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Elderly Women and Urinary Incontinence in Long-Term Care

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1. Introduction

The prevalence of urinary incontinence (UI), although difficult to define due to underreporting, is estimated to affect over 13 million Americans, and greater than 50% of residents residing in long-term care (LTC) facilities (Bennet, 2008; Earthy & Nativ, 2009; Parker, 2007). It has been estimated that the cost of UI in Canadian LTC facilities is approximately \$3000.00 to \$10,000.00 per year for each resident experiencing UI (Earthy & Nativ, 2009). The Canadian Continence Foundation (2005) reported that one in four middle-aged and older women are affected by UI. By the year 2050, the number of women likely to experience UI will increase by 46% (Romanzi, 2010). The increasing prevalence of UI in long term-care facilities from 55% to 65% over the past 10 years is alarming, and requires careful consideration by healthcare providers and policy-makers (MacDonald & Butler, 2007; Sahyoun, et al., 2001).

UI is a multidimensional healthcare issue that should be viewed from various perspectives and contexts, as a condition requiring operational, clinical, strategic, and interdisciplinary focus (Klusch, 2003). However, the current state of the knowledge maintains that much of the existing literature continues to explore UI from the contexts of the medicalization of UI, the physical and economic burdens of UI, the marginalization of elderly women experiencing UI in long-term care, and healthcare providers' attitudes, approaches, and strategies to managing UI in LTC. There were few references found that discussed how elderly women managed their UI, and the effects of UI on the quality of life (QoL) from the women's lived experiences. To date the psychosocial effects of urinary incontinence for elderly women has received minimal attention in the current research literature. Physiological complications and the implications for symptom management of UI are the predominant research issues being addressed. The following chapter presents an account of the current state of knowledge with each of the aforementioned topics discussed in relation to elderly women in LTC. The chapter will begin by defining UI, and end with a necessary discussion of healthcare practices, education, and research related to elderly women and UI in LTC.

2. Background

UI is a prevalent health issue adversely affecting the quality of life, well-being and psychosocial aspects of elderly women's lives residing in LTC (Bradway et al., 2010;

Howard & Steggall, 2010; Palmer, 2008). UI has been documented as a primary reason for institutionalization and admission to LTC facilities, and documented to negatively impact social, sexual, and physical activities of elderly women (Lifford et al., 2008; Stewart, 2010; Wilson, 2003). Yet, UI has been acknowledged as an inconvenience, rather than being a health issue requiring adequate healthcare resources (Hu, 1990; MacDonald & Butler, 2007; Norton & Brubaker, 2006). Given that, UI is not life threatening to women, often results in UI care not being viewed as a priority, therefore, it is repeatedly under-reported, under-treated, and often mismanaged (McDermott, 2010 Norton & Brubaker, 2006). UI has been labelled a “silent epidemic” and a worldwide health issue that commonly affects women (Beji et al., 2010).

Although UI has devastating physical and psychological effects on individuals, family, friends, and caregivers (McDermott, 2010; Wilson, 2003), society continues to stigmatize and associate UI with as inevitable component of ageing that is considered normal, and effortlessly managed (Bennet, 2008; Bradway et al., 2010). As suggested in the literature, this stigma has the potential to isolate women and render them silent about their experiencing of UI, hence, women accept UI as being a normal part of life (Borrie et al., 2002, Howard & Steggall, 2010; MacDonald & Butler, 2007; Robinson, 2000). This in turn, potentially may prevent women from accessing supportive healthcare services and seeking appropriate measures to assist in the prevention or management of UI (Bennet, 2008; Parker, 2007; Hagglund & Ahlstrom, 2007). The stigma of UI is further compounded by some healthcare professional trivializing UI in comparison to other healthcare issues and “by incorrectly describing it as a non-hierarchical index of functional status” (Wilson, 2003, p.752). While frequently cited as the primary reason for admission of elderly women to LTC, the impacts of UI are continually misunderstood, downplayed, under-reported, under-treated, silenced and not well defined (Borrie et al., 2002; Norton & Brubaker, 2006; Zeznock et al., 2009).

3. UI defined

The term UI can be defined in multiple and diverse ways by different groups and individuals (Palmer, 1996). The International Continence Society (ICS) has defined UI as a condition of involuntary urine loss that is objectively demonstrable and is a social or hygienic problem (Thakar & Stanton, 2000). This definition implies that UI can have a detrimental effect on the lives of those experiencing the condition (Hunnskaar & Vinsnes, 1991). The ICS is an international society for medical professionals, concerned with furthering education, scientific research, clinical practice and removing the stigma of incontinence (ICS, 2011). The ICS has developed definitions and terminology for researchers pertaining to UI types, assessment, and diagnosis in an attempt to standardize UI discourse. The ICS has a global health focus committed to improve the QoL for individuals affected by urinary, bowel, and pelvic floor disorders through education, research, and advocacy.

Another group to consider when defining UI is administrators and managers in LTC facilities. According to Palmer (1996), administrators in LTC may define UI with respect to controlling the economic expenditures that is required to manage the issue. Budgeting monies for UI products, linens, and staffing to manage toileting, soiling, and skin breakdown is of primary concern to LTC administrators and managers (MacDonald & Butler, 2007). In my previous experience as a Director, Resident Care and site manager in an

urban, LTC setting in Eastern Nova Scotia, Canada, discussions of UI frequently occurred in relation to the economic burden of managing the problem. Procedures and strategies were designed to maintain costs of products used for UI, with little consideration given to comfort or appropriateness of interventions from the resident's perspective or the overall impact on QoL.

Some healthcare providers and caregivers in LTC may define UI in terms of the demanding workload and the timely investments dedicated to physical management of changing incontinent products, voiding schedules, and soiled linens and clothing changes (Brink, 1990, Palmer, 1996). Furthermore, UI maybe viewed by some healthcare professionals as low on the priority list of healthcare needs, and not a prudent expenditure of precious time and energy (Bayliss & Salter, 2004). In an attempt to reduce or eliminate UI, it has been documented that some healthcare providers and caregivers in LTC spend productive time implementing fluid management strategies and double incontinent products worn in an attempt to deal with the issue of UI (Brink, 1990). Physicians on the other hand, may define UI in regards to assessment, diagnosis, medical and/or surgical technologies and management, and pharmacological treatments (Day et al, 2010). This definition incorporates the philosophy of controlling and/or curing UI for those individuals experiencing the condition and tends to medicalize UI. Conversely, elderly women experiencing UI in LTC may subjectively define UI with respect to psychological, social, economic or physical implications and contexts (DuBeau et al., 2006; Getliffe et al., 2007; Hagglund & Ahlstrom, 2007; Howard & Steggall, 2010; Lifford et al, 2008; MacDonald & Butler, 2007; McDermott, 2010; Norton & Brubaker, 2006; Palmer, 1996; Parker, 2007; Wilson, 2003; Zeznock et al, 2010). The loss of bodily control, decrease in activities of daily living, social isolation, skin infections and dermatitis, falls, cost of incontinent products, and embarrassment maybe considered important in a UI definition to elderly women (MacDonald & Butler, 2007; McDermott, 2010; Nix & Haugen, 2010; Palmer, 2008; Parker, 2007; Stewart, 2010; Wilson, 2003). Also, it has been well documented in the literature that elderly women experience feelings of being less attractive and different from others resulting in shame, depression, and loss of self-confidence and inferiority, which must be considered when defining UI from the individuals perspective (Gallagher, 1998; Goldstein et al., 1992; Grimgy et al., 1993; Lifford et al, 2008; Palmer, 2008; Hunskaar & Vinsnes, 1991).

The diversity in definitions, terminology, and perspectives pertaining to UI can lead to confusion and ambiguity about the health issue, which in turn impacts upon UI care. The lack of common, cohesive and holistic definitions and terminology relating to UI makes it difficult for healthcare professionals, caregivers, researchers, educators and those experiencing UI to communicate and conceptualize issues, solutions, and interventions (Palmer, 1996; Zeznock et al, 2010). Moreover, clear, common, and cohesive UI definitions and terminology could provide individuals with an opportunity to give voice and meaning to their experiences of living with UI, and subsequently influence their care (Hagglund & Ahlstrom, 2007). Thus, myths and ideas of UI being a normal part of ageing could be dispelled, while increasing the possibility of making UI an important healthcare issue that requires timely attention and resources.

The author suggests that definitions and terminology about UI may be expanded to encompass the social determinants of health and the broader impact of cultural, political, and economic contexts that influence individuals' experiences with UI. There is also a need

to combine the cost factors related to the management of UI in long-term care, with the fiscal and human burden (cost) to women experiencing UI, to determine appropriate practices. What it means to experience UI and the impact on QoL, given the associated management strategies imposed on elderly women within LTC, is a critical concern for the delivery of holistic and individual continence care. Knowledge about the impact of UI on an individual's sense of self, and how that translates to the delivery of continence care has received minimal attention in the research literature. The need for healthcare providers to become more knowledgeable about the issues that effect the delivery of care related to UI requires an in depth analysis beyond budget consideration, to acknowledge the overall burden to elderly women experiencing UI in LTC. Thus, it is suggested by the author that UI may be viewed from a broader perspective encompassing the social, physical, economic, cultural, and political contexts rather than focusing primarily on a narrow perspective that can further lead to the medicalization of UI.

4. Medicalization of UI

UI has been associated with several disease processes and is reported to be one of the major causes of admission to long-term care facilities (Beji et al., 2010; Bradway et al., 2010; Coward et al., 1995; Du Moulinet al., 2009; Edwards, 2001; MacDonald & Butler, 2007; Norton & Brubaker, 2006; Thom et al, 1997). Yet, there is minimal research regarding the psychosocial impact of UI on elderly women. UI creates a multidimensional healthcare problem, which has become medicalized as evidenced by the predominance of diagnostic and treatment regimes. Further, UI is often associated with co-morbidity and invasive procedures such as urodynamic studies, catheterizations and pelvic examinations, particularly in the elderly (Norton & Brubaker, 2006; Resnick, 1992). However, for over twenty years, literature has suggested that incontinence in the elderly is curable with medical and/or surgical interventions (Resnick). The elderly population may be a more vulnerable group relative to the fear of impending surgery or invasive diagnostic treatments that require hospitalization (Mitteness, 1990), which consequently poses a threat to maintaining independence. Being independent and able to control UI is of vital importance to elderly women's perception of themselves (Birgersson et. al, 1993). The following are some examples of research demonstrating the medicalization of UI.

Thom et al. (1997) in a review of 5,986 medical records of men and women aged 65 years and older examined the associations between medically diagnosed UI and factors such as; risk of several disease conditions, hospitalizations, nursing home admissions and mortality. Results indicated that the risk of hospitalization was 30% higher for women. There was also an increased risk of UI with a diagnosis of Parkinson's disease, dementia, stroke, depression and congestive heart failure for both women and men. In addition, the likelihood of nursing home admission secondary to UI was twice as high for women while the risk of mortality was a not significant. These results demonstrate a medical approach to institutionalized care when managing UI, which is more likely to impact women.

Hunskar and Vinsnes (1991) used the Sickness Impact Profile (SIP) questionnaire to assess the QoL of women with UI according to age, symptom group, volume of urinary leakage, and duration of incontinence. Thirty-six women between 40-60 years and forty women aged 70 years or more were randomly selected from a medical clinic. Women were categorized into two subgroups, either urge to void or stress incontinence, as defined by the SIP.

Findings revealed that UI in women adversely affects QoL. Major differences were found when age and symptoms were analyzed such that women who had the urge to void identified symptoms associated with greater impairment than the symptoms defined by women who had stress incontinence. However, age had a greater influence on the impact of stress incontinence. Elderly women reported little effect of stress incontinence in terms of impairment while younger women believed stress incontinence had a significant effect on the overall QoL.

Norton & Brubaker (2006) discussed UI in terms of being under-reported and under-treated. The authors cited that in women "urine storage and emptying is a complex coordination between the bladder and urethra, and disturbances in the system due to child birth, aging or other medical conditions can lead to urinary incontinence" (p.5). Further, that stress and urge UI, the two main types of UI in women, can be evaluated and clinically assessed by most primary physicians. They go on to discuss the pathophysiology, epidemiology, symptoms, signs, urodynamic diagnosis and treatment options for different types of UI in women. However, the authors do mention in the assessment and management of UI in primary care, the importance of acknowledging stigma or effect on QoL of the woman, and to initiate non-surgical options depending on the type of UI and overall goals for treatment.

Lifford, et al. (2008) used a prospective study design to examine the epidemiology of UI in older women. The authors cited that "establishing the epidemiological of UI can aid in identification of populations at risk, and help to target medical screening, prevention, and treatment" (p.1191). The study setting was a Nurses' Health Study that was established in 1976 when 121,700 female registered nurses in 11 United States responded to a survey pertaining to their medical history and lifestyles. Between 2000 and 2002 women were requested to complete two questions to evaluate their frequency of UI experienced and extent of urine leakage. Then, the rates of UI incidents and progression or remission of UI were calculated, and estimated relative risks of UI and associated risk factors completed by logistic regression. Results indicated women with no urine leakage at baseline reported 9.2% experiencing leakage at least once a month after 2 years. The women experiencing leakage at least weekly had an incidence of 3.6% with stress UI being the greatest incidence followed by mixed and urge UI. Stress UI in the women was found to decrease with age, while urge and mixed UI increased with age. With regards to the prevalence UI in the year 2000, findings indicated that 32.1% of the women experiencing leakage once a month progressed to experiencing leakage at least once a week over follow-up. Furthermore, 8.9% of women with frequency leakage in 2000 indicated an improvement to monthly leakage or less, while 25 had experienced complete remission. Conclusions from the study revealed that the UI incidence is high in older women, with the progression from occasional to frequent leakage being very common, while urge UI increases with age and has limited effective treatment modalities. Therefore, it was proposed that more research on UI prevention in older women needs to be conducted.

5. The burdens of UI on QoL of elderly women

UI imposes devastating psychosocial, physical and economical burdens for elderly women (DuBeau et al., 2006; Getliffe, et al., 2007; Hagglund & Ahlstrom, 2007; Howard & Steggall, 2010; Lifford et al, 2008; MacDonald & Butler, 2007; McDermott, 2010; Norton & Brubaker, 2006; Palmer, 1996; Parker, 2007; Wilson, 2003; Zeznock et al, 2010). Elderly women's

emotional health can be negatively affected by experiencing UI (Gallagher, 1998; Howard & Steggall, 2010; McDermott, 2010). The following are some studies that will demonstrate the burdens of UI on the QoL of elderly women. Gallagher (1998) used a descriptive correlation research design to explore the relationship between urogenital distress and the psychosocial impact of UI in elderly women living in apartment complexes in Toledo, Ohio. The sample was comprised of 17 women over the age of 60 who experienced UI at least once a week. Findings indicated that there was a strong relationship between urogenital distress and the psychosocial impact of UI in elderly women. The author further reported that UI negatively impacted physical, social and emotional aspects of health. These findings are consistent with other studies that have identified factors that support a negative effect of UI. Another example, a quantitative study by Norton (1982) focused on the degree and extent of restrictions imposed by UI, using a sample of 55 women aged 22-78 who attended a urodynamic clinic. Results from the study demonstrated that incontinence did have far-reaching psychosocial effects and contributed to women feeling anxious, embarrassed and unwilling to participate in a wide range of activities. To what extent age impacted on these restrictions and the psychosocial effects of UI was unclear given the wide variance in ages in this sample.

Whyman et al. (1987) measured the psychosocial impact of UI on 69 women living in the community, aged 55 and older using the Incontinence Impact Questionnaire (IIQ). The IIQ consisted of 26 items which asked women to rate the extent to which urine leakage affected their activities of daily living, social interactions and perceptions of self. Findings revealed that incontinence affects primarily women's perceptions of self. Daily activities most affected occurred when the availability of restrooms was unknown, and when women were unfamiliar with surroundings or engaged in physical recreation.

To acquire an understanding of older women's experience of UI in the community, Dowd (1991) interviewed seven women aged 58-79. Findings suggested that older women's experiences with UI posed a threat to their self-esteem. In addition, these older women employed a number of self-care strategies to control and normalize their UI into daily routines, thus maintaining their self-esteem and dignity. Although this study did address the psychosocial impact of UI in older women, the author neglects to identify or discuss the actual types of self-care strategies the women used to maintain self-esteem.

Sandvik et al. (1993) in a study of 187 women aged 19-91, investigated the psychosocial consequences of UI using a 38 item questionnaire mapping demographic data, medical history and toileting habits. Findings cited that 80% of the women interviewed considered UI to be more than a minor problem. The effect of age on these findings was not reported, which is a major limitation in interpreting the findings. These researchers defined three major concepts relating to the psychosocial impact of UI, mental distress, practical inconveniences, and social restrictions. Mental distress caused by UI included, fear of smelling, fear of discovery, feelings of despair, feeling dirty, feeling of inferiority, lack of self confidence, fear of being alone, loss of joy, and shame. Practical inconveniences caused by UI included smell, disturbed sleep, skin irritation, extra laundry, and added expenses. For women living in long-term care the "practical inconveniences" of smell and skin irritations are potential psychological burdens when attending socials, visiting with friends and families, or eating in the dining room. The social restrictions caused by UI included; lifting, laughing, travelling, dancing, shopping, wearing desired clothes, and entertaining guests.

Rolls (1997) explored the night time sleeping patterns of 18 residents living in a nursing home and the factors that impacted on sleep. Findings indicated that factors such as; environmental noise, lights, staff conversation, performance of routine incontinence care, and repositioning of residents who were immobile were major contributors to sleep disruption. Consequently, individualized incontinence care routines were considered as critical to promote sleep. In addition, Rolls (1997) asserted that residents experience more agitation during the day if awoken by night staff to perform incontinence care and repositioning. Thus, a lack of sleep due to the changing of incontinence products at night is a burden affecting the QoL of individuals living in LTC.

DuBeau et al. (2006) conducted a retrospective quantitative study using a Minimum Data Set (MDS) database involving 5 states (Kansas, Maine, Mississippi, New York and South Dakota) in the USA from 1994-1996. The purpose of the study was to determine whether nursing home residents with UI experienced worse QoL than continent residents, whether the relationship between QoL differs across cognitive and functional impairment, and to determine whether a change in continence status is associated with a change in QoL. The participants were aged 65 years and older. QoL was measured according to the MDS derived social engagement scale. Findings reported that UI was significantly associated with worse QoL in residents experiencing moderate cognitive and functional impairment, and new or worsening UI experienced over a 6 month period was associated with worse QoL. The authors suggested that this research evidence supports strong rationale for targeting interventions and strategies for those residents experiencing UI, while presenting an incentive to improving continence care.

Howard & Steggall (2010) in a descriptive literature review explored the relationship between UI, QoL and barriers to help-seeking behaviour in women. The authors indicated that factors such as severity of UI, type of UI, age, and actual QoL scores seemed to contribute to how UI impacts women's QoL. Reliable evidence concluded that increased severity of UI is as a predictor of impact on QoL (Huang et al., 2006; Yu et al., 2003). Yet, with increasing age the prevalence and severity of UI increases, but in younger women the impact of UI on QoL was found to be more significant than in their older counterparts (Monz et al., 2007). The major cue for seeking help for UI appears to have been the QoL score itself. This is supported by Yu et al. (2003) in their findings that indicated that QoL and women's perceptions of whether they viewed UI as a disease or not, were factors that affected women's help-seeking behaviour.

5.1 Physical and economic burdens of UI

Not only do elderly women experience psychosocial impacts of UI, but the importance of physical and economic burdens that UI can impose should not be overlooked. UI predisposes elderly women to physical side effects such as rashes, dermatitis, skin infections, decubitus ulcers, and urinary tract infections (Du Moulin et al., 2009; Getliffe et al., 2007; Goldstein et al., 1992; Nix & Haugen, 2010; Schnelle, 1991). There is also an increased risk of falls associated with UI in the elderly, due to wet and slippery floors from dribbling and impaired mobility due to wearing bulky or poor fitting incontinence products (Hu, 1990; Loughrey, 1999; Parker, 2007). This was evidenced in my own nursing practice in LTC. Incidents of residents falling occurred while toileting by slipping on their own incontinent products or urine. For some, the outcome was traumatic requiring treatment

and/or hospitalization for lacerations and fractures. This proved to be an enormous physical burden for the elderly and the healthcare system, despite being preventable with proper supervision and appropriate symptom management of UI.

UI imposes tremendous economic burdens on individuals and their families. UI is one of the primary reasons for breakdown in care giving relationships for the elderly, and often results in nursing home placement (Du Moulin et al., 2009; Coward et al., 1995; Hu, 1990). Given our aging population and longer life expectancy of women, it is the aging woman who will be at the greatest risk for requiring additional care for UI, and the potential increased for associated nursing home placement to long-term care facilities (Sharpe, 1995; Stewart, 2010; Wilson, 2003).

Over a twenty years ago Hu, (1990) asserted that there are costs associated with routine incontinence care included; labour, supplies, and laundry in LTC facilities. The burden of managing UI in long-term care has been estimated to be more than 3 billion dollars annually in the USA (Wilson, 2003). In Canada, the average cost for supplies and nursing care for a senior with UI residing in LTC is between \$3,000-\$10,000 per year (Earthy & Nativ, 2009). Budget conscious administrators provide residents with the most cost-effective incontinence products, supplies, and staffing. Therefore, elderly women in long-term care facilities incur a personal cost for buying preferred incontinence products, and personal hygiene items to hide embarrassing odour associated with UI (Getliffe et al., 2007; Stewart, 2010). In turn, these disposable incontinence and personal hygiene products are considered a burden for the environment, and may not be permitted for use in health related facilities and long-term care agencies (MacDonald & Butler, 2007). Moreover, scent-free policies instituted in many LTC facilities compounds the issue of elderly women attempting to hide embarrassing odours associated with being incontinent.

UI has psychosocial, physical, and economic burdens which impact on elderly women in today's society as evidenced in the literature (Beji et al, 2010; Borrie et al, 2002; Coward et al., 1995; Dowd, 1991; Earthy & Nativ, 2009; Goldstein, 1992; Gallagher, 1998; Hu, 1990; Lifford et al, 2008; MacDonald & Butler, 2007; McDermott, 2010; Norton, 1982; Parker, 2007; Resnick, 1997; Sandvik et al., 1993; Schnelle, 1991; Simons, 1985; Wilson, 2003;). Research is required that explores how elderly women's perceive the impact of this event on their overall QoL and sense of well-being. For healthcare providers working in long-term care to be instrumental in reducing the economic, physical, and psychosocial burden of UI they need to consider the perception of the residents and plan incontinence care in a way that promotes QoL and assists in decreasing the marginalization of elderly women experiencing UI.

5.2 The marginalization of elderly women

Western society focuses on youthfulness as evidenced in media images of anti-ageing cosmetics, wrinkle-smoothing creams and hair dyes (Bernard, 1998). Historically, elderly women have rarely been portrayed as attractive females, and were commonly viewed as asexual or incapable of sexual expression (Steinke, 1988). Sexual behaviour was believed to be inappropriate, hence taboo for older adults (Smedley, 1991). Consequently, gender and age have continued to marginalize elderly women in our society. Ageism creates a negative attitude towards the elderly, while reinforcing social oppression (Bernard, 1998). Blair and White (1998) suggested that compelling evidence exists concerning stereotyping related to

gender bias and ageism, which contributes to a lack of health maintenance services for older women. The present healthcare system reinforces this attitude by the lack of interest and resources for speciality practices in geriatrics (Wilson, 2003). Some healthcare providers diminish the significance of UI (Wilson, 2003) and some healthcare providers are seen as being unhelpful (Bradway, 2004), which in turn impacts upon women's seeking help for UI. UI is often found to be ignored by some healthcare providers due to their lack of education or expertise to address the healthcare issue, which are limiting factors negatively impacting service development and delivery (Getliffe & Dolman, 2007; Zeznock et al., 2009). Ignoring UI and negative demeaning attitudes towards the elderly, and the withholding treatments based on biased judgements and prognoses for the elderly are pervasive among some healthcare professionals and policy decision-makers (Mardon et al., 2006; Sharpe, 1995). The use of "baby talk" to elderly women by nursing staff in long-term care facilities reaffirms the negative perceptions of the elderly person's functional ability, perpetuating "women to women ageism" (Bernard, 1998; Sharpe, 1995). Bernard (1998) found that some healthcare providers, including nurses, possess more ageism attitudes than the population at large, a situation which dramatically impacts on the marginalization of elderly women. For elderly women, healthcare providers' stereotypical beliefs about aging increase the probability that their concerns will be devalued (Sharpe, 1995; Wilson, 2003). For that reason, elderly women may hesitate to discuss their UI with physicians, nurses, and other healthcare providers who possess ageist and sexist attitudes. Further, UI is considered to be a social taboo and stigmatizing, which is often another reason for women to not seek healthcare or delay in seeking healthcare services for their UI (Hagglund et al., 2003; Howard & Steggall, 2010). Walters et al. (2001) cited that withdrawal, resignation and low expectations were found to be dominant reasons for women not seeking assistance for their UI. Further, Horrocks et al. (2004) in a grounded theory study of twenty participants over 65 years old added that reasons for not seeking help for UI were independent management of UI, reactions to incontinence and attitudes to ageing and health. When individuals did seek help for incontinence the themes media influences and contact with primary care emerged.

Tauton et al. (2005) found that the attitudes of some healthcare providers' negatively impacted incontinence care, as they viewed UI as being time consuming and sometimes frustrating. Subsequently, patients were passively managed instead of being actively treated for UI. This is consistent with MacDonald & Butler (2007) who noted that the attitudes of staff providing care directly to women with UI in long-term care affected their UI experience, particularly when the staff were busy. This is supported by one woman in the study mentioning that her experience with UI in LTC was influenced directly by how busy the staff were when she rang to be toileted. Walters et al. (2001) acknowledged that even when some elderly do consult with healthcare providers there are high rates of unmet needs experienced. It was also found that healthcare providers often do not inquire about UI, even when individuals are at high risk (Du Moulin et al., 2009).

Zeznock et al. (2009) in a qualitative descriptive study of 17 women living with UI in Alaska found that although most women did seek out healthcare providers' their encounters with healthcare providers were varied with both negative and positive experiences. Many of the women in the study viewed encounters with healthcare providers as being a significant factor in their experiences of living with UI, particularly if those encounters were negative. Negative encounters with healthcare providers precluded women from seeking future

healthcare pertaining to their incontinence. Likewise, Hagglund and Ahlstrom (2007) in a phenomenological hermeneutic approach interviewed 14 women with UI in Sweden. One of the findings pointed out that some women had experienced a less satisfying encounter when they sought help for their UI. In some instances, women felt that they were treated nonchalantly by healthcare providers, and were not being taken seriously. Also, some women felt that they were wounded by the manner in which they were treated by some healthcare providers, but they did have a respectful experience when they accessed another healthcare provider.

Yet, some healthcare providers have found have to positively influence those experiencing UI (Borrie et al., 2002; MacDonald & Butler, 2007). One example is Borrie et al (2002) , who reported the use of specialized nurses (nurse continence advisors) with education and training in managing UI to positively impacted UI care, and reduced the incidence of UI, and use of incontinence pads in Ontario, Canada. The nurse continence advisors used behavioural interventions and lifestyle counselling, which proved to be a cost- effective management strategy consistent with recommendations and guidelines of the Canadian Continence Association. Given the shifting of demographics of our population, the extent to which healthcare providers' attitudes and behaviours exists in the delivery of care to the elderly, and specifically to women, requires close scrutiny and careful examination by healthcare providers and the public.

5.3 Managing UI in LTC

Distinct odours and piles of clean diapers are considered the hallmarks of nursing homes (Tulloch, 1989). The paucity of research and literature relating to UI in long- term care makes it difficult to change these images as the hallmarks of long -term care. There is obviously a need for more exploratory work to describe living and management of UI in long -term care. Managing the burden of UI in LTC is a major concern to administrators and healthcare providers. The increased availability of incontinence products augments the "cultural knowledge" that UI is a normal process for which pads and briefs are the best solution (Mitteness, 1990). The use of disposable absorbent products such as adult diapers or briefs, underpads and panty liners are major strategies for managing wetness for elderly women with UI in long- term care (Brink, 1990; Palmer, 2008; Wagg et al, 2004; Watson et al., 2003). The purpose of these disposable incontinence products are to "soak up" urine or contain incontinence for the dignity and comfort of the resident, protect clothing, furniture, floors and bedding, while simultaneously controlling odour (Brink, 1990; Getliffe et al., 2007). Advances in technology "have led to absorbent products that are designed to contain large quantities of urine and to protect the skin from the effects of incontinence" (Palmer, 2008, p.439). Hu et al. (1990) added that the staff use the disposable under pads to lift and reposition residents by pulling on the product. This practice results in tearing of the product, and thus leaking of urine contributes to odour. The use of absorbent products and pads should be based primarily on residents' assessments, requirements, and preferences and not for staff convenience (Palmer, 2008).

Mitteness (1990) cited that healthcare providers were informing the elderly that nothing could be done for their UI as it was just considered as a normal part of aging. This message was considered to support residents by providing a protective effect on one's self-esteem

(Herzog et al., 1989). Physicians perceived UI as a nursing task and often avoid dealing with the issue, thus ignoring the effect of UI on self-esteem of elderly women, while nurses often inappropriately focused on the management of soiling rather than on the management of incontinence (Mitteness, 1990). Staff in nursing homes reported finding UI care frustrating, time-consuming and aesthetically unpleasant, leading to staff burnout, and poor morale (Yu & Kaltreider, 1987). Notably, if caregivers view UI negatively, rather than a QoL concern, elderly women who are physically and psychologically devastated by the effects of UI are rendered helpless (Mitteness, 1990).

A study conducted by Birgersson et al. (1993) of six elderly women with a mean age of 80.5 years, living in a Swedish nursing home, identified that a decrease in self-esteem was closely linked with the manner in which nurses assisted them in changing their incontinence products. Elderly women were in a state of vulnerability regarding their intrinsic value and autonomy as a result of having UI and wearing an incontinence product. These authors send a powerful message to healthcare providers concerning UI in elderly women. The need to treat women who have UI with respect, support, and include them in decisions-making and choices regarding their UI is essential.

The implementation of fluid management and voiding schedules are strategies employed by some nursing staff in LTC as an attempt to reduce or eliminate UI (Brink, 1990). Nursing staff will often restrict fluids in the evening in order to reduce night-time toileting or wetting (Brink, 1990). However, imposing such a strategy as a policy for all residents is excessive and places individuals at risk for dehydration. The goal for creating such a policy raises the question of quality of care. By trying to control UI in elderly women, nursing staff may, in fact, be attempting to minimize their workload associated with UI. Little data was found to document the outcome of these shortages on overall care and resident's well-being.

Routine voiding schedules are considered habit training procedures that will avoid incontinence by having the resident empty their bladder regularly (Earthy & Nativ, 2009; Klusch, 2003). Voiding schedules are usually indicated for many residents living in LTC, yet too often voiding schedules become a regular regime to control incontinence (Palmer, 2008; Resnick 1992). Imposing such a strategy on a competent elderly woman, capable of making informed decisions regarding her UI has ramifications for self-esteem and QoL. A simple request to go to the washroom to void could be denied by the staff, because it is not her scheduled bathroom time. Additionally, these women who do not need to void, are forced to toilet. If voiding schedules are to assist residents in maintaining comfort and decreasing the number of incontinent episodes, they must be individualized (Birgersson et al., 1993). By providing individualized care, nurses may enable elderly women experiencing UI to increase their autonomy and self-esteem and ultimately their QoL.

Freundl and Dugan (1992) examined the relationships between attitudes, knowledge, and institutional culture in relation to management of UI in the elderly. The Incontinence Stress Questionnaire-Staff Reaction (ISQ-SR) was used to measure staff attitudes towards UI in the elderly. The participants were 336 nursing personnel from 16 different LTC agencies accrued by convenience sampling. Prevalence of UI was calculated at 72%, however written protocols were not always apparent. Also, over 50% of the agencies acknowledged to using catheters as a management strategy for UI, and almost all of the agencies used incontinence products. With regards to education, findings indicated that few of the agencies reported

having no training in the management of UI. However, most of the education was agency in-services, followed by classroom instruction in a school of nursing. Notably, less than half the participants acknowledged having formal clinical educational in the management of UI. According to the study, LTC facilities generally have positive attitudes toward UI in the elderly, but they have a limited knowledge regarding application to specific clinical situations or insight into the current research relating to UI. This lack of knowledge has dramatically impacted the manner in which UI care is provided to the elderly in LTC.

Vinsnes et al (2001) completed a study to understand Norwegian nurse's attitudes towards clients with UI by place of work, age, and educational levels of staff. Five hundred thirty-five responded to the questionnaire including five nursing facilities, three home care districts and medical surgical wards at a university hospital. Findings reported that staff members working in the long-term care were older than staff working in acute care units. Further, most of the registered nurses worked in the acute care, while most of the nursing assistants worked in long-term care. Findings also indicated that working on a medical surgical unit predicted more negative reactions and feeling towards UI than working in a nursing home. Also, nursing assistants working in medical units were more positive towards UI than registered nurses in LTC. Overall, the study indicated that attitudes toward UI were positive, but did not address how this translated to practice.

5.4 Elderly women managing UI in LTC

The literature suggests that elderly women practice a multitude of psychological and behavioural strategies to manage UI in long-term care. Many elderly women view UI as an inevitable part of aging, and often develop their own coping strategies rather than seeking help for their incontinence (Beji et al., 2010; MacDonald & Butler, 2007; Porrett & Cox, 2008; Stewart, 2010; Zeznock et al., 2009). Even earlier on, Skoner and Haylor (1993) suggested that elderly women prefer to normalize UI into their daily routines in an attempt to maintain their self-esteem. Time is measured in intervals between trips to the toilet in an attempt to minimize negative social sanctions from others due to visible soiling or smell thus, preventing shame and embarrassment (Mitteness, 1990). Psychological management strategies often include secrecy and social isolation (MacDonald & Butler, 2007). Elderly women keep incontinence a secret to minimize social ostracism or gossip, which in turn leads to social isolation (Mitteness, 1990; MacDonald & Butler, 2007). Some behavioural management strategies practiced by elderly women were reported to include; reducing fluid intake, voiding frequently, modifying activities that cause urine leakage, using pads and incontinent products, wearing perfume and deodorants to hide scents of urine, and altering clothing (Brink, 1990; Dowd, 1991; Hagglund & Ahlstrom, 2007; Hu et al., 1990; Mitteness, 1990; Skoner & Haylor, 1993; Whyman et al., 1987; Wilson, 2003; Zeznock et al., 2009). In addition to behavioural management, it has also been documented that the elderly implement dietary and environmental managements as a way to cope with UI (Wilson, 2003).

Routines in LTC facilities may not be supportive in assisting incontinent elderly women to practice their psychological and behavioural strategies (MacDonald & Butler, 2007). Maintaining social isolation and secrecy is very difficult as residents share dining areas and attend the same social activities. Scent free policies in long term-care facilities as previously mentioned present challenges for elderly women by preventing the use of fragrances such

as powders and perfumes to disguise the scent of urine. The lack of opportunity by women to implement the psychological and behavioural strategies they desire contribute to decreased self-esteem and further social isolation (Dowd, 1991). Consequently, it becomes imperative that healthcare providers in LTC shift their thinking of UI as a health and QoL issue, and to understand why elderly women use particular strategies to cope with UI.

5.5 The effects of UI on the QoL from the elderly women's lived experiences in LTC

There is limited literature pertaining to the impact of UI on the QoL of elderly women experiencing UI in LTC from their lived experiences. O'Dell et al. (2008) in a descriptive qualitative study interviewed 25 women aged 65-96 with pelvic floor dysfunction, to increase understanding of the views of frail elderly women in residential care related to QoL, values, and preferences for pelvic floor care. Study findings suggested that pelvic floor dysfunction was not reported to play a central role in general QoL in these elderly women with multiple co-morbidities. The women discussed the value of comfort, containment, restful sleep, and making do, and were opposed to evaluation or interventions or citing risks of discomfort and ineffectiveness. Further, these elderly women living in LTC may prefer to live with pelvic floor dysfunction, than to access evaluation and treatment, even though it is available in their LTC facility. The authors concluded that residents in LTC ought to be part of planning care if improved QoL is the primary goal.

Another qualitative study using one-to-one interviewing by MacDonald & Butler (2007), explored the experiences of elderly women living in LTC with UI. Findings revealed that UI had a dramatic impact on the QoL of elderly women residing in LTC. There existed physical costs of UI that included; skin irritation and breakdown, bladder inflammation, physical discomfort, and feelings of being wet and soggy. Women expressed feelings of being dependant on staff for care and therefore, felt like they were losing control of their body, losing dignity, losing their independence, and losing the ability to maintain active lives, which directly impacted their QoL. The study suggested opportunities for improving healthcare education related to QoL of women who experience UI, and the need to make the UI experience more visible and openly discussed as a healthcare issue. Therefore, more research studies need to be conducted to determine the effects of UI on the QoL of elderly women in LTC from their lived experiences.

6. Implications for clinical practice

6.1 A comprehensive UI assessment

Given that UI can result from a multitude of interwoven contextual origins "including anatomic, physiologic, pathologic, and external factors" (Parker, 2007, p.70), a comprehensive UI assessment is essential for quality and holistic care for elderly women in LTC experiencing UI. The importance of conducting a comprehensive UI assessment comprised of history taking and physical examination, medication review, fluid intake patterns, a voiding diary, details about UI such as voiding patterns, use of urinary bladder stimulants or irritants, environmental factors, type of UI experienced, and responding to questions about UI is evident in the literature (Benne, 2008; Borrie et al., 2002; Bucci, 2007; Parker, 2007). A voiding and intake diary is an example of one tool that is considered useful in assessing an individual's frequency, time of urination, fluid intake, and number of

incontinent episodes (Nitti, 2001). The outcome of this tool supported staff in long-term care to better understand and manage UI.

A thorough and comprehensive assessment of the underlying contributing factors of UI, and the identification of the type of UI experienced are pivotal in determining appropriate interventions and treatment modalities for those experiencing UI (Benne, 2008; Borrie et al., 2002). Possible outcomes of a thorough comprehensive UI assessment may include individualized targeted interventions and approaches that can lead to improved bladder control, and subsequently, a decrease in the frequency of UI (Benne, 2008). An individualized UI care approach, using multiple interventions is recommended that can assist in improving the QoL of elderly women experiencing UI in LTC (Benne, 2008; Borrie et al., 2002; Bucci, 2007; MacDonald & Butler, 2007).

6.2 Individualizing UI care

It was apparent from the literature that continence care is comprised of rituals and routines evidenced by scheduled toileting regimes, quotas of incontinent products and procedures for changing of incontinent products. These findings suggested the need for individualized and sensitive continence care for women living in LTC. Individualized care embodies “an interdisciplinary approach which acknowledges elders as unique persons and is practiced through consistent caring relationships” (Happ et al, 1996, p.7). Individualized care also encompasses the principles that all behaviour has meaning, that individual needs are best met when behaviour is understood by the care provider, and that the best manner in which to respond to behaviour is by assessment, intervention, and evaluation (Sullivan-Marx and Strumpf, 1996). According to Bucci (2007) for individualized continence care comprehensive identification, assessment, and diagnosis are necessary. The author supports the implementation of the CHAMMP (Continence, History, Assessment, Medications, Mobility, Plan) Tool, which is a comprehensive evaluation tool to assist in developing individualized care plans for those experiencing UI in LTC. The implementation of care plans that are individualized also provides continuity among staff providing continence care to achieve the desired and shared goal of continence for their residents (MacDonald & Butler, 2007). By implementing approaches in care that are matched with the individual’s preferences, needs, and capacities, then overall QoL can be improved (Newman, 2000).

6.3 Empowering women experiencing UI in LTC

As cited previously, studies have reported that women experiencing UI attempt to normalize UI into their daily lives by employing self-treatment strategies as opposed to seeking medical attention (Beji et al, 2010; Hagglund & Ahlstrom 2007; Milne & Moore, 2006; Skoner & Haylor, 1993). UI is commonly concealed to preserve a women’s sense of identity, and accepted as a normal part of ageing and being a woman (Bradway et al., 2010; Bush et al., 2001; Stewart, 2010). Frequently, elderly women lack knowledge of treatments that are available and are not often presented with opportunities to discuss or explain their UI with healthcare providers (Mardon et al, 2006; Zelnock et al, 2009; Dugan et al, 2001). Dugan et al. (2001) reported that almost 70% of older adults experiencing UI were not asked by their healthcare provider about their UI. Gaps in healthcare providers’ knowledge about UI and UI management, discomfort in discussing the topic and attitudes towards UI directly impact

upon the quality of continence care elderly women receive in LTC (Du Beau, 2006; Palmer, 2008). Empowering elderly women to regain UI requires education and a shift from providing task related care to incorporating holistic care and opportunities to dialogue with healthcare providers (Lekan-Rutledge, 2004). Empowerment is the practice of assisting individuals to establish control over factors that impact their health (Lau, 2002). Empowerment implies that individuals will assert control over their lives, thus optimizing independence with the support of healthcare providers serving as advocates (Jones & Meleis, 1993). Empowering women to actively participate in their care may lead to managing incontinence more efficiently and effectively (Roe, 2000).

There is a need for educating the public and healthcare providers to dispel the myths and taboos that UI is a normal part of aging, and that the implementation of incontinent products is not the only option or successful solution for UI (Stewart, 2010; Shamliyan et al., 2008). Knowledge regarding alternatives to incontinent products such as habit training, regaining mobility, Kegel exercises, self-management strategies, medications or medical management maybe considered is critical for healthcare providers working in long- term care. Sharing information about possible health promoting interventions and management strategies with women experiencing UI in LTC may provide them with hope for trying alternative methods to incontinence products, while empowering them to make choices and inform decision-making about their continence care. There are too few healthcare providers communicating to the public that UI is treatable, controllable, or preventable (Du Moulin et al., 2009; Zeznock et al., 2009). If more public education and awareness were provided, individuals entering facilities such as long- term care would be better able to manage and understand UI, which in turn potentially may assist in dispelling ageism and ageist practices in LTC.

6.4 Dispelling ageism in LTC

Ageism is a form of discrimination against the elderly causing labelling and stereotyping as a consequence of chronological age (Ward, 2000). Ageism impedes self-esteem and independence, which can lead to marginalization and unsubstantiated assumptions concerning the elderly. Ageism can be manifested by the attitudes of the staff, language used by the staff, lack of decision-making power by women, and lack of decision-making choice by women regarding their incontinent care, such as types of products worn, toileting times, or changing of incontinent products (MacDonald & Butler, 2007). Healthcare providers need to be attentive and reflect on their own attitudes, beliefs, and feelings towards the elderly (Zeznock et al., 2009), given that it dramatically impacts the provision of care, and consequently the self-esteem and psychosocial aspects of the elderly individual (Palmer, 2008). In addition, healthcare providers should be cognisant of their non-verbal and verbal communication, which potentially reinforces ageism. Implementing active therapeutic communication skills are vital for advocating the needs of women experiencing UI in LTC. There exists a lack of knowledge in healthcare providers' perspectives regarding the unique needs of elderly, especially with regards to the provision of individualized and sensitive incontinent care (DuBeau et al., 2007; Zeznock et al., 2009).

Managers are responsible to ensure that their staff is educated about ageism, and it's manifestations in the work place. Managers could also foster a work environment whereby

nurses and other healthcare providers can bring forth institutional ageist practices, and injustices without fear of reprisal. Healthcare professional licensing bodies must lobby governments and public policy-makers to incorporate positive awareness of the aging in developing health policies and the allocating of resources to caring for elderly with UI in LTC. Further, nurses and other healthcare providers should actively lobby governments for more healthcare programs and funding for LTC facilities, so that staffing and supplies are adequate to ensure provision of individualized, competent incontinent care. Existing national and provincial continence organizations need to be more vocally active about practice continence care guidelines, which in turn could assist in dispelling myths about incontinence, and potentially decrease ageist attitudes. Healthcare providers must be encouraged to participate in continence care committees within the LTC facilities locally, provincially, and internationally in order to attain knowledge about current evidenced-based continence care practices.

7. Implications for education

Nurses, physicians, and other healthcare providers must be educated about the implications of UI on the QoL of elderly women, a topic that is still rarely discussed, poorly understood, and considered taboo in some cultural groups. Lack of knowledge regarding UI, and the elderly perpetuates ageist attitudes of healthcare providers and consequently, negatively impacts the provision of quality and sensitive continence care. It was evident from research that healthcare providers lacked knowledge regarding assessment of UI, provision of individualized continent care, and physical and psychosocial implications of UI. Furthermore, there was little knowledge regarding assisting elderly women with UI or the influence of staff on the UI experience. Therefore, it is imperative to incorporate knowledge regarding UI into core curriculum of Nursing Undergraduate and Graduate programs, LPN programs, PCW programs, Medical Schools, and other health care professionals' education. This would help dispel the myth that UI is a normal part of ageing, while assisting healthcare providers to reflect on their own beliefs and bias regarding the elderly and UI. Furthermore, healthcare providers must be educated to initiate conversations and be confident in dialoguing about UI with elderly women, as it is a sensitive topic rarely discussed by the individual experiencing UI. While dialoguing about UI, healthcare providers should be cognisant of the ageist terminology that maybe barriers to communication and empowering women. Healthcare providers ought to be advocates and educate elderly women in LTC that experiencing UI is not normal, and there are treatment options and methods to assist in controlling UI other than incontinent products.

It is essential that mandatory continence care programs be incorporated into the orientation of new staff to LTC facilities, as nurses are often the first contact of elderly experiencing incontinent problems. A continence care program could include tools to assess, implement, and evaluate continence care and include strategies to prevent episodes of incontinence that are individualized. Another component of the educational program for healthcare providers in LTC could involve role playing, whereby each of the staff must wear an incontinent product that has been saturated with water over gym clothing, or have them lying in a bed with another staff member changing their incontinent product. Role playing is a unique interactive learning method whereby staff may appreciate what it is like to experience UI first hand. Additionally, management in LTC facilities must form partnerships with the staff

in planning, implementing, and evaluating such a program for it to be successful (Palmer, 1995). Administrators, managers, and owners of LTC facilities must be educated about the negative implications that short staffing and budgeting has on elderly women's experiences with UI in LTC. It is fundamental that management and staff attend educational conferences and in-services pertaining to UI to ensure that their knowledge is current, evidence-based and without bias from incontinent companies seeking considerable profits.

Staff and managers of LTC facilities must lobby governments to formalize initiatives to educate and recruit new staff to the field of Gerontology and long-term care, so that caring for the elderly will be viewed as a valuable and a respected place for employment. Advanced Nursing Practice in Gerontology and nurse-led continence clinics must be encouraged, and financially supported to optimize health promotion and standards of care for the elderly living in LTC (Borrie et al., 2002).

8. Implications for future research

Research is required to improve and advance evidence-based continence care practices. From the literature it is evident there are areas where further research is recommended. One potential area for further research is the impact of culture, economic and social factors associated with elderly women's experiences and perceptions of UI in LTC. This research would provide healthcare providers with the knowledge to understand the implications of UI on the QoL of elderly women, and assist in implementation strategies to ensure individualized continent care. With regards to cultural factors affecting women's perceptions of UI, it would be interesting to complete a research study with extended families where long-term care would not be considered an option, and to explore how significant an impact ageism has on a women's experience with UI. Also, to complete a comparative study of for profit and non-profit LTC facilities to determine differences and similarities in the experiences women have with UI. Further, conduct research on the prevention of UI in elderly women, design and test interventions that are based on evidence, and research that supports the implementation of nurse-led continence clinics that are cost-effective. More research that improves the diagnosis, treatments and management strategies, and outcomes is necessary to guide evidenced-based clinical practice for elderly women with UI in LTC is needed (Borrie et al., 2002; MacDonald & Butler, 2007; Du Moulin et al., 2009). Du Beau et al (2007) suggested that more research is required that determines residents' and families' definitions and values of "quality" UI care and how to incorporate them into quality improvement strategies. More research that address nurses' attitudes, and their cultural and ethnic perspectives about UI are imperative to advancing continence care practices (Zeznock et al., 2009).

A comparative study to explore similarities and differences between younger women experiencing UI and older women experiencing UI in LTC could be conducted. The knowledge attained from this type of study would be fundamental to care of all women experiencing UI in LTC. This research could assist healthcare providers to understand the impact of ageing, which potentially may optimize the quality of incontinent care. Also, a research study that developed and implemented an individualized continence care program in LTC is essential given the current state of knowledge about continence care. Such a study could combine quantitative and qualitative methods. Further, more research that considers

gender is essential to understanding the impact of UI on elderly women's QoL, and research that addresses the psychological, social, economic, and/or physical implications and contexts of UI, is crucial to developing and implementing holistic and quality continence care programs.

9. Conclusion

The minimal literature on such a specialized topic as UI in elderly women in LTC necessitates the use of literature that may be considered by some to be a little outdated. However, the relevance of this valuable research and insights into the topic continues to offer support in the absence of more recent research contributions. A review of the literature on UI in elderly women indicates that much of research has concentrated on the medicalization of UI, as evidenced by the predominance of diagnostic and surgical treatment regimes. Many of the studies found were quantitative, employing convenience samples of elderly women in treatment facilities or in the community, with wide age variances. Thus, these studies were not representative of the larger population of incontinent elderly women, who according to the literature, tend to harbour the secret of incontinence. Furthermore, much of the existing literature continues to explore UI from the contexts the physical and economic burdens of UI, the marginalization of elderly women experiencing UI in long-term care, and healthcare providers' attitudes, approaches, and strategies to managing UI in LTC. There is a lack of research found regarding elderly women's experiences of UI in LTC or the psychosocial impacts of UI on elderly women. Although, 80% of elderly women in one study indicated that UI was more than a minor problem, it was apparent from the literature that many healthcare providers considered UI a normal part of the aging process and a management issue, rather than a healthcare issue (Taunton et al., 2005).

Evident from the literature was the diversity in definitions and perspectives pertaining to UI, which may cause confusion and ambiguity for elderly women, healthcare providers and society. There exists a need to clearly define UI, so that there is common language to discuss UI, and common meanings about solutions and interventions for UI (Palmer, 1996; Zeznock et al., 2010). This in turn, may potentially assist in dispelling misconceptions and myths about UI, while providing elderly women with terms to foster discussions with healthcare providers about their experiences with UI.

Existing literature on elderly women's experiences with UI indicates that UI negatively impacts physical, social and emotional aspects of health, contributing to women feeling anxious, embarrassed and unwilling to participate in a wide range of activities. However, to what extent age impacts on the psychosocial effects of UI is unclear due to wide age variances in many of the study samples. Of the literature found, three of the studies (DuBeau et al, 2006; Sandvik et al., 1993; Whyman et al., 1987) quantified the psychosocial consequences of UI in elderly women, which supported the negative impact of UI. One qualitative study found described the meaning of UI to elderly women living in LTC (MacDonald & Butler, 2007). Another qualitative study by Dowd (1991) suggested that older women's UI posed a threat to their self-esteem and in order to maintain control of their lives implemented self-care strategies. However, this study neglected to discuss the self-care strategies that elderly women employed to maintain their self-esteem.

Also apparent from the literature is the importance of the physical and economic burdens of UI. Although the literature does cite the psychosocial, physical and economic burdens of UI on elderly women, few explored how these burdens impact QoL or a sense of well-being for incontinent elderly women in LTC. As well, research is needed that explores the knowledge, attitudes and behaviours of the public related to UI to develop strategies that will assist in educating the public and dispel myths and ageist perceptions about the elderly.

The research reviewed revealed that elderly women in society are marginalized by gender and age, which in turn contributes to the lack of health maintenance services for elderly women. Some literature findings reflected some healthcare providers' stereotypes of ageing further marginalized elderly women and devalued their concerns and stories, which silenced them. Yet, throughout the literature, the management of UI in LTC was emphasized. Nurses and other healthcare providers focused on the management of the soiling, and many viewed UI as a task for which incontinent products were the solution. UI care was found to be frustrating, time-consuming and comparable to a housekeeping task by healthcare professionals. The literature asserted that strategies such as pad use, fluid management, and voiding schedules were implemented by nursing staff in an attempt to reduce or eliminate UI. Unfortunately, fluid management put the elderly at risk for dehydration while voiding schedules were not individualized by nursing staff. Some literature addressed the need for comprehensive assessments and the importance of individualized continence care.

According to the research available elderly women experiencing UI practiced a number of self-management strategies; secrecy, isolation, frequent voiding, using incontinent products, reducing fluid intake, clothing changes, and wearing scents. Elderly women preferred to normalize UI into daily routines, thus preventing shame and embarrassment. Further research is required that allows elderly women to tell their stories about UI, and explore the impact of UI on women's sense of identity. By generating new knowledge, misconceptions and myths surrounding UI in elderly women can be dispelled. Knowledge will further nurses' and other healthcare providers' understanding of the meanings and effects of UI on women's QoL and sense of self, ultimately impacting healthcare practices of caring for elderly women experiencing UI in LTC.

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11. References

Bayliss, V. & Salter, L. (2004). Pathways for Evidenced-based Continence Care. *Nursing Standard*, Vol.19, No.9, (November 10-16, 2004), pp. 45-52 ISSN: 0029-6570

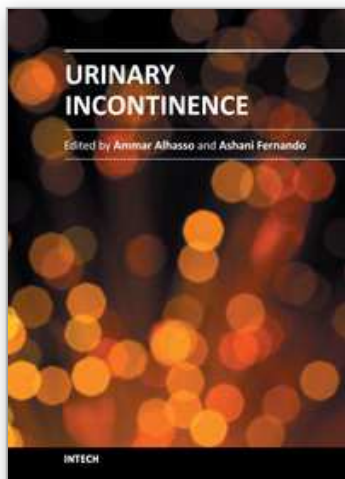
- Beji, N. K., Ozzbas, A., Aslan, E., Biligic, D. & Erkan, H. A. (2010). Overview of the Social Impact of Urinary Incontinence with a Focus on Turkish Women. *Urologic Nursing*, Vol.30, No.6, (November-December, 2010), pp.327-334, ISSN 1053-816X
- Benne, J. (2008). Correct assessment is key to treatment. *Long-Term Living*. Vol. 57, No.4, (April 2008), pp. 32-34, ISSN 1940-9958
- Bernard, M. (1998). Backs to the future? Reflections on women, ageing and Nursing. *Journal of Advanced Nursing*, Vol.27, No.3, (March 1998), pp. 633-640, ISSN 0309-2402
- Birgersson, A. M., Hammar, V., Widerfors, G., Hallberg, I. R. & Athlin, E. (1993). Elderly Women's Feelings about Being Urinary Incontinent, Using Napkins and Being Helped by Nurses to Change Napkins. *Journal of Clinical Nursing*, Vol. 2, No.3,(May 1993), pp.165-171, ISSN1365-2702
- Blaire, K. & White, N. (1998). Are Older Women Offered Adequate Health Care? *Journal of Gerontological Nursing*, Vol.24, No.10, (October, 1998), pp. 39-44 ISSN 0098-9134
- Borrie, M. J., Bawden, M., Speechley, M. & Kloseck, M. (2002). Interventions led by Nurse Continence Advisors in the Management of Urinary Incontinence: A Randomized Controlled Trial. *Canadian Medical Association Journal*, Vol.166, No.10, (May 2002), pp.1267-1273, ISSN 0820-3946
- Bradway, C., Dahlberg, B. A. & Barg, F. K. (2010). How Women Conceptualize Urinary Incontinence: A Cultural Model. *Journal of Women's Health*, Vol.19, No. 8, (December 2009), pp. 1533-1541, ISSN 1931-843X
- Bradway, C.K.W. (2004) Narratives of Women with Long-term Urinary Incontinence. Nursing Dissertation. University of Pennsylvania, USA.
- Brink, C. A. (1990). Absorbent Pads, Garments, and Management Strategies. *Journal of the American Geriatrics Society*, Vol.38, No.3, (March 1990), pp. 368-373, ISSN: 0002-8614
- Bucci, A.T. (2007). Be a continence champion: Use the CHAMMP tool to individualize the plan of care. *Geriatric Nursing*, Vol.28, No.2, (March-April 2007), pp. 120-125, ISSN 0197-4572
- Bush, T.A., Castellucci, D.Y., & Phillips, C. (2001). Exploring Women's Beliefs Regarding Urinary Incontinence. *Urologic Nursing*, Vol.21, No.3, (June 2001), pp. 211-218, ISSN 1053-816X
- Coward, R., Horne, C., & Peek, C. (1995). Predicting Nursing Homes Admissions among Incontinent Older Adults: A comparison of Residential Differences across Six Years. *The Gerontologist*, Vol.35, No.6, (December 1995) pp.732- 743, ISSN 0016-9013
- Day, R.A., Paul, P., Williams, B., Smeltzer, S.C. & Bare, B. (2010). *Brunner & Suddarth's textbook of medical-surgical nursing (2nd Canadian Ed)*. ISBN ISBN-13: 978-0-781-799898 PA, USA.
- Dowd, T. (1991). Discovering older women's experiences of urinary incontinence. *Research in Nursing and Health*, Vol.14, No.3, (September 1990), pp.179-186, ISSN1098-240X
- DuBeau, C., Simon, S. E. & Morris, J. N. (2006). The Effect of Urinary Incontinence on Quality of Life in Older Nursing Home Residents. *Journal of the American Geriatrics Society*, Vol.54, No.9, (September 2006), pp. 1325-1334, ISSN 00028614
- DuBeau, C. E., Ouslander, J. G. & Palmer, M. H. (2007). Knowledge and attitudes of nursing home staff and surveyors about the revised federal guidance for incontinence care. *Gerontologist*, Vol.47, No.4, (August 2007), pp. 468-479, ISSN 0016-9013
- Dugan, E., Roberts, C.P., Cohen, S. J., Preisser, J. S., Davis, C. C., Bland, D. R. & Albertson, E. (2001). Why older community- dwelling adults do not discuss urinary

- incontinence with their primary care physicians. *Journal of the American Geriatrics Society*, Vol.49, No.4 (April 2001), pp. 462-465, ISSN 0002-8614
- Du Moulin M. F. M. T., Hamers, P. P. H., Ambergen, A. W. & Halfens, R. J. G. (2009). Urinary Incontinence in Older Adults Receiving Home Care Diagnosis and Strategies. *Scandinavian Journal of Caring Sciences*, Vol.23, No.2, (June 2009), pp. 222-230, ISSN 0283-9318
- Earthy, A. & Nativ, A. (2009). Incontinence. *Long-Term Living*, Vol. 58, No.3, (March 2009), pp. 24-25, ISSN 1940-9958
- Edwards, D. J. (2001). Nonsurgical Options for Treating Incontinence. *Nursing Homes Long Term Care Management*, Vol.50, No.5, (May 2001), pp.40-42, ISSN 1061-4753
- Freundl, M. & Dugan, J. (1992). Urinary incontinence in the elderly: Knowledge and attitude of long-term care staff. *Geriatric Nursing*, Vol.13, No.2, (March/April 1992), pp.70-75, ISSN 0197-4572
- Gallagher, M. (1998). Urogenital distress and the psychosocial impact of urinary incontinence on elderly women. *Rehabilitation Nursing*, Vol.23, No.4, (July-August, 1998), pp. 192-197, ISSN 0278-4807
- Getliffe, K, Fader, M., Cottenden, A., Jamesion, K. & Green, N. (2007). Absorbent Products for Incontinence: 'Treatment Effects' and Impact on Quality of Life. *Journal of Clinical Nursing*, Vol.16, No.10, (October 2007), pp. 1936-1945, ISSN 0962-1067
- Goldstein, M., Hawthorne, M., Engeberg, S., McDowell, J., & Burgio, K. (1992). Urinary Incontinence: Why people do not seek help. *Journal of Gerontological Nursing*, Vol.18, No.4, (April 1992), pp. 15-20, ISSN 0098-9134
- Hagglund, D. & Ahlstrom, G. (2007). The Meaning of Women's Experience of Living with Long-term Urinary Incontinence is Powerless. *Journal of clinical Nursing*, Vol. 16, No.10, (October 2007), pp.1946-1954, ISSN: 0962-1067
- Hagglund, D. & Wadensten, B. (2007). Fear of Humiliation Inhibits Women's Care-Seeking Behaviour for Long-term Urinary Incontinence. *Scandinavian Journal of Caring Sciences*, Vol.21, No.3, (August 2007), pp. 305-312, ISSN 0283-9318
- Herzog, A., Fultz, N., Normolle, D., Brock, B., & Diokno, A. (1989). Methods used to manage urinary incontinence by older adults in the community. *Journal of the American Geriatrics Society*, Vol.37, No.4, (April 1989), pp. 339-347, ISSN 0002-8614
- Horrocks, S, Somerset M, Stoddart H & Peters T. (2004). What prevents older people from seeking treatment for urinary incontinence? A qualitative exploration of barriers to the use of community continence services. *Family Practice*, Vol. 21, No.6, (March 2004), pp. 689-96, ISSN 0263- 2136
- Howard, F. & Steggall, M. (2010). Urinary Incontinence in women: Quality of life and help-seeking. *British Journal of Nursing*, Vol.19, No.12, (June 2010), pp. 742-749, ISSN 0966-0461
- Hu, T. (1990). Impact of urinary incontinence on health-care costs. *Journal of the American Geriatrics Society*, Vol.38, No. 11, (November 1990), pp. 292-295, ISSN 0002-8614
- Hu, T., Kaltreider, L., & Igou, J. (1990). The cost-effectiveness of disposable versus reusable diapers: A controlled experiment in a nursing home. *Journal of Gerontological Nursing*, Vol.16, No.2, pp.19-24, ISSN 0098-9134
- Huang, A. J., Brown, J. S., Kanaya, A. M., Creaseman, J. M., Ragins, A. L. Van Den Eeden, S. K. (2006). Quality-of-Life Impact and Treatment of Urinary Incontinence in Ethnically Diverse Older Women. *Archives of Internal Medicine*, Vol.166, No.18, (October 2006), pp. 2000-2006, ISSN 0003-9926

- Hunnskaar, S. & Vinsnes, A. (1991). The Quality of Life of Women With Urinary Incontinence as Measured by the Sickness Impact Profile. *Journal of the American Geriatrics Society*, Vol.39, No.4, (April 1991), pp.378-382, ISSN 0002-8614
- International Continence Society (2011). *About the ICS*. 15.06.2010. Available from <http://www.icsoffice.org/About.aspx>.
- Jones, P. S. & Meleis, A. I. (1993). Health is Empowerment. *Advances in Nursing Science*, Vol.15, No.3, (March 1993), pp.1-14, ISSN1550-5014
- Klusck, L. (2003). Targeting our approach to incontinence. *Nursing Homes*, Vol.52, No.12, (December 2003), pp.28, ISSN 1061-4753
- Lau, D. H. (2002). Patient empowerment—a patient-centred approach to improve care. *Hong Kong Medical Journal*, Vol.8, No.5, (October 2002), pp.372-374, ISSN 1024-2708
- Lekan-Rutledge, D. (2004). Urinary incontinence strategies for frail elderly women. *Urologic Nursing*, Vol.24, No.4, (August 2004), pp. 281-301, ISSN 1053-816X
- Lifford, K. L., Townsend, M. K., Curhan, G. C., Resnick, N. M. & Grodstein, F. (2008). The Epidemiology of Urinary Incontinence in Older Women, Incidence, Progression, and Remission. *Journal of the American Geriatrics Society*, Vol. 56, No. 7, (July 2008), pp.1191-1198, ISSN 0002-8614
- Loughrey, L. (1999). Taking a Sensitive Approach to Urinary Incontinence. *Nursing*, Vol.29, No.5, (May 1999), pp. 60-61 ISSN 0360-4039
- MacDonald, C., Butler, L. (2007). Silent no more: Elderly women's stories of living with urinary incontinence in long-term care. *Journal of Gerontological Nursing*, Vol.14, No.20, (January 2007), pp. 14-20, ISSN 0098-9134
- Mardon, R. E., Hanlin, S., Pawlson, L. G. & Haffer, S. C. (2006). Management of Urinary Incontinence in Medicare-managed Care Beneficiaries: Results from the 2004 Medicare Health Outcomes Survey. *Archives of Internal Medicine*, Vol.166, No.10, (May 2006), pp. 1128-1133, ISSN 0003-9926
- McDermott, P. (2010). Review of the Factors Influencing Continence Care. *Journal of Community Nursing*, Vol.24, No.1, (January 2010), pp. 4-7, ISSN 1462-4753
- Milne, J. L., & Moore, K.N. (2006). Factors impacting self-care for urinary incontinence. *Urologic Nursing*, Vol.26, No.1, (February 2006), pp.41-51. ISSN 1053-816X
- Mitteness, L. (1990). Elder care: Social aspects of urinary incontinence in the elderly. *Journal of the American Geriatrics Society*, Vol.38, No.3, (March 1990), pp. 374-378, ISSN 0002-8614
- Monz, B., Chartier-Kastler, E., Hampel, C., Samsioe, G., Hunnskaar, S., Espuna-Pons, M., Wagg, A., Quail, D., Castro, R. & Chinn, C. (2007). Patient characteristics associated with quality of life in European women seeking treatment for urinary incontinence: Results from PURE. *European Urology*, Vol.51, No.4, (October 2007), pp.1073-1081, ISSN 0302-2838
- Newman, D. (2000). New technologies for stress urinary incontinence. *Contemporary OB/GYN*, Vol.45, (April 2000), pp. 69-83, ISSN 0090-3159
- Nitti, V. W. (2001). Overactive bladder: Strategies for effective evaluation and Management. *Contemporary Urology*, Available from <http://proquest.umi.com/pdq...3&Fmt=Del=1&Mtd=1&Idx=3&Sid=1&RQT=309> ISSN 1042-2250
- Nix, D. & Haugen, V. (2010). Incontinence-associated Dermatitis. *Long-Term Living*, Vol.59, No.3, (March 2010), pp.32- 33, ISSN1940-9958
- Norton, C. (1982). The effects of urinary incontinence in women. *International Rehabilitation Medicine*, Vol.4, No.1, pp. 9-14, ISSN 0379-0797

- Norton, P. & Brubaker, L. (2006). Urinary Incontinence in Women. *The Lancet*, Vol. 367, No. 9504, (January, 2006), pp. 57-67, ISSN 0140-6736
- O'Dell, K.K., Jacelon, C., & Morse, A.N. (2008). 'I'd rather just go on as I am' - Pelvic floor care preferences of frail, elderly women in residential care. *Urological Nursing*, Vol.28, No.1, (February 2008), pp. 36-47, ISSN1053-816X
- Palmer, M. H. (1995). Nurses' knowledge and beliefs about continence interventions in long-term care. *Journal of Advanced Nursing*, Vol. 21, No. 6, (June 1995), pp. 1065-1072, ISSN: 0309-2402
- Palmer, M. H. (1996). *Urinary Continence: Assessment and Promotion*. ISBN 0834207478, Gaithersburg, MD, United States of America
- Palmer, M.H. (2008). Urinary incontinence quality improvement in nursing homes: Where Have we been? Where are we going? *Urologic Nursing*, Vol. 28, No. 6, (December 2008), pp.439-444, ISSN 1053-816X
- Parker, K. F. (2007). The management of urinary incontinence. *Drug Topics*, Vol. 151, No. 18, (September 2007), pp. 69-76, ISSN 0012-6616
- Resnick, N. (1997). Discussion: Theoretical and Practical Considerations in Modeling Outcomes in Urge Urinary Incontinence. *Urology*, Vol.50, No.6a, (December 1997), pp. 109-110 ISSN 0090-4295
- Resnick, N. (1992). Urinary incontinence in older adults. *Hospital Practice*, Vol.32, No.10, (October 1992), pp. 139-184, ISSN 2154-8331
- Robinson, J. P. (2000). Managing Urinary Incontinence in the Nursing Home Residents' Perspectives. *Journal of Advanced Nursing*, Vol. 31, No.1, (January, 2000), pp. 68-77, ISSN 1523-6064
- Roe, B. (2000). Effective and ineffective management of incontinence: Issues around illness trajectory and health care. *Qualitative Health Research*, Vol.10, No.5, (September 2000), pp. 677-690, ISSN1049-7323
- Rolls, E. .C. (1997). Night Time Sleep in a Nursing Home. Unpublished Master's Thesis, Dalhousie University, Halifax, Nova Scotia, Canada.
- Romanzi, L. (2010). Vaginal Rejuvenation defined. 15.05.2010, Available from www.urogynics.org/blog/2010/vaginalrejuvenationdefined
- Sahyoun, N., Pratt, L., Lentzner, H., Day, A. & Robinson, K. (2001) The changing profile of nursing home residents: 1985-1997, 39.10.2004 Available from <http://www.cdc.gov/nchs/data/agingtrends/04nursin.pdf>
- Sandvik, H., Kveine, E., & Hunskaar, S. (1993). Female Urinary Incontinence: Psychosocial impact, self care, and consultations. *Scandinavian Journal of Caring Sciences*, Vol.7, No.1, (May 1993), pp. 53-56, ISSN 0283-9318
- Schnelle, J .F. (1991). *Managing Urinary Incontinence in the Elderly*. ISBN 0826173608, New York: United States of America
- Sharpe, P. (1995). Older women and health services: Moving from Ageism Toward Empowerment. *Women and Health*, Vol.22, No.3, pp. 9-23, ISSN 0363-0242
- Simons, J. (1985). Does incontinence affect your client's self concept? *Journal of Gerontological Nursing*, Vol.11, No.6, (June 1985), pp. 37-42, ISSN 0098-9134
- Skoner, M. M, & Haylor, M. J. (1993). Managing incontinence: Women's normalizing strategies. *Health Care for Women International*, Vol.14, No.6, (November-December 1993), pp. 549- 560, ISSN 0739-9332
- Smedley, G. (1991). Addressing sexuality in the elderly. *Rehabilitation Nursing*, Vol.16, No. 1, (January-February 1991), pp. 9-11, ISSN 0278-4807

- Steinke, E. (1988). Older Adults' Knowledge and Attitudes About Sexuality and Aging. *Image: Journal of Nursing Scholarship*, Vol. 20, No.2, (June 1988), pp. 93-95, ISSN: 0743-5150
- Stewart, E. (2010). Treating Urinary Incontinence in Older Women. *British Journal of Community Nursing*, Vol.15, No. 11, (November 2010), pp.526-532, ISSN 1462-4753
- Sullivan-Marx, E., & Strumpt, N, (1996). Restraint -free care for acutely ill patients in the hospital, *Advanced Practice in Acute and Critical Care Clinical Issues*, Vol.7, No.4, (November 1996), pp. 572-578, ISSN 15597768
- Taunton, R.L., Swagerty, F.D.I., Lassetter, J.A., Lee, R.H. (2005). "Continent or Incontinent? That is the question". *Journal of Gerontological Nursing*, Vol.31, No.9, (September 2005), pp. 36- 44, ISSN 0098-9134
- Thakar, R. & Stanton, S. (2000). Management of Urinary Incontinence in Women. *British Medical Journal*, Vol.321, No.7272, (November 2000), pp.1326-1331, ISSN 0959-8138
- Thom, D., Haan, M., & Van Den Eeden, S. (1997). Medically recognized urinary incontinence and risks of hospitalization, nursing home admissions and mortality. *Age and Ageing*, Vol.26, No. 5, (September 1997), pp. 367-374, ISSN: 0002-0729
- Tulloch, J. (1989). The incontinency taboo. *Geriatric Nursing*, Vol.10, No.1, (January/February 1989), pp. 19, ISSN 0197-4572
- Vinsnes, A. G., Harkless, G. E., Haltbakk, J., Bohm, J., & Hunskaar, S. (2001). Healthcare personnel's attitudes towards patients with urinary incontinence. *Journal of Clinical Nursing*, Vol.10, No.4, (July 2004), pp. 455-462, ISSN 0962-1067
- Wagg, A., Milan, S., Lowe, D. & Potter, J., (2004). Pilot of the National Audit of Continence Care for Older People (England & Wales). Available from http://www.rcplondon.ac.uk/college/ceeu/ceeu_coop_home.htm
- Ward, D (2000). Ageism and the abuse of older people in health and social work. *British Journal of Nursing*, Vol.9, No.9, (May 2003), pp. 560-563, ISSN 0966-0461
- Walters, K., Iliffe, S., & Orrell, M. (2001). An exploration of help- seeking behaviour in older people with unmet needs. *Family Practice*, Vol.18, No.3, (January 2001), pp. 277-282, ISSN 0263- 2136
- Watson, N.M., Brink, C.A., Zimmer, J.G. & Mayer, R.D., (2003) Use of the agency for health care policy and research urinary incontinence guideline in nursing homes. *Journal of the American Geriatrics Society*, Vol. 51, No.12, (December 2003), pp. 1779-1786, ISSN0002-8614
- Whyman, J., Harkins, S., Choi, S., Taylor, J., & Fantl, A. (1987). Psychosocial impact of urinary incontinence in women. *Obstetrics & Gynecology*, Vol.70, No.3, (September 1987), pp.378-381, ISSN 0029-7844
- Wilson, M. M. G. (2003). Urinary Incontinence: Bridging the Gender Gap. *The Journals of Gerontology*, Vol.58A, No.8, (August 2003), pp.752-755, ISSN 1079-5006
- Yu, H.J., Wong, W.Y., Chen, J. & Chie, W. C. (2003). Quality of Life Impact and Treatment Seeking Chinese Women with Urinary Incontinence. *Quality of Life Research*, Vol.12, No.3, (May 2003), pp. 327-333, ISSN 0962-9343
- Yu, L.C., & Kaltreider, D.L. (1987). Stressed nurses dealing with incontinent patients. *Journal of Gerontological Nursing*, Vol.13, No. 1, (January 1987), pp.27-30, ISSN 0098-9134
- Zeznock, D. E., Gilje, F. L. & Bradway, C. (2009). Living with Urinary Incontinence: Experiences of Women from 'The Last Frontier'. *Urologic Nursing*, Vol.29, No. 3, (May-June 2009), pp. 157-185, ISSN: 1053-816X



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