Concept Analysis of Health-Related Quality of Life in Nursing Home Residents with Urinary Incontinence

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Bladder dysfunction and resultant urinary incontinence (UI) is a significant problem in nursing homes. Between 45% to 70% of residents in nursing homes experience UI (Lekan-Rutledge, 2004; McCliment, 2002; Newman, Gaines, & Snare, 2005; Palmer, 2008; Sparks, Boyer, Gambrel, & Lovett, 2004; Yu, Kalreider, Hu, L., & Craighead, 1989), and it appears to be increasing (DuBeau, Simon, & Morris, 2006) and is one of the pivotal reasons individuals are admitted from home to a nursing home (Newman et al., 2005).

Older adults who experience UI can also experience negative and often devastating outcomes, including falls (which, in turn, may lead to fractures), pressure ulcers, disruption of sleep patterns, and urinary tract infections (UTIs) (Lekan-Rutledge, 2004; Lewis, 1995; Newman et al., 2005; Wooldridge, 2000). Common psychological issues resulting from UI include dependency, shame, guilt, helplessness, depression, anxiety, and loss of self-esteem (Bradway, 2003; DuBeau et al., 2006; Ko, Lin, Salmon, & Bron, 2005; MacDonald & Butler, 2007; Teunissen, Van Don Bosch, van Weel & Lagro-Janssen, 2006).

The aim of this concept analysis is examination of health-related quality of life in nursing home residents with urinary incontinence. Walker and Avant’s concept analysis methodology was utilized to identify antecedents, defining attributes, consequences, empirical referents, and cases associated with the concept.

Key Words: Quality of life, nursing home residents, urinary incontinence, concept analysis.

Objectives
1. Explain the possible negative psychological issues related to older adult nursing home residents experiencing UI.
2. Define health-related quality of life (HRQoL).
3. Identify the characteristics of a positive HRQoL.
4. Discuss ways nurses may influence HRQoL in nursing home residents.

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Note: Objectives and CNE Evaluation Form appear on page 119.
Improved assessment and care provision processes should result from clarity and enhanced understanding of concepts. Walker and Avant (2005) made the following statement about the importance of concept analysis to practice: “The only way we will be able to demonstrate the evidence base for our practice is to be able to first describe the phenomena in a measurable or at least communicable way” (p. 63).

A variety of databases were utilized during the literature search portion of this analysis, including Proquest Health and Medical Complete, MEDLINE, CINAHL, Health Source: Nursing/Academic Edition, and Google Scholar. The author examined articles that utilized health-related quality of life (HRQoL) as a focus, but concentrated on articles dealing with the population of older adults and persons experiencing UI. For currency of information, articles prior to 2002 were excluded with the exception of seminal works focused on development of instruments to address, measure, and define HRQoL.

**Rationale for Use of HRQoL Concept**

The literature provides insight into ambiguity about the concept of HRQoL as compared to quality of life (QoL), and lack of consensus on gold standard definitions of these concepts (Anderson & Burckhardt, 1999; Farquhar, 1995; Sloane et al., 2005). For purposes of this analysis, the lack of consensus is acknowledged, and HRQoL will be considered a more narrowly defined concept than QoL with a focus on impact of health interventions on perceived QoL (Sloane et al., 2005).

HRQoL is negatively impacted when older adults experience UI (Bradway, 2003; DuBeau et al., 2006; Ko et al., 2005; MacDonald & Butler, 2007; Teunissen et al., 2006). Moreover, conditions having the most negative impact on HRQoL include “degree of frailty... history of strokes, diagnosis of Parkinson’s disease, previous falls or fractures, and the presence of urinary incontinence” (Sitou et al., 2005, p. 132).

The harmful impact of UI is a prominent issue for older adults and includes feelings of lack of control and dependency, shame, guilt, social isolation, avoidance of activities, anxiety, impaired self-esteem, and depression (Bradway, 2003; Ko et al., 2005; MacDonald & Butler, 2007; Teunissen et al., 2006). The Urodyamics Society and the American Urologic Association recommend that any study involving UI includes assessment and measurement of HRQoL (Blaivas et al., 1997). Finally, appropriate assessment and intervention improve HRQoL in older adults with UI (Bradway, 2003; Sajid, Tonsi, & Baig, 2008; Sitoh et al., 2005; Teunissen et al., 2006; Wodchis, Hirdes, & Feeny, 2003).

**Although the first definition addresses QoL, the author includes it due to the authoritative and seminal nature of the work, and because it informs the HRQoL concept and dimensions impacting and being impacted by it. All other definitions listed in Table 1 describe and define HRQoL.**

**Operational Definitions of HRQoL**

Numerous instruments measure or operationalize the concept of HRQoL. The instruments listed in Table 2 were chosen as operational definitions of HRQoL based on specificity of measuring QoL or HRQoL associated with UI. The Incontinence Stress Questionnaire for Patients (ISQ-P) is the only tool the author found to measure HRQoL in nursing home residents with UI (Yu et al., 1989).

**Antecedents**

Antecedents are defined as “events or incidents that must occur prior to the occurrence of the concept” (Walker & Avant, 2005, p. 73). The antecedents for this concept include residence in a nursing home, UI, and ability to perceive and express an experience of HRQoL.

**Defining Attributes**

Defining attributes are “the heart of concept analysis” (Walker & Avant, 2005, p. 68) and are recurring characteristics of the concept found in the literature. They are dynamic and may change over time as the concept matures or as the concept is viewed from a different perspective or with a different population (Walker & Avant, 2005). Recurring themes found within the literature describing HRQoL in nursing home residents with UI include a reduced sense of control and self-worth, dependency, shame, and social isolation (Ko et al., 2005; MacDonald & Butler, 2007;
Table 1. Theoretical Definitions of HRQoL

<table>
<thead>
<tr>
<th>Theoretical Definition</th>
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<tr>
<td>“WHO defines quality of life as an individual's perception of their position in life in the context of the culture and value systems in which they live, in relation to their goals, expectations, standards, and concerns. It is a broad-ranging concept affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, and their relationships to salient features of the environment.”</td>
<td>WHOQOL Group, 1997, p. 1</td>
</tr>
<tr>
<td>“…an abstract, subjective, multidimensional concept” with “no universal definition.” Four essential dimensions of HRQoL include physical health, mental health, social health, and an overall sense of functional well-being.</td>
<td>Wyman, 1998, p. 779</td>
</tr>
<tr>
<td>“The value assigned to duration of life as modified by the impairments, functional states, perceptions, and social opportunities that are influenced by disease, injury, treatment, or policy.” (This definition was utilized by researchers examining the Minimum Data Set for correlates to HRQoL)</td>
<td>Wodchis et al., 2003, p. 491</td>
</tr>
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<td>“…only those aspects of quality of life that can be affected by health care interventions.”</td>
<td>Sloane et al., 2005, p. 37</td>
</tr>
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<td>“The functional effect of an illness and its consequent therapy upon a patient, as perceived by the patient.”</td>
<td>Chen, Taichman, &amp; Doyle, 2008, p. 623</td>
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<td>“Health-related quality of life measures: patient outcome measures that extend beyond traditional measures of mortality and morbidity, to include such dimensions as physiology, function, social activity, cognition, emotion, sleep and rest, energy and vitality, health perception, and general life satisfaction.”</td>
<td>National Information Center on Health Services Research and Health Care Technology, 2008</td>
</tr>
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<td>“A multi-dimensional dynamic concept that has developed from the need to estimate the psychosocial impact of diseases, which include economic welfare, characteristics of community and environment, and health status.”</td>
<td>Sajid et al., 2008, p. 365</td>
</tr>
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<td>“…an individual’s quality of life from his/her own subjective perspective, in contrast to the professional's objective evaluation of the health status of the individual.”</td>
<td>Sajid et al., 2008, p. 366</td>
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Table 2. Operational Definitions of HRQoL

<table>
<thead>
<tr>
<th>Instrument Abbreviation</th>
<th>Instrument Name or Description</th>
<th>Source</th>
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<tr>
<td>CONTILIFE</td>
<td>Quality-of-life questionnaire about urinary incontinence</td>
<td>Amarenco et al., 2003</td>
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<tr>
<td>I-QOL</td>
<td>Urinary Incontinence Quality of Life</td>
<td>Wagner, Patrick, Bavendam, Martin, &amp; Buesching, 1996</td>
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<tr>
<td>ICIQ-FLUTS</td>
<td>International Consultation on Incontinence Questionnaire-Female Lower Urinary Tract Symptoms</td>
<td>Brookes, Donovan, Wright, Jackson, &amp; Abrams, 2004</td>
</tr>
<tr>
<td>ICIQ-UI Short Form</td>
<td>International Consultation on Incontinence Questionnaire-Short Form</td>
<td>Avery et al., 2004</td>
</tr>
<tr>
<td>ISQ-P</td>
<td>Incontinence Stress Questionnaire for Patients</td>
<td>Yu et al., 1989</td>
</tr>
<tr>
<td>KHQ</td>
<td>King's Health Questionnaire</td>
<td>Kelleher, Cardozo, Khullar, &amp; Salvatore, 1997</td>
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<tr>
<td>MUDI</td>
<td>Male Urogenital Distress Inventory</td>
<td>Robinson &amp; Shea, 2002</td>
</tr>
<tr>
<td>MUSIQ</td>
<td>Male Urinary Symptom Impact Questionnaire</td>
<td>Robinson &amp; Shea, 2002</td>
</tr>
<tr>
<td>N-QoL</td>
<td>Nocturia Quality of Life Questionnaire</td>
<td>Abraham et al., 2004</td>
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<tr>
<td>OAB-q</td>
<td>Overactive Bladder Symptom and Health-Related Quality-of-Life Questionnaire</td>
<td>Coyne et al., 2002</td>
</tr>
<tr>
<td>UDI</td>
<td>Urogenital Distress Inventory</td>
<td>Van Der Vaart, De Leeuw, Roovers, &amp; Heintz, 2002</td>
</tr>
<tr>
<td>YIPS</td>
<td>York Incontinence Perceptions Scale</td>
<td>Lee, Reid, Salmarche, &amp; Linton, 1995</td>
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Newman et al., 2005; Sajid et al., 2008; Sitou et al., 2005; Sloane et al., 2005; Teunissen et al., 2006; Wodchis et al., 2003. Wyman, 1998, Yu et al., 1989). Therefore, defining characteristics of positive HRQoL include a sense of control, self-worth, independence, and social engagement. The ISQ-P was developed based on nursing home resident experiences with UI, so themes were gathered from this tool (Yu et al., 1989). In addition, the theoretical definitions of HRQoL provide insight into aspects of the defining characteristics. The author utilized recurrent themes found in the literature, ISQ-P tool, and theoretical definitions to select the defining characteristics.

Consequences

Walker and Avant (2005) define consequences as “those events or incidents that occur as a result of the occurrence of the concept – in other words, the outcome of the concept” (p. 73). The consequences of positive HRQoL are significant for nursing home residents, and poor HRQoL can result in potentially devastating outcomes (Lekan-Rutledge, 2004; Lewis, 1995; Newman et al., 2005; Wooldridge, 2000). The resident has an enhanced self-esteem and sense of dignity when positive HRQoL becomes the lived experience. The resident experiences increased independence and the freedom to be more socially engaged. In this instance, the consequences and defining characteristics are essentially the same. Finally, as the resident’s UI improves, causing HRQoL to increase, a reduction in number of pressure ulcers, falls, UTIs, and catheterizations should follow (Lekan-Rutledge, 2004; Lewis, 1995; Newman et al., 2005; Wooldridge, 2000).

Empirical Referents

The final phase of concept analysis involves ascertaining empirical referents that identify or measure the defining characteristics (Walker & Avant, 2005). Empirical referents are defined as “classes or categories of actual phenomena that by their existence or presence demonstrate the occurrence of the concept itself” (Walker & Avant, 2005, p. 73).

Van Der Vaart, De Leeuw, Roovers, and Heintz (2002) made a case for the use of instruments to measure the specific aspects of HRQoL based on disease or condition versus use of a generic tool. They state that generic tools are “...often less sensitive for measuring specific aspects of a particular disease, compared with condition- or disease-specific HRQoL questionnaires” (p. 544). Based on this argument, the author proposes utilization of a tool that specifically measures HRQoL in nursing home residents with UI. The only tool fitting these criteria is the ISQ-P (Yu et al., 1989). Therefore, measurement of defining attributes would best be accomplished with this tool.

When UI is not properly assessed and treated in nursing home residents, outcomes can include increased falls, pressure ulcers, UTIs, and urinary catheterizations, which in turn negatively impact HRQoL (Lekan-Rutledge, 2004; Lewis, 1995; Newman et al., 2005; Wooldridge, 2000). These results would also be appropriate indicators or empirical referents to denote impairment of HRQoL. If these indicators are absent or reduced, positive HRQoL should be increased. Data regarding falls, pressure ulcers, UTIs, and urinary catheterizations can be obtained from the Minimum Data Set (MDS) form, a required documentation tool completed by nursing home staff for each resident on admission, quarterly, and with any significant change in condition (Centers for Medicare and Medicaid Services [CMS], 2006; DuBeau, 2005; Wodchis et al., 2003).

Cases

Model Case

According to Walker and Avant (2005), the development of the model case “...is an example of the use of the concept that demonstrates all the defining attributes of the concept” (p. 69). They describe it further as “a pure case of the concept, a paradigmatic example, or a pure exemplar” (p. 69). They note that model cases, as well as related, borderline, and contrary cases, can arise from “real life...the literature, or even be constructed” (p. 69). The following cases have been created by the author and include fictitious nursing homes, nursing home residents, and situations. The model case for the concept of HRQoL in nursing home residents with appropriately assessed and treated UI is the following. Ms. Smith has been a resident of Caring Court Nursing Home for six months. She was unable to remain at home due to mild cognitive impairment and mobility problems. In addition, she experienced worsening UI, which was partly to blame for the fall that led to her fractured hip. As a result of the assessment and intervention of a gerontology advanced practice nurse at the nursing home, her UI was properly diagnosed and treated. The nurses and nursing assistants were caring and respectful of her as they worked to manage her UI. Ms. Smith said, “When I was wet all the time and couldn’t control my urine, I didn’t feel I could even leave my room. I got so lonely, and almost felt shunned by others. At times I didn’t feel worth a dime.” She indicated that now not only is her hip better, but she feels better all the way around. She is now involved in several activities at the nursing home and is taking her meals in the dining room instead of alone in her room. This case includes all the defining attributes of positive HRQoL, including a sense of control, self-worth, independence, and social engagement.
Related Case

Walker and Avant (2005) describe related cases as “…those cases that demonstrate ideas that are very similar to the main concept but that differ from them when examined closely” (p. 71). They further state that related cases “are similar to the concept being studied [and] they are in some way connected to the main concept” (p. 71).

The related case for the concept of HRQoL in nursing home residents with appropriately assessed and treated UI involves Mr. Jones. Mr. Jones has been a resident at Caring Court Nursing Home for one year. In that year, he has gone from a sad, lonely, and withdrawn person to a highly engaged and seemingly joyous one. Mr. Jones lost his wife six months prior to becoming a resident of the nursing home. During that period, he lost interest in all activities and avoided being with people. He spent many days tearful and feeling that life was not worth living. His daughter became increasingly concerned about his sense of hopelessness and seeming lack of self worth.

After Mr. Jones was hospitalized for a UTI that led to sepsis, the decision was made to transfer him to Caring Court Nursing Home upon dismissal from the hospital. As nursing home staff worked with Mr. Jones and encouraged his involvement with other residents, he began to join in occasionally. When a group of residents invited him to join them twice weekly for games of poker, he reluctantly agreed. As he participated in the poker games, he began to share the loss he felt due to the death of his wife. He found that two others at the table had also lost their spouses and could relate to his sense of grief. Over the course of the year, Mr. Jones began to participate in more activities and was overheard to say, “I feel better than I’ve felt in a long time. I want to live again and with the help of my friends, I know I can. I am beginning to feel like my old self again. I know I can make it.”

This case includes the protagonist experiencing a greater sense of control over his life experiences, increased social engagement, and improvement in self worth. However, his feeling of improved HRQoL is tied to the companionship and empathy received from his fellow poker players rather than appropriate assessment and treatment of UI.

Borderline Case

According to Walker and Avant (2005), the borderline case differs from the related case in that it “contain[s] most of the defining attributes of the concept being examined but not all of them” (p. 70). They go on to say that borderline cases “…differ substantially in one of [the defining characteristics and are] inconsistent in some way from the concept under consideration” (p. 70).

The borderline case for the concept of HRQoL in nursing home residents with appropriately assessed and treated UI involves Ms. Brown. She is also a resident at Caring Court Nursing Home. She is on the Forget Me Not Alzheimer Unit at Caring Court. The staff on this unit provide excellent care, and maintain kind and respectful attitudes. Ms. Brown had a problem with UI, but placement on a prompted voiding toileting program has eliminated most of her UI issues. However, due to significant cognitive impairment, Ms. Brown is unable to express feelings resulting from improvement of her UI. She is actively involved most days in the activities of the unit and takes her meals in the dining area. This case shows Ms. Brown feeling comfortable, engaged, and in control, with positive self-worth; however, due to her impaired cognition, she is incapable of perceiving and expressing her experience of an improved health state and HRQoL.

Contrary Case

The final case is the contrary case, described as an obvious and unambiguous example of what the concept is not (Walker & Avant, 2005). The contrary case for this concept involves Mrs. Green. She is a resident of the Complacent Place Nursing Home. The personnel at this nursing home provide care that inconsistently meets minimum standards and rarely focuses on the individual needs of residents. When Mrs. Green was admitted, she had a significant UI problem. She wore incontinence briefs day and night. She also had mobility issues that resulted in not being able to make it to the bathroom without assistance prior to an episode of incontinence.

This situation could have been improved with the placement of a bedside commode. This was discussed in team meetings along with the use of timed voiding and the need for additional physical therapy to optimize the resident’s mobility. However, the persons who were to follow up on these measures did not do so; therefore, the UI and mobility problems worsened. As a result, Mrs. Green attempted to get up without assistance, slipped in urine, and fell, resulting in a fractured right arm. The fracture only served to augment the mobility issues. Since her right hand was dominant, she could no longer use it to move about in bed. Further, the staff did not turn her every two hours, so she developed a pressure ulcer to the coccyx area. The ulcer was not assessed properly; therefore, it was not identified until it reached stage 2 (at which point it was also moving rapidly toward stage 3).

Mrs. Green appeared increasingly despondent about her situation and made statements like, “Why is this happening to me? Just let me die.” It became progressively more difficult to treat the pressure ulcer due to the uncontrolled UI, so the physician...
was called and an order for an indwelling catheter was obtained. After one week with the catheter in place, Mrs. Green experienced delirium as a result of a UTI the staff did not identify. Due to the demanding and increasingly hostile behaviors of Mrs. Green resulting from the delirium, the staff again contacted her physician, and obtained an order for alprazolam to calm her down. The additional medication resulted in over-sedation, which led to even less movement, resistance to getting up in a chair, and terminated in pneumonia and hospitalization. Mrs. Green continued to worsen after being hospitalized, and ultimately died after two weeks from an overwhelming sepsis. In this case, none of the defining attributes of positive HRQoL were present.

Conclusion

Limitations and Recommendations

The concept of HRQoL is somewhat ambiguous and may be interpreted differently based on the perspective of the person or discipline defining it. The meaning and interpretation of the concept also varies based on the associated health condition. This concept is value-laden, and as a result, elicits an emotional response unique to each person.

A significant portion of the literature referred to in this concept analysis was derived from the discipline of medicine. This was due to the preponderance of literature located and determined by the author to be appropriate for this analysis, originating from that discipline. In some instances, the interpretation of HRQoL based on the medical model does not contain all the aspects of holism central to the discipline of nursing. This represents a need for additional studies either within the discipline of nursing or utilizing a multidisciplinary approach.

The author found a limited number of studies specific to the population of older adult nursing home residents. Since UI is experienced by the majority of this population, it is correlated with a negative impact on HRQoL. Maintenance of positive HRQoL has significant consequences in this population, and a concerted effort to utilize nursing home residents in more studies with this focus is needed.

Select review articles were included by the author in this concept analysis. These articles provided significant information valuable to the analysis of the concept and/or population of nursing home residents with UI, which was the phenomenon of interest; however, because these articles were not primary research, conclusions from the concept analysis may be limited.

Length of life is not the focus in HRQoL. Rather, the focus in HRQoL is on quality in the time that is available to the person. The literature indicates HRQoL is enhanced when individuals have a sense of control over their lives and daily experiences (Ko et al., 2005; MacDonald & Butler, 2007; Teunissen et al., 2006). Further, HRQoL is intrinsically tied to one’s sense of self-worth, which in turn, is tied to one’s sense of a positive health status (Sajid et al., 2008; Sitoh et al., 2005; Wilson & Cleary, 1995; Wodchis et al., 2003). However, finding adequate means of measuring these somewhat vague, and at times, seemingly incomprenhensible conceptual experiences is an ongoing limitation that does not lend itself to reductionist and positivistic appraisal.

Implications for Practice

It is critical that care providers in nursing home settings recognize the significance of UI on resident HRQoL. All care providers need an accurate understanding of UI to assure no person caring for a nursing home resident approaches UI as normal and expected, but as a highly significant and deleterious event with potentially grave implications. This recognition should lead to awareness of the importance of addressing psychological needs with the same emphasis and vigor as physical needs. The culture in nursing homes needs to move away from a focus on UI containment to a concerted and intentional focus on root cause management and treatment based on evidenced-based practice guidelines.

References


