

Figuring it Out in the Moment: A Theory of Unregulated Care Providers' Knowledge Utilization in Dementia Care Settings

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ABSTRACT

Background: Within the context of knowledge translation, the disconnect between the results of research and the practice patterns of nursing care providers has not been reported in the context of institutional dementia care practice. Therefore, little is known about how knowledge about best dementia care practice, defined broadly as the person-centered approach, gets used by institutional nursing care providers.

Aim: Unregulated care providers provide the majority of nursing care for older people with Alzheimer's disease and related disorders living in long-term care facilities. The purpose of this grounded theory study was to explore the process whereby these workers use knowledge about person-centered care in their dementia care practice.

Methods: Transcribed data from tape-recorded interviews with 20 unregulated care providers among eight long-term care facilities in Ontario, Canada, were coded and categorized at progressively more abstract levels until concepts and the relationships among them were integrated in a middle-range theory of knowledge utilization.

Results: The theory of *Figuring it Out in the Moment* illustrates how unregulated care providers in dementia care settings practice in the context of unpredictability, variability, and personal threat. Their use of knowledge about person-centered care is dependent on the existence of certain individual and relational conditions that interrelate with four separate, but interconnected, phases of clinical decision-making and action.

Conclusions: As a middle-range theory, *Figuring it Out in the Moment* is concrete and pragmatic information for promoting evidence-based dementia care not included in existing overarching knowledge utilization frameworks. Areas for further investigation include how knowledge utilization is conceptualized, as well as the influences of practitioners' clinical decision-making, the nature of caregiving with particular client populations, and the characteristics of individuals alone and in relationship on the utilization of best practice knowledge.

KEYWORDS knowledge utilization, unregulated care providers, theory, person-centered care, dementia
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INTRODUCTION

The number of people aged 65 years or older is rising, as are conditions that affect older people such as Alzheimer's disease and related disorders (ADRD). According to the Canadian Study of Health and Aging (1994), the number of Canadians with ADRD is projected to be 778,000 by the year 2031. Half of those afflicted are expected to reside in long-term care (LTC) facilities. In the province of Ontario, 75% of direct care within these facilities is provided by unregulated care providers called personal support workers (PSWs; PricewaterhouseCoopers 2001). The quality of care, and arguably the quality

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of life, of institutionalized older people with ADRD is particularly dependent on what PSWs do and how they do it. Authors report that the care provided by nursing care providers, including PSWs, is not always consistent with best dementia care practice (Hallberg et al. 1995; Younger & Martin 2000). The reason for this disconnect and how it might be resolved have been neglected areas of research to date. This study contributes to closing this gap by exploring how PSWs understand and engage in the process of using knowledge about person-centered care in the day-to-day practice world of dementia care settings.

LITERATURE REVIEW

Best practice for dementia care has been described as the person-centered approach, which involves physical, emotional, and existential closeness between care providers and people with ADRD (Kitwood 1997). Through such relational patterns, care providers come to understand residents' personal life histories as well as their values, beliefs, preferences, and remaining capabilities. This understanding is used to make care decisions that are consistent with an individual resident's life as a whole and that optimize his or her self-determination and independent functioning.

Although person-centered care in gerontological nursing practice is being actively debated, and alternative frameworks for the care of older people have been proposed (Dewing 2004; Nolan et al. 2004), for this study, Kitwood's (1997) seminal work is considered representative of best practice in regard to dementia care specifically. There is compelling anecdotal evidence and initial empirical confirmation that it leads to positive outcomes for older people with ADRD, their families, and formal caregivers (Burgener et al. 1993; Christian 1997; Stokes 1997; Wells et al. 2000; Fossey et al. 2006).

Despite documented positive outcomes of person-centered care, the direct care provided to older people with ADRD in Ontario LTC facilities at times reflects a more traditional task-oriented approach characterized by standardized routines and a primary focus on residents' basic physical care needs over their psychosocial needs (Younger & Martin 2000; PricewaterhouseCoopers 2001). This approach is strongly criticized in the literature and has been linked to negative outcomes in dementia care practice (Kuremyr et al. 1994; Rader 1995).

Canada is not alone in regard to deficiencies in dementia care (Hallberg et al. 1995; Ford & McCormack 2000; Bostrom et al. 2006). Across the globe, many strategies have been evaluated for their effect on improving care, including staff training, in Canada (Hagen & Sayers 1995) and the United States (Cohn et al. 1990; Cohen-Mansfield et al. 1997), systematic clinical supervision in Sweden (Olsson

et al. 1998; Berg & Hansson 2000), formal staff motivational systems in the United States (Burgio et al. 2002), and practice development in the United Kingdom (Wright & McCormack 2001). These different strategies have produced variable results and have led, at best, to short-lived improvements in dementia care practice. Our ability to explain this variability and lack of long-term changes may be partly explained by a lack of understanding about the factors that influence nursing staffs' use of knowledge about best practice in dementia care.

A critical review of the nursing literature on evidence-based practice, research utilization, and diffusion of innovation yielded little to explain these factors and their interrelationships. Empirical work has been focused primarily on registered nurses, acute care practice, and on the utilization of instrumental knowledge, which have limited applicability to the case of PSWs in LTC settings. Instrumental knowledge utilization involves the application of knowledge, while conceptual knowledge utilization involves changing one's understanding or the way one thinks about a situation (Stetler 1994). PSWs' utilization of knowledge about person-centered care involves changing how they view older people with ADRD, as well as the focus of their caregiving role, rather than the concrete application of a standardized protocol. One study examined both registered and unregulated nursing staff use of research in the care of older people (Bostrom et al. 2006), but did not specifically address the process in relation to dementia care practice or knowledge about person-centered care.

The results of the literature review indicate that we know what best dementia care practices are, but do not understand the best way to encourage their use by PSWs. The purpose of this study was to understand (1) the factors that influence PSWs' utilization of knowledge about person-centered care and (2) the interrelationships among these factors and the use of knowledge about person-centered care in everyday practice in LTC facilities.

METHODOLOGICAL APPROACH

Grounded theory method as described by Strauss and Corbin (1998) was used to explore how PSWs understand and engage in the process of utilizing knowledge about person-centered care in the day-to-day practice world of dementia care settings. Ethics approval was received from the research review board at the University of Toronto and the research review board for the participating institutions.

Boundaries of the data collection were PSWs working on special care units (SCUs) within LTC facilities either full or part time, with the equivalent of at least one-year full-time work experience on a SCU, and assigned to the day or evening shift. These initial recruitment boundaries

were established to ensure that participants had sufficient experience to provide full descriptions of the phenomenon of interest.

Participants were recruited from SCUs in eight LTC facilities in Toronto through on-site meetings with the primary investigator. Residents on these 32-bed secured units have a diagnosis of ADRD, persistently try to leave the facility (i.e., are "exit-seekers"), and/or have behavioral issues not tolerated by cognitively intact residents.

An educational program grounded in the principles of person-centered care had been initiated in the study sites within the year before the investigation. This initiative plus many provincial programs to enhance dementia care in Ontario provided participants with exposure to the knowledge being investigated.

Data were derived from transcriptions of face-to-face interviews with 20 PSWs during 8 months between 2004 and 2005. Concurrent data collection and analysis were done using the constant comparative method (Strauss & Corbin 1998). Guiding questions for initial interviews were broad and open-ended and moved to the particular as the study progressed. Participants were encouraged to describe their use and nonuse of knowledge related to person-centered care and to identify factors that influenced this. As influential factors were described, coded, and categorized, subsequent interviews became more directive and focused to elicit information specific to these factors and their interrelationships.

The ongoing selection of participants was guided by the emerging theory through the process of theoretical sampling. The researchers decided where to sample in order to discover variations among concepts and to densify categories in terms of their properties and dimensions (Coyné 1997; Strauss & Corbin 1998). For example, early in the study, attempts were made to recruit demographically diverse participants, however, as data collection and analysis proceeded, it became apparent that specific demographic characteristics were not particularly relevant to how PSWs utilized knowledge about person-centered care. The process of theoretical sampling continued until saturation was reached, meaning that no new conceptual information was available within the data to indicate that new codes or categories were needed or that existing ones needed expansion. Finally, data were coded and categorized at progressively more abstract levels until concepts and the relationships among them were integrated in a middle-range theory of knowledge utilization.

To ensure trustworthiness, a number of verification processes were embedded in the research design, including memos of key analytic decisions, frequent peer review meetings, journal writing, and presentation of the study in progress to a range of stakeholder groups at health

care conferences. The combined verification processes promoted discovery of a theory of knowledge utilization that is grounded in the data provided by participants.

FINDINGS

The 20 participants reflect a range of demographics (see Table 1). These PSWs shared many stories about when they provided or failed to provide best dementia care and the factors that influenced these varied patterns. The process by which participants utilized knowledge about person-centered care is captured in the theory of *Figuring it Out in the Moment* (see Figure 1). This involved a complex myriad of interrelationships among four interconnected phases of decision-making and action with contextual, individual, and relational factors of influence. There was no direct link revealed between a PSW knowing what should be done and actually doing it in a moment of practice.

The Phases of Knowledge Utilization

Foundational to participants' utilization of knowledge about person-centered care were four phases of decision-making and action called melding, contextualizing, trial-ing, and appraising.

The melding phase. Melding involved participants' efforts to attain knowledge about person-centered care as well as information about residents as individuals. The latter was considered essential for translating the principles of person-centered care into specific interventions for specific residents. Although no two participants relied on the same combination of sources of knowledge, every participant suggested that no one source could provide all the information about person-centered care required to demonstrate best practice. The knowledge sources used

TABLE 1
Participant demographics

DEMOGRAPHIC	<i>n</i>
Gender	Male = 3; female = 17
Age (years)	31–50 = 9; >50 = 11
Employment status ^a	FT = 12; PT = 8
Shift ^b	D = 7; E = 6; D/E = 7
Work experience SCU (years)	<5 = 6; 5–10 = 1; 11–16 = 7; >17 = 6
Highest education ^c	HS = 9; C = 5; U = 4
Health care education ^d	None = 1; UCP = 19; other = 8
Country of origin	Canada = 1; other = 19

^aFT = full-time; PT = part-time; ^bD = day shift; E = evening shift; D/E = combined day and evening shifts; ^cHS = high school; C = college diploma/certificate; U = university degree; ^dUCP = unregulated care provider certificate; Other = registered nurse (*n* = 5), registered practical nurse (*n* = 1), pharmacy (*n* = 1), and midwife (*n* = 1).

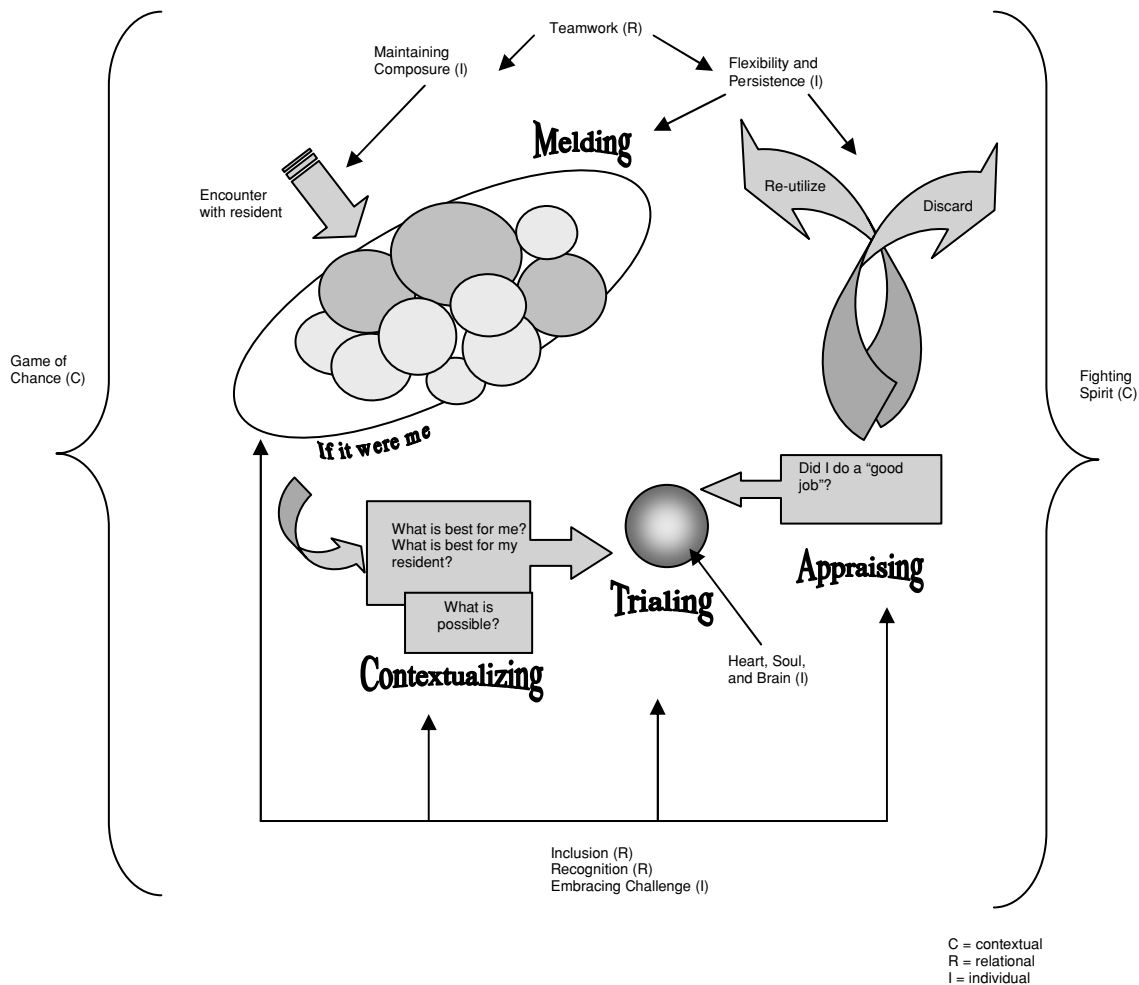


Figure 1. The theory of Figuring it Out in the Moment.

by participants are described in Table 2 and represented by the overlapping circles within the melding phase in Figure 1. The three sources relied on most were *team sharing* ($n = 15$), *experience* ($n = 14$), and *resident observation* ($n = 14$).

The melding process revealed options for practice: things a PSW could do or say to respond to a particular resident in a way that was consistent with best dementia care. Before choosing from these options, most evaluated their relative worth from the perspective of *if it were me*, that is, what they would want for themselves or a significant other in a similar situation. As one participant said, “putting . . . a lot of your own personality and your personal beliefs . . . on to another person.”

The contextualizing phase. In the contextualizing phase, participants made a decision about which practice option to try by determining the fit of all options with the care of a specific resident. Fit was determined to be “best” for

the PSW (i.e., *what is best for me?*) and for the resident (i.e., *what is best for my resident?*). Some also determined fit by considering whether a practice option was actually feasible, considering available human and environmental resources (i.e., *what is possible?*).

What was “best” for PSWs was that which fit with their individual ways of working: “[W]e all work different. We all have our own ways of doing things.” It was also that which helped a participant do a “good job,” repeatedly cited as accomplishing care with a minimum of resistance and aggression from residents: “I think it’s better at the end of the day if you go home and you’ve been hugged by half a dozen residents than it is to go home with a sore rib because you’ve been punched.” What was best for residents was that which kept them free of upset: “To see them happy and contented. When you see them in bed and you know that they’re contented, you know you’ve done your best that night.”

TABLE 2
Sources of knowledge accessed by participants

SOURCE	<i>n</i>	DESCRIPTION
Team sharing	15	Participants' observation of colleagues' caregiving; formal and informal discussions with health care team members about resident care
Experience	14	Professional work experience as an unregulated care provider or other health care professional; personal life experiences
Resident observation	14	Observation of resident behaviors and movements to gauge mood, emotional status, and reaction to caregiving
Documentation	10	Biographical information about residents from charts
Reading	10	Books or articles in the newspaper about caring for older people with ADRD
In-service	9	Formal workplace continuing education opportunities, preferably involving role play and a two-way exchange of information
School	9	Formal training/education as an unregulated care provider or other health care professional
Resident report	5	Resident verbal expression about likes, dislikes, life history
Family	3	Resident family members' report of resident likes, dislikes, premorbid personality, caregiving strategies
Policy	3	Institutional policy; provincial LTC standards

The trialing phase. The trialing phase involved the actual use of knowledge about person-centered care in a moment of practice, often with some trepidation and uncertainty: “[Y]ou make mistakes and more mistakes and more mistakes and that’s the nature of the work. You just have to keep learning.”

The appraising phase. In the appraising phase, participants examined the practice option they tried and considered its overall effectiveness by asking themselves if they did a “good job.” One participant qualified a good job as follows: “[I]f I do something, they don’t have to fight and they let me do things like some care.” Most participants appraised practice options by evaluating their effect on resident resistance and aggression: deliberations akin to those of the contextualizing phase. If a particular action was consistently effective in decreasing resident resistance and therefore supported a participant’s efforts to do a good job, it was more likely to be used again in practice. Over time, a particular practice option may become a habitual part of a PSW’s caregiving by virtue of its reliably positive influence on residents’ behaviors. However, if a practice option did not decrease resident resistance, participants frequently suggested that they might try it again because “not everything works with every resident.” The decision to *reutilize* or *discard* a practice option was not always straightforward.

Contextual Factors of Influence

Two contextual factors related to dementia care practice emerged as particularly influential in participants’ knowledge utilization: the *game of chance* and the *fighting spirit*. These factors reflect the inherent and enduring challenges of caring for people with ADRD. They played a fundamental

role in shaping both the nature of and the requisite conditions for the process of *Figuring it Out in the Moment* and for that reason have been positioned as brackets around the process of knowledge utilization in Figure 1.

The game of chance. The *game of chance* represents the uncertainties inherent in dementia care practice. It relates to the changeable moods and behaviors of residents as well as the variability with which they respond to caregiver actions. Participants described these inconsistencies as unpredictable and random. They accepted that there would be “good days” and “bad days,” but felt incapable of knowing when the “good” or the “bad” would come: “Because I always feel that every one of them [residents] is going to come to me with something different . . . And the surprise I get . . . not all the days are the same and everybody gives you a different experience each day. You don’t get the same response from the same person.”

Because of the perceived uncertain nature of their work, participants did not plan in advance how they would use knowledge about person-centered care: “You don’t plan You go in the actual thing. You don’t plan ahead, oh, Mrs. So-and-so will do this, will do that When the time comes you do the actual thing, right there.” *Figuring it Out* was a recurring process of “solving the problem right there” initiated upon each new encounter with a resident.

The *game of chance* also influenced the character of the melding, trialing, and appraising phases. Participants continually sought knowledge from many sources (i.e., melding phase), considering different ways of providing care, and pursuing more ideas that they could use when confronted with “surprises” from residents. Using selected knowledge in the trialing phase was viewed more as a

testing of something that might work rather than an act guaranteed to lead to success: "It doesn't work sometimes. Sometimes it does. Sometimes it doesn't." This inconsistency in the effectiveness of options helps explain why participants did not necessarily discard those options found to be ineffective in the appraising phase. Although a particular choice of action may not support a PSW's efforts to do a good job in one moment of practice, it may be effective in another moment and worth trialing again.

The fighting spirit. Resistive and aggressive resident behavior, labeled by one participant as "the fighting spirit," emerged as defining a characteristic of dementia care practice as did variability and unpredictability. Participants identified residents' *fighting spirit* as an inexorable challenge they face in their day-to-day work: "Some people think, oh, you just work there and it's easy. It's not easy. It's not easy at all. Sometimes the abuse you have to go through—they [residents] hit you, you know."

The process of *Figuring it Out* was portrayed as immediate, indicated by the appended phrase "*in the Moment*": "It's like a quick wit you have to respond." Participants' need to *Figure it Out* promptly on the spot in their practice was linked directly to the *fighting spirit*. They experienced a sense of urgency to figure things out quickly so as to avoid escalation of a resident's behavior. A resident's mood may change quickly and there is only a small window of opportunity to intervene before a situation worsens.

The *fighting spirit* also influenced the nature of the contextualizing and appraising phases of decision-making. So consuming was participants' concern with residents' aggression that it was a principal consideration in deciding what particular practice option to try in a moment of practice and in evaluating the effectiveness of options once they had been tried.

Individual Factors of Influence

To use knowledge about person-centered care despite the challenges imposed by the *game of chance* and the *fighting spirit*, participants identified four essential individual characteristics: *flexibility and persistence*; *heart, soul, and brain*; *embracing challenge*; and *maintaining composure*.

Flexibility and persistence. Because of the *game of chance*, knowledge about person-centered care may or may not be effective in relation to a specific resident's care at a particular moment of time. Multiple attempts to do *what is best* for residents and for one's self are often required, therefore the need to have *flexibility and persistence*:

[Y]ou've got to have a very high flexibility . . . Where as on another floor you just do the work you follow, one, two, three patient

and you're done. With Alzheimer, because of the behaviour, the aggression, you go over and go back. You might have to have four times an attempt to shave a patient, where in another unit you just do it once.

This individual capacity intersected with the appraising and melding phases of knowledge utilization, enabling participants to continually evaluate the practice options they trialed, relinquish what did not work, and re-engage with their knowledge sources to find new practice options.

Heart, soul, and brain. The *fighting spirit* set up a tension between what one knows is best to do according to knowledge about person-centered care (e.g., engage warmly with residents) and what one might instinctually feel like doing when confronted with aggressive resident behavior (e.g., disassociate from residents). Having *heart, soul, and brain* enabled participants to resolve this tension. These characteristics intersected directly with the trialing phase of knowledge utilization: the act of carrying through with the caregiving action one knows is best.

Possessing knowledge related to ADRD (i.e., *brain*) helped some participants depersonalize a resident's aggression by associating it with pathology: "Some will still spit at you, but again, that's the sickness. You have to remember, you're dealing with a disease at times . . ." However, knowing on a rational level that a resident's aggression was a result of disease was not sufficient in itself to sustain a participant's ability to utilize knowledge about person-centered care in the presence of the *fighting spirit*. Most participants also indicated the need for compassion (i.e., *heart and soul*): "To work in an institution like this, you must have something in your heart. Without that, you can't do it."

Maintaining composure. The ability to stay calm and to approach residents in a positive frame of mind, referred to as *maintaining composure*, was the third individual influencing factor that intersected with the onset of the melding phase. Because encounters with residents who were agitated or aggressive were so frequent, it was difficult for participants not to approach residents with the anticipation of such behavior. However, the capacity to avoid such foreboding, described by one participant as "wip[ing] my slate clean," meant a PSW was better able to engage in the process of *figuring things out* and begin the melding of knowledge:

[T]he one [resident] that you saw previously and had given care to might have been a little bit aggressive . . . if you take that with you to the next person, you might be expecting the other person is going to do that to you because you're still taking that old baggage along with you and you get the sweetest response for the next person and then you have to catch yourself to respond . . . so you

have to actually sit down, oh, she was actually nice to me after the other one just finished abusing me.

Furthermore, a PSW who communicated feelings of anxiety or fear to a resident by not *maintaining composure* risked escalating the resident's agitation. This in turn amounted to an escalation of the *fighting spirit*, which further complicated the overall process of *Figuring it Out in the Moment* as previously described.

Embracing challenge. *Embracing challenge* involved viewing the variable, unpredictable, and aggressive behaviors of residents as problems to be solved. It helped participants stay curious and motivated to keep melding, contextualizing, trialing, and appraising knowledge moment by moment in practice until problems were solved. As such, *embracing challenge* intersected with all four phases of the process of *Figuring it Out in the Moment*. Many participants identified the challenges of dementia care practice as motivating: "I like my work. I like working with residents . . . I like the challenge dealing with that situation." Those who demonstrated a capacity to reframe the complexities of dementia care in a positive light by *embracing challenge* were less likely to become discouraged or feel defeated by the *game of chance* or *fighting spirit* at any phase in the process of utilizing knowledge about person-centered care.

Relational Factors of Influence

The final factors that influenced participants' knowledge utilization were relational, presented as *inclusion*, *teamwork*, and *recognition*. All participants described the influence of their relations with others on their capacity to do what was best for residents with ADRD.

Inclusion. *Inclusion* represented opportunities for PSWs to exchange knowledge through formal team conferences and informal discussions among health care team members. It had a direct influence on the melding phase of knowledge utilization by enhancing PSWs' access to their primary source of knowledge (i.e., *team sharing*). It influenced all phases of the knowledge utilization process by motivating participants to keep *Figuring it Out in the Moment* despite the *game of chance* and *fighting spirit*.

As unregulated care providers, participants struggled to feel valued for their contributions to residents' care and used many derogatory labels to describe how they think their work is viewed by others, including "the lowest of the low of nursing" and "grunt labor." Being asked by a physician for input on a resident care matter was "an honor" to one participant who claimed, "In this line of work, historically, I have never had not even a manager or anyone say to me, what do you think?" When *inclusion* was absent from the relations that participants had

with other team members, they described continued feelings of little worth and less motivation to keep trying to do a "good job."

Teamwork. PSWs need to work together as a team within and across shifts if they are to successfully utilize knowledge about person-centered care. *Teamwork* augmented individual participants' *flexibility and persistence* and strengthened their capacity for *maintaining composure*.

When exercising *flexibility and persistence*, PSWs may end a shift without having provided complete care to a resident because no practice option was found to be effective in doing what was best. *Teamwork* meant that incoming staff would readily assume responsibility for the resident's remaining care without complaint: "Don't have the saying that this is not mine, this is not yours. We work in a team." It required breaking down rigid boundaries defining caregiving responsibilities among PSWs and across shifts.

When participants self-identified difficulty in *maintaining composure*, they needed to be able to call on their peers to take over the care of a resident until they could regain composure: "I always know that there's someone there that will help me if I have any troubles." Without such *teamwork*, a PSW would be left to care for a resident in an emotional state that limits her ability to use best practice knowledge.

Recognition. *Recognition* was acknowledgement by others (i.e., peers, management, interdisciplinary team members, or a resident's family) of PSWs' caregiving efforts to do what was best for residents. It influenced the process of *Figuring it Out in the Moment* by mitigating against a participant becoming discouraged at any point in the process, and was therefore a source of motivation not unlike the factors of *embracing challenge* and *inclusion*:

[B]efore you're not happy, and then maybe like the upper head nurse, whatever, it's one of the things if they're nice to you. They appreciate what you are doing, your director, whatever, you're head nurse, your co-worker, you know, you're happy with them. That makes you work good.

Not one participant felt completely satisfied with the *recognition* they received. Knowledge about person-centered care does not unequivocally work in every practice moment by virtue of the variability and unpredictability inherent in dementia care practice. According to some participants, management failed to appreciate this and, furthermore, tended to focus more on PSWs' unsuccessful caregiving moments with residents rather than their efforts to do what was best: "[I]f you're always getting negative input . . . this is like a spiral . . . like we're trying and we don't get motivated or . . . encouraged."

DISCUSSION

The emergent theory of *Figuring it Out in the Moment* explicates the process by which unregulated care providers in SCUs make decisions about, and act on, knowledge related to person-centered care and how contextual, individual, and relational factors might influence these efforts. The theory reflects the perspective of PSWs within the specific context of ADRD care. As such, it offers a unique contribution to the theoretical literature and indicates areas for further research.

To date, theoretical work related to evidence-based practice has been focused largely on developing overarching frameworks to explain knowledge utilization as a phenomenon that transcends particular clinical settings, practitioners, and types of knowledge (Logan & Graham 1998; Rosswurm & Larrabee 1999; Dobbins et al. 2002; Rycroft-Malone 2004; Michie et al. 2005; Edgar et al. 2006). These frameworks universally depict knowledge utilization as a complex, multifaceted process that is influenced by many factors. Some variation exists among the models about influencing factors, but cumulatively they highlight that those related to individual practitioners and to the environment warrant consideration when promoting evidence-based practice. These assertions were similarly suggested by participants of this study. What the theory of *Figuring it Out in the Moment* contributes to this premise, as a middle-range theory, is specificity and therefore pragmatic utility.

Estabrooks and colleagues (2006) questioned the likelihood of developing one overarching theory of knowledge utilization, suggesting that a theory needs to be context specific to guide the design of useful interventions for promoting evidence-based practice. As overarching frameworks, current models provide only general concepts and propositions that need to be contextualized before facilitating knowledge utilization in a particular setting (Edgar et al. 2006). For example, a common assertion across the models is the need to identify barriers to knowledge utilization and to design strategies most likely to mitigate against them. However, no details are provided about what the specific barriers are in different contexts and what specific strategies might be most effective. In contrast, the middle-range theory emerging from this study indicates an understanding of why certain factors influence PSWs' utilization of knowledge and how they interrelate to exert their influence. Such concrete information would assist in the development of practical interventions that facilitate the process in the real world of practice in long-term care settings.

Decision-making processes underpinning health care providers' utilization of best practice knowledge have been underresearched (Mano-Negrin & Mittman 2001). This

study indicated how PSWs engage in this process, starting with their acquisition of best practice knowledge, through their evaluation of its merit according to certain criteria, and finally ending in their appraisal of its effectiveness upon utilization.

A distinct characteristic of participants' decision-making was their reliance on human sources of knowledge (i.e., *team sharing*). Similar patterns have been identified in the evidence-based practice of physicians (Gabbay & le May 2004), of social workers (Booth et al. 2003), and of registered nurses (Thompson et al. 2004; Estabrooks et al. 2005). Further study of this aspect of decision-making is essential for determining the most effective means of disseminating best practice knowledge to unregulated and professional care providers.

Also of note was PSWs' heavy reliance on their personal way of knowing to supplement and make sense of knowledge about person-centered care. Carper (1978) suggested that nursing practice is grounded in four separate ways of knowing: empirical, aesthetic, personal, and ethical. She defined the personal way of knowing as an understanding of self and others. From the perspective of *if it were me*, participants examined their own feelings within a practice situation and used this knowledge to better understand their resident's world. Specifically studying how different ways of knowing are integrated in a practitioner's clinical decision-making may add clarity to the nature of the knowledge utilization process, including the lag between empirical knowledge and health care practices.

PSWs' decision-making about best practice knowledge was shown in this study as different from that described for professional nurses. The latter has been linked to nurses' capacity for critical and reflective thinking (Stetler et al. 1999). Participants' decision-making lacked these intellectual elements. Beyond assessing whether resident aggression was decreased by a trialed practice option in the appraising phase, participants did not describe any further thinking into why the practice option they tried might have had the effect it did. Knowing a practice option is effective without knowing why would make it difficult to determine when the option might be appropriate to repeat. By not engaging in critical reflective thinking, unregulated care providers might fail to demonstrate growth in their use of best practice knowledge over time. The investigation of strategies to enhance the critical and reflective nature of decision-making related to best practice knowledge may be a worthwhile focus for intervention studies related to evidence-based practice.

Limited attention has been given to the influence of specific clinical contexts on evidence-based health care. "Context" has not been studied explicitly in terms of the

nature of nursing work with particular client populations. It has more often been linked to organizational characteristics, such as the resources available for innovation within an institution (Kitson 1997; Stetler 2003), and an organization's culture in regard to research (Dobbins et al. 2002; McCormack et al. 2002). This study showed that the nature of dementia care work (i.e., *game of chance* and *fighting spirit*) weighed heavily in PSWs' clinical decision-making about best practice knowledge and set the parameters for which individual and relational factors would be particularly influential in putting such knowledge to use during caregiving. Focusing on the specific challenges of nursing in different clinical settings may assist in advancing our full understanding of contextual impediments to evidence-based practice.

Individual characteristics of health care providers have emerged as influential in prior investigations into evidence-based nursing, as they did in this study. They have included research values, skills, and awareness (Funk et al. 1991; Stetler 2001; Estabrooks et al. 2003); questioning and intellectual curiosity (Closs & Cheater 1994; Mottola 1996); and in-service attendance (Estabrooks 1999). These factors relate in general to practitioners' interest in, access to, and understanding of empirical knowledge. The theory of *Figuring it Out in the Moment* shows that PSWs' utilization of knowledge related to person-centered care may be better understood by reflecting on what is required of them on an emotional as well as intellectual level to use such knowledge: the *heart and soul* that complement the *brain*.

Our understanding of evidence-based health care might be enhanced if there is a closer examination of what is required of individual practitioners on various levels to utilize different types of knowledge. Using instrumental knowledge about a new wound-care product, for example, may require no more from a nurse than dexterity and proper use of infection control practices. In contrast, what is required of PSWs to use conceptual knowledge about person-centered care went far beyond psychomotor competencies.

Participants in this study described the primacy of social relations in the process by which they utilized knowledge. The process was enhanced when PSWs' peer relationships on their unit were collaborative (i.e., *teamwork*), when there were opportunities provided for them to share and receive information about resident care with interdisciplinary team members (i.e., *inclusion*), and when their efforts to use best practice knowledge were acknowledged and praised by others (i.e., *recognition*). The latter two factors were key to sustaining PSWs' motivation to keep striving to do what was best for their residents. The link be-

tween the utilization of knowledge and workplace relations has only recently taken a more prominent place in studies of evidence-based health care (West et al. 1999; Dopson et al. 2002; Angus et al. 2003; French 2005; Pepler et al. 2005; Wallin et al. 2006). Relations that have emerged as influential include power and status differentials as well as the "us-and-them" effects of professional socialization (Zwarenstein & Reeves 2006); "emotionally intelligent" leaders who are responsive, empathetic, and appreciative toward staff (Edgar et al. 2006); and organizations where individuals are valued, teams work together effectively, and leaders use "democratic-inclusive" and "empowering" approaches to management (Rycroft-Malone 2004). PSWs in this study affirmed these dynamics, suggesting that continued study in this area may ultimately universalize conceptualizations of knowledge utilization as a social process and make more explicit the link between healthy workplaces and practice excellence.

LIMITATIONS

Unique traits of participants might not be captured in the demographics listed in Table 1. Participants were contacted at their workplace and were interviewed during work time. There was no way, therefore, to guarantee complete confidentiality of participants' involvement in the study. As a result, the PSWs who volunteered to participate may have been unique in relation to their comfort and willingness to share their practice experiences and concerns and to have others know that they were doing so. Furthermore, because data collection included face-to-face interviews, participants may also be unique in relation to their ability to articulate their perspectives. These uncertainties may influence the transferability of the findings to all PSWs working in all SCUs.

CONCLUSION

In the interest of promoting evidence-based health care, Grol and Grimshaw (1999) highlighted the need to "identify appropriate strategies affordable within available resources for introducing a specific innovation in a specific setting with a specific target group that has specific features" (p. 508). The middle-range theory of *Figuring it Out in the Moment* is information to support these efforts in dementia care settings by explicating how unregulated care providers use knowledge about person-centered care when caring for institutionalized older people with AD/DRD. Areas for further investigation include the influences of practitioners' clinical decision-making, the nature of caregiving work with particular client populations, and the

characteristics of individuals alone and in relationship on the utilization of best practice knowledge. The emerging theory invites reflection on how evidence-based health care is currently conceptualized and studied.

References

- Angus J., Hodnett E. & O'Brien-Pallas L. (2003). Implementing evidence-based nursing practice: A tale of two intrapartum nursing units. *Nursing Inquiry*, 10(4), 218–228.
- Berg A. & Hansson U.W. (2000). Dementia care nurses' experiences of systematic clinical group supervision and supervised planned nursing care. *Journal of Nursing Management*, 8, 357–368.
- Booth S.H., Booth A. & Falzon L.J. (2003). The need for information and research skills training to support evidence-based social care: A literature review and survey. *Learning in Health and Social Care*, 2(4), 191–201.
- Bostrom A.M., Wallin L. & Nordstrom G. (2006). Research use in the care of older people: A survey among health-care staff. *International Journal of Older People Nursing*, 1(3), 131–140.
- Burgener S.C., Shimer R. & Murrell L. (1993). Expressions of individuality in cognitively impaired elders: Need for individual assessment and care. *Journal of Gerontological Nursing*, 19(4), 13–22.
- Burgio L.D., Stevens A., Burgio K.L., Roth D.L., Paul P. & Gerstle G. (2002). Teaching and maintaining behavior management skills in the nursing home. *The Gerontologist*, 42(4), 487–496.
- Canadian Study of Health and Aging. (1994). Retrieved March 17, 2003, from <http://www.csha.ca>.
- Carper B.A. (1978). Fundamental patterns of knowing in nursing. *Advances in Nursing Science*, 1(1), 13–23.
- Christian D. (1997). Protecting her personal source of love. *Journal of Dementia Care*, 5(4), 24–25.
- Closs S.J. & Cheater F.M. (1994). Utilization of nursing research: Culture, interest and support. *Journal of Advanced Nursing*, 19(4), 762–773.
- Cohen-Mansfield J., Werner P., Culpepper W.J. II & Barkley D. (1997). Evaluation of an inservice training program on dementia and wandering. *Journal of Gerontological Nursing*, 23(10), 40–47.
- Cohn M.D., Horgas A.L. & Marsiske M. (1990). Behavior management training for nurse aides: Is it effective? *Journal of Gerontological Nursing*, 16(11), 21–25.
- Coyne I.T. (1997). Sampling in qualitative research: Purposeful and theoretical sampling; merging or clear boundaries? *Journal of Advanced Nursing*, 26, 623–630.
- Dewing J. (2004). Concerns relating to the application of frameworks to promote person-centeredness in nursing with older people. *Journal of Clinical Nursing*, 13(3a), 39–44.
- Dobbins M., Ciliska D., Cockerill R., Barnsley J. & DiCenso A. (2002). A framework for the dissemination and utilization of research for health-care policy and practice. *The Online Journal of Knowledge Synthesis for Nursing*, 9(7). Retrieved February 4, 2008, from [http://health-evidence.ca/downloads/A_framework_for_dissemination_\(2002\).pdf](http://health-evidence.ca/downloads/A_framework_for_dissemination_(2002).pdf).
- Dopson S., FitzGerald L., Ferlie E., Gabbay J. & Locock L. (2002). No magic targets! Changing clinical practice to become more evidence based. *Health Care Management Review*, 27(3), 35–47.
- Edgar L., Herbert R., Lambert S., MacDonald J., Dubois S. & Latimer M. (2006). The joint venture model of knowledge utilization: A guide for change in nursing. *Nursing Leadership*, 19(2), 41–55.
- Estabrooks C.A. (1999). Modeling the individual determinants of research utilization. *Western Journal of Nursing Research*, 21(6), 758–772.
- Estabrooks C.A., Chong H., Brigidear K. & Profetto-McGrath J. (2005). Profiling Canadian nurses' preferred knowledge sources for clinical practice. *Canadian Journal of Nursing Research*, 37(2), 118–140.
- Estabrooks C.A., Floyd J., Scott-Findlay S., O'Leary K. & Gushta M. (2003). Individual determinants of research utilization: A systematic review. *Journal of Advanced Nursing*, 43(5), 506–520.
- Estabrooks C.A., Thompson D.S., Lovely J.J. & Hofmeyer A. (2006). A guide to knowledge translation theory. *The Journal of Continuing Education in the Health Professions*, 26(1), 25–36.
- Ford P. & McCormack B. (2000). Keeping the person in the centre of nursing. *Nursing Standard*, 14, 40–44.
- Fossey J., Ballard C., Juszcak E., James I., Alder N., Jacoby R. & Howard R. (2006). Effect of enhanced psychosocial care on antipsychotic use in nursing home residents with severe dementia: Cluster randomised trial. *British Medical Journal*, 332(7544), 756–758.
- French B. (2005). Contextual factors influencing research use in nursing. *Worldviews on Evidence-Based Nursing*, 2(4), 172–183.
- Funk S.G., Champagne M.T., Wiese R.A. & Tornquist E.M. (1991). Barriers to using research findings in practice: The clinician's perspective. *Applied Nursing Research*, 4(2), 90–95.
- Gabbay J. & le May A. (2004). Evidence based guidelines or collectively constructed "mindlines"? Ethnographic study of knowledge management in primary care. *British Medical Journal*, 329(7473), 1013–1016.
- Grol R. & Grimshaw J. (1999). Evidence-based implementation of evidence-based medicine. *The Joint Com-*

- mission *Journal on Quality and Patient Safety*, 25(10), 503–513.
- Hagen B.F. & Sayers D. (1995). When caring leaves bruises: The effects of staff education on resident aggression. *Journal of Gerontological Nursing*, 21(11), 7–16.
- Hallberg I.R., Holst G., Nordmark A. & Edberg A. (1995). Cooperation during morning care between nurses and severely demented institutionalized patients. *Clinical Nursing Research*, 4(1), 78–104.
- Kitson A. (1997). Developing excellence in nursing practice and care. *Nursing Standard*, 12(2), 33–37.
- Kitwood T. (1997). *Dementia reconsidered: The person comes first*. Buckingham, UK: Open University Press.
- Kuremyr D., Kihlgren M., Norberg A. & Astrom S. (1994). Emotional experiences, empathy and burnout among staff caring for demented patients at a collective living unit and a nursing home. *Journal of Advanced Nursing*, 19(4), 670–679.
- Logan J. & Graham I.D. (1998). Toward a comprehensive interdisciplinary model of health care research use. *Science Communication*, 20(2), 227–246.
- McCormack B., Kitson A., Harvey G., Rycroft-Malone J., Titchen A. & Seers K. (2002). Getting evidence into practice: The meaning of 'context.' *Journal of Advanced Nursing*, 38(1), 94–104.
- Mano-Negrin R. & Mittman B. (2001). Theorising the social within physician decision making. *Journal of Management in Medicine*, 15, 259–265.
- Michie S., Johnston M., Abraham C., Lawton R., Parker D. & Walker A. (2005). Making psychological theory useful for implementing evidence based practice: A consensus approach. *Quality & Safety in Health Care*, 14(1), 26–33.
- Mottola C.A. (1996). Research utilization and the continuing/staff development educator. *The Journal of Continuing Education in Nursing*, 27(4), 168–173.
- Nolan M.R., Davies S., Brown J., Keady J. & Nolan J. (2004). Beyond 'person-centred' care: A new vision for gerontological nursing. *International Journal of Older People Nursing*, 13, 45–53.
- Olsson A., Bjorkhem K. & Hallberg I.R. (1998). Systematic clinical supervision of home carers working in the care of demented people who are at home: Structure, content and effect as experienced by participants. *Journal of Nursing Management*, 6, 239–246.
- Pepler C.J., Edgar L., Frisch S., Rennick J., Swidzinski M., White C., Brown T. & Gross J. (2005). Unit culture and research-based nursing practice in acute care. *Canadian Journal of Nursing Research*, 37(3), 66–85.
- PricewaterhouseCoopers. (2001). *Report of a study to review levels of service and responses to need in a sample of Ontario long term care facilities and selected comparators*. Retrieved June 26, 2003, from www.oanhss.org/staticcontent/staticpages/about/pdf/Level%20of%20Service%20Report%20FINAL%20version.pdf.
- Rader J. (1995). *Individualized dementia care: Creative, compassionate approaches*. New York: Springer.
- Rosswurm M.A. & Larrabee J.H. (1999). A model for change to evidence-based practice. *Image: Journal of Nursing Scholarship*, 31(4), 317–322.
- Rycroft-Malone J. (2004). The PARIHS framework—a framework for guiding the implementation of evidence-based practice. *Journal of Nursing Care Quality*, 19(4), 297–304.
- Stetler C.B. (1994). Refinement of the Stetler/Marram model for application of research findings to practice. *Nursing Outlook*, 42(1), 15–25.
- Stetler C.B. (2001). Updating the Stetler model of research utilization to facilitate evidence-based practice. *Nursing Outlook*, 49(6), 272–279.
- Stetler C.B. (2003). Role of the organization in translating research into evidence-based practice. *Outcomes Management*, 7(3), 97–103.
- Stetler C.B., Corrigan B., Sander-Buscemi K. & Burns M. (1999). Integration of evidence into practice and the change process: Fall prevention program as a model. *Outcomes Management for Nursing Practice*, 3(3), 102–111.
- Stokes G. (1997). Reacting to a real threat. *Journal of Dementia Care*, 5(1), 14–15.
- Strauss A. & Corbin J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.
- Thompson C., Cullum N., McCaughan D., Sheldon T. & Raynor P. (2004). Nurses, information use, and clinical decision making—the real world potential for evidence-based decisions in nursing. *Evidence-Based Nursing*, 7(3), 68–72.
- Wallin L., Ewald U., Wikblad K., Scott-Findlay S. & Arnetz B.B. (2006). Understanding work contextual factors: A short-cut to evidence-based practice? *Worldviews on Evidence-Based Nursing*, 3(4), 153–164.
- Wells D.L., Dawson P., Sidani S., Craig D. & Pringle D. (2000). Effects of an abilities-focused program of morning care on residents who have dementia and on caregivers. *Journal of the American Geriatrics Society*, 48(4), 442–449.
- West W., Barron D.N., Dowsett J. & Newton J.N. (1999). Hierarchies and cliques in the social networks of health care professionals: Implications for the design of dis-

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- semination strategies. *Social Science and Medicine*, 48, 633–646.
- Wright J. & McCormack B. (2001). Practice development: Individualised care. *Nursing Standard*, 15(36), 37–42.
- Younger D. & Martin G.W. (2000). Dementia care mapping: An approach to quality audit of services for people with dementia in two health districts. *Journal of Advanced Nursing*, 32(5), 1206–1212.
- Zwarenstein M. & Reeves S. (2006). Knowledge translation and interprofessional collaboration: Where the rubber of evidence-based care hits the road of teamwork. *The Journal of Continuing Education in the Health Professions*, 26(1), 46–54.