfied or frustrated?

Can you remember another incident that you would like to share? (if yes, repeat probes as identified above)

Question #4:

Having just reflected on (*# of incidents described*) critical incidents that are meaningful to you, can you share what these incidents taught you about the factors that influence the facilitation of nursing staffs' knowledge utilization in LTC?

Closing:

Is there anything else that you would like to tell me about facilitating nursing staffs' utilization of best knowledge in LTC practice settings?

Appendix E

Questionnaire for Written Submissions from Primary Study
EXPLANATION AND STATEMENT REGARDING THE STUDY:
We are interested in learning about the factors that influence the facilitation of nursing staffs'
utilization of best knowledge in LTC practice settings. We would like to learn about these
factors by reading descriptions of incidents from your practice as a facilitator that were
particularly satisfying and those that were somewhat frustrating. We are interested in what
supports the efforts of facilitators of knowledge utilization and what interferes with efforts to
enhance nursing staffs' utilization of best knowledge. We would like to learn about these things
from your perspective.

Please respond to the following questions as completely as possible.

1.   What has struck you most about working with nursing staff in LTC facilities as a
      facilitator of knowledge utilization? (*for first written submissions only*)

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2.   Think back and identify an incident you remember as a particularly *satisfying* experience
      related to your work of encouraging nursing staff to utilize best knowledge.   Briefly
      describe the incident by answering the following questions.

      What type of knowledge was involved in the facilitation experience/incident?

      What happened?

      What were the circumstances that led up to this incident?

      When and where did it occur?

      Who was involved in the incident?

            What exactly did he/she/they do?

            How did you respond to him/her/them?

            How did his/her/their actions affect your behaviour?

      What was particularly significant about the incident to make you feel satisfied?

      Can you remember another incident that you would like to share? (if yes, please respond
      to the same questions as listed above)

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3. Think back and identify an incident you remember when "things didn't go so well." Think of an incident when you experienced a sense of *dissatisfaction* or *frustration* in relation to your responsibility for enhancing nursing staffs' utilization of best knowledge. Briefly describe the incident by answering the following questions.

What type of knowledge was involved in the facilitation experience/incident?

What happened?

What were the circumstances that led up to this incident?

When and where did it occur?

Who was involved in the incident?

What exactly did he/she/they do?

How did you respond to him/her/them?

How did his/her/their actions affect your behaviour?

What was particularly significant about the incident to make you feel dissatisfied or frustrated?

Can you remember another incident that you would like to share? (if yes, repeat probes as identified above)

4. Having just reflected on critical incidents that are meaningful to you, can you share what these incidents taught you about the factors that influence the facilitation of nursing staffs' knowledge utilization in LTC?

Is there anything else that you would like to tell me about facilitating nursing staffs' utilization of best knowledge in LTC practice settings?

Appendix F

Participant Information Sheet and Consent Form from Primary Study

Title of study: Facilitating Knowledge Utilization in Long-term Care Settings: Exploring Influential Factors Through Critical Incident Technique

Principle Investigator: Nadine Janes, RN, PhD(Candidate)
Assistant Professor, Ryerson University, School of Nursing
(416) 979-5000, ext.6316

Co-investigators: Mary Fox, RN, PhD(Candidate)
Director, Collaborative Research Program: Rehabilitation & Long-Term Care

Mandy Lowe, BSc (OT), MSc
Clinical Educator, Occupational Therapy
Toronto Rehabilitation Institute

Kathy McGilton, RN, PhD
Research Scientist
Toronto Rehabilitation Institute

I am being invited to participate in a research study.

Aim of the study:
The purpose of this study is to learn about the factors that influence the facilitation of nursing staffs' utilization of best knowledge in Long-term Care (LTC) practice settings.

Description of the study:
If I agree to participate in the study, I have a choice to participate in interviews or to write about my experiences on a secure website.

1. If I choose to be *interviewed*, I will be interviewed by one of the investigators on two separate occasions, two months apart. The interviews will each last about 30 minutes. They will take place in a private area in a location and at a time that are convenient to me. I will be asked a few questions about my age, education and years of experience as a facilitator of knowledge utilization, as well as about specific incidents from my practice. The interviews will be tape-recorded with my permission. If the investigators require more data, I may be asked to volunteer for a second round of interviews conducted in the same manner as the first.

2. If I choose to participate in *writing*, I will be asked to complete a questionnaire posted on a secure website provided by the investigators. I will be reminded to complete the questionnaire on two separate occasions, two months apart. These reminders will be sent to

me regularly through email. The questionnaire contains questions about my age, education and years of experience as a facilitator of knowledge utilization, as well as about specific incidents from my practice. My written responses to the questions will be used for analysis. If the investigators require more data, I may be asked to volunteer for a second round of written questionnaires conducted in the same manner as the first.

Participation:

My participation in this study is voluntary. If I agree to participate, I am free to refuse to answer any specific questions and to stop the interview or written questionnaire at any time for whatever reason without affecting, in any way, my employment status. I am also free to withdraw from the study and to have my interview or written responses removed from the study at any time within one year of the interview/written questionnaire date for whatever reason without affecting, in any way, my employment status.

Potential benefits:

There are no direct benefits to me. However, it is hoped that the information from this study will help support the work of facilitators of knowledge utilization in LTC facilities.

Potential harm:

There are no known risks for me if I participate in this study. However, I may experience some psychological distress while recounting a critical incident through the interview or written submission process if the incident involved a negative experience or conflict with others. If such distress occurs, I am free to end the interview or discontinue my written submission at that time. To protect others whom I may refer to in my recounting of a critical incident, all names of persons and of facilities/units will be replaced with pseudonyms immediately upon the transcription of my data by the investigators.

Privacy and Confidentiality:

My participation in this study will remain confidential. Information that I provide in the interviews or through the secure website will be kept confidential and anonymous and only the investigators will know which responses are mine. My name will not appear in the typed transcripts of interviews or on the written questionnaire. A code number will be used to replace my name. During the study, all data will be kept on a secure computer and access to the computer will be secured by use of a specific password known only to the investigators. Tape recordings and typed transcripts of my interview/printed copies of my questionnaire will be stored in a secure, locked cabinet during the study. When the study is completed, the tape recordings of my interviews will be erased and the list linking my name to a code number will be destroyed. Also when the study is completed, the data on the computer will be transferred to a compact disc and erased from the computer. All data on the compact disc as well as the printed copies of my interview/written questionnaire will be stored in a secure, locked cabinet for five years at which time they will be destroyed/shredded. My name will not appear in any publication about the study. Direct quotations of things I say during the interview, without my name, may appear in a publication. All identifying or potentially identifying information (e.g., name of unit/facility, name of colleagues or staff I refer to during the interviews or written submissions) from my statements will be removed during the transcription of my interview or

written submission so that no such identifying information appears in any written document, publication, or presentation related to the study.

Compensation:
I will receive a one time payment of $20.00 for taking part in this study.

For questions and further information:
If I have any question about the study, I can reach the principle investigator at (416) 979-5000, ext. 6316.

In addition to the Principle Investigator, I may contact the Ethics Review and Grants/Contracts Officer at Ryerson University if I have a concern or complaint about the research (Alexander Karabanow, (416) 979-5000, ext.7112, akaraban@ryerson.ca)

Nadine Janes, Principal Investigator

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Title of study: Facilitating Knowledge Utilization in Long-term Care Settings: Exploring Influential Factors Through Critical Incident Technique

I , _____ agree to be involved in the research Study entitled: Facilitating Knowledge Utilization in Long-term Care Settings: Exploring Influential Factors Through Critical Incident Technique.

- I have read and understood the information sheet that has been given to me

- I understand that participation in the study will involve
  ☐ two interviews
  ☐ two written submissions using a website

- I understand that I may be asked to volunteer to participate in
  †two additional interviews
  †two additional written submissions using a website

- I understand that my participation in this study will remain confidential during and indefinitely upon completion of the study.

  - During the study, all data will be kept on a secure computer. Access to the computer will be secured by use of a specific password known only to the investigators. Tape recordings and typed transcripts of my interview/paper copies of my written questionnaire will be stored in a secure, locked cabinet during the study. When the study is completed, the tape recordings of my interviews will be erased and the list linking my name to a code number will be destroyed. Also when the study is completed, the data on the computer will be transferred to a compact disc and erased from the computer. All data on the compact disc as well as the printed copies of my interview/my questionnaire will be stored in a secure, locked cabinet for five years at which time they will be destroyed/shredded.

  - I understand that my participation in this study is voluntary. I am free to refuse to answer any question and to stop the interview/written questionnaire at any time without affecting my employment status in any way. I am also free to withdraw from the study and to have my interview responses/written submissions removed from the study at any time within one year of the date of my interview/written submission without affecting my employment status in any way.

  - I understand that any information that I provide will be kept confidential and anonymous and that only the investigators will know which responses are mine. I understand that I will not be identified by name on any written records of the interview/written questionnaire or in any reports of the study. All identifying or potentially identifying information from my statements (e.g., name of unit/facility, names of colleagues or staff)

will be removed upon the transcription of my critical incidents such that no such information appears in any presentation, written document, or publication of the study.

- I understand that I will receive a one time payment of $20.00 as compensation for my involvement in the study.

- I understand that I may not benefit directly from participating in this study.

- While there are no known risks associated with my involvement in this study, there is the potential that I may experience psychological distress during the recounting of a critical incident if it involved a negative experience or conflict with others. If such distress occurs, I am free to end the interview session or discontinue the written submission process.

- I have been given the opportunity to ask whatever questions I desire, and all such questions have been answered to my satisfaction.

- I have been given a copy of the consent form and Nadine Janes' telephone number should I have any further concerns or questions regarding my participation in this study.

- I have been given the contact information for the Ethics Review and Grants/Contracts Officer at Ryerson University if I have a concern or complaint about the research.

- I would like to receive a summary of the study findings and a copy of any published article related to the study   YES €   NO €

_____

Signature of participant   Date

I have explained the nature of the study to the subject and I believe that she/he has understood it.

_____   _____

Signature of researcher   Date

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