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Spirituality in later life: Effect on quality of life.

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SPIRITUALITY AND QUALITY OF LIFE IN LATER LIFE

Quality of life (QOL) of older adults is of particular concern, given the relatively high incidence of chronic illness and functional impairments in the elderly. Nurses have a key role to play in maintaining and promoting QOL of older adults. It is well known that spiritual and religious beliefs are important to many older adults and people with chronic illnesses. For instance, 73% of Americans over 64 years of age report that religion is very important in their lives (Gallup, 1996) and when older adults were asked what made their lives good, spiritual beliefs and attending a place of worship were repeatedly mentioned (Bowling, Gabriel, Dykes, et al., 2003). Spiritual and religious supports are also important to people coping with cancer, other serious illnesses, and loss, many of whom are also older (Brady, Peterman, Fitchett, Mo, & Cella, 1999). Hence, the specific research question for the study was: Does spirituality explain the perceptions of QOL of older adults when age, gender, social support, and health status are controlled?

Literature Review

Spirituality

Spirituality is a concept that is of considerable interest to nurses. In nursing theories, there has been an interest in a unitary and unifying approach to caring for the whole person, and the traditional bio-psycho-social model has been expanded to include spirituality (Martsolf & Mickley, 1998; Parse, 1998; Watson, 1989). However, spirituality is a concept that is not always clearly understood or accurately measured (Bash, 2004; Chui, Emblen, Hofwegen, Sawatzky & Meyerhoff, 2004; Tanyi, 2002). Considerable research focuses on religion and religiosity. Religion refers to traditional belief systems, often organized in the context of an institution, and religiosity is often measured using indicators such as church attendance or participation in particular practices, rituals, and beliefs. It is apparent that many people, including nurse

educators, tend to confuse the concepts of religion and spirituality (Olson, Paul, Douglass, Clark, Simington, & Goddard, 2003).

Spirituality is more inclusive and universal than religiosity. It encompasses meaning in life as well as faith and is considered to be relevant regardless of whether or not a person is involved with any organized religion (Muldoon & King, 1995; Tanyi, 2002). It is thought to encompass a state of peace and harmony and relates to ultimate questions about the meaning of life, illness, and death (Dyson, Cobb & Forma, 1997; Emblen, 1992; Newlin, Knafl & Melkus, 2002). It is evident from the myriad of definitions of the concept that it has both religious and existential dimensions; the religious aspects relate to faith in a higher power or transcendent belief systems while the existential dimensions relate to a sense of meaning or purpose in life.

From a review of 73 articles on spirituality published between 1991 and 2000, Chui, Emblen, van Hofwegen, Sawatzky & Meyerhoff (2004) identified a number of themes including: existential reality, transcendence, connectedness, and power/force/energy. Most researchers defined spirituality existentially, including both individual experience and meaning in life. In relation to transcendence, the researchers believed that spirituality transcends the context of reality and exists through and beyond time and place. The essence of transcendence was considered to be liberation from suffering and opening to life and death. In relation to the theme of connectedness, authors conceptualized spirituality as relationships with self, others, nature and higher being. Love, harmony, and wholeness are important elements of these relationships. In relation to the theme of power/force/energy, researchers included creative energy, motivation, guidance, and striving for inspiration in their definition of spirituality.

In a systematic review of the gerontological nursing literature, Weaver, Flannelly, and Flannelly (2001) noted that many nurse authors used a single nominal measure of religion or spirituality in their studies. Only two used Likert-type scales of spiritual well-being consisting of

20 or more items. The frequency of religious or spiritual variables was nearly twice that found in gerontology or family medicine journals and far greater than that found in psychiatric or psychological journals.

While there has been increasing recognition of the importance of spirituality in peoples' lives, health care professionals do not always help in this regard. Recently, it was reported that 83% of people wanted to discuss spirituality in some form with their physician, but 91% reported that their physicians had never asked about spirituality (McCord et al., 2004). It is not clear that nurses are any better than physicians at addressing the spiritual needs of their clients. In a study of adults with cancer and their family caregivers, Taylor (2003) found that many family caregivers and clients were eager for spiritual care. These informants suggested that this care included kindness and respect; talking and listening; prayer, connecting with symmetry, authenticity and physical presence, quality temporal nursing care; and mobilizing religious or spiritual resources. It is notable that these strategies are, for the most part, elements of good nursing care.

Quality of Life

Many scholars regard QOL at least as important as quantity of life (Ebersole, 2000; Gems, 2003), and some nursing theorists, such as Benner (1985) and Parse (1998) view QOL as the goal of nursing. Nurse researchers have conducted considerable research on QOL of people with various health challenges (Ferrans, 1996; Hapse, 1994; Molzahn, Northcott & Hayduk, 1996; Zahn, 1992).

QOL is a concept that has also been defined and measured in many different ways. The question of what constitutes QOL has been a focus of exploration and investigation since the days of the early philosophers (Adler, 1980; Molzahn & Kikuchi, 1998). The introduction of the concept into health care research came at a time when the predominance of traditional medical

outcomes such as mortality and morbidity was criticized because they did not adequately represent a wide range of other potential outcomes of such interventions.

QOL is highly subjective and contextual. It is shaped by lived experiences of the individual. While most people intuitively understand the concept, there is lack of consensus among researchers on the definition of the concept. It is often used as an umbrella term covering a wide range of related concepts such as health status, functional status, happiness, lifestyle, depression, etc. (Molzahn, 1998; Moons, 2004). There is also some confusion in relation to the concept "health-related QOL" (HRQOL), which is often used to assess the impact of illness on QOL (Guyatt, Feeny, & Patrick, 1993); measurement of QOL involves a broader assessment than measurement of HRQOL, which focuses on impact of illness on the individual. Although measurement of QOL has been a challenge because of the wide range of definitions and conceptualizations, the development QOL tools has increased exponentially over the last 20 years in Europe and North America. Several guides have been developed for the selection and use of some of these measures (e.g., Bowling, 1995, 1997; ProQolid, 2005).

There are many issues pertaining to the measurement of QOL (Molzahn, 1998). Considerable attention has been given to the various dimensions of the concept (Ferrans, 1996; Molzahn, 1998; Zahn, 1992). While there is general agreement that there are physical, psychological and social dimensions to the concept, some researchers identify many more aspects. This has sometimes led to tautologies where the predictor or causal variable is also dimension of QOL. For this reason, a global measure of QOL was selected for this study. Another issue pertains to who is able to rate QOL. It has been found that nurses, physicians, and family members cannot accurately rate QOL of the patient (McPherson & Addington-Hall, 2003; Molzahn, Northcott & Dossetor, 1997; Pearlman & Uhlman, 1988) and it is recommended that only an individual can rate his/her own QOL.

Linking Spirituality and QOL

The relationships between religious beliefs and QOL have received far greater empirical study than spirituality and QOL, and much of the research focuses on concepts that are somewhat different from those in this study. Koenig, McCullough, and Larson (2001) report that there have been 724 studies on religious coping this century, and about two-thirds of them have demonstrated a positive association between religious activity and better mental health, greater social support, and less substance abuse. Of these studies, only 5% showed a negative impact of spirituality and religion on health related variables. The negative impact is attributed to religious struggles or negative coping (e.g., I feel God has abandoned me). Similarly, Larson, Swyer and McCulloch (1998) extensively reviewed journals and found that spirituality was a positive factor for coping with illness, preventing illness and aiding treatment. Sarvimaki and Stenbock-Hult (2000) found a significant positive relationship between perceived health and meaning in life. Hapshe (1994) found that spiritual integrity, a somewhat different concept, had a strong significant relationship with overall QOL. Hilleras, Jorm, Herlitz and Winblad. (2001) found a significant relationship between religiosity or having a belief and faith in a higher power and QOL in people over the age of 90. Loeb, Penrod, Falkenstern, Gueldner and Poon (2003), in a qualitative study, reported that relying on spirituality and/or religion was an important coping strategy employed by the 37 older adults who participated in a study of people managing multiple chronic conditions. However, there have been a number of conflicting findings including those of King, Steck and Thomas (1999) who noted that strength of spiritual beliefs was an independent predictor of poor outcome at nine months in 250 patients admitted to a London hospital. Tseng and Wang (2001) found no empirical evidence for the role of religious beliefs on QOL of older Taiwanese nursing home residents.

There has been limited research examining the specific relationships between the concepts of spirituality and QOL, particularly among older adults, and the existing findings are mixed. Bartlett, Piedmont, Bilderback, Matsumoto and Bathon (2003) found that spirituality (which was conceptualized as an internal quality that offers a sense of hope, meaning and opportunity for social connectedness that helps individuals adjust to the unpredictable nature of chronic illness) to be a significant predictor of positive QOL of a group of people with arthritis. Brady et al. (1999) found that spirituality was associated with QOL to the same degree as physical well-being in people with cancer. Some negative findings have also been noted. Raphael et al. (1997) found no significant links between spiritual beliefs and life satisfaction, a concept closely related to QOL. They did, however, find a moderate and significant positive link between spiritual being and perceived health of older adults.

In summary, there are considerable difficulties in the conceptualization and measurement of both spirituality and QOL. There has been research on the health benefits of religion but less research on the relationships among spirituality, QOL, and other variables, particularly with older adults.

Method

The Data Set

This was a secondary analysis of Canadian data from a larger international study designed to develop and test a new module for the measurement of QOL of older adults (WHOQOL-OLD) and to examine predictors of QOL of older adults. Data were available from a convenience sample of 426 people living in British Columbia, Canada who volunteered to complete the questionnaire. They had responded to advertisements placed in local community newspapers, posters in seniors' centres, and to invitations offered during presentations.

The Instruments

The instruments used in this study included: the WHOQOL-100 and a Demographic and Clinical Data Form. The WHOQOL-100 is a well-established and tested measure of QOL for a general population. The rationale for the development of the WHOQOL, its conceptual background, the proposed uses and the steps taken to develop the measures have been described in detail in a number of publications (WHOQOL Group, 1995, 1998). An agreed definition of QOL provided the starting point: "*Quality of life is the individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the persons' physical health, psychological state, level of independence, social relationships and their relationship to salient features of their environment"* (WHOQOL Group, 1995).

The instrument was developed through an iterative process that included the development of an agreed definition of QOL, agreed definitions of facets or particular characteristics of QOL, the generation of a large item pool reflecting those definitions, and finally, an agreed set of items for the pilot WHOQOL. The WHOQOL-100 consists of 100 items and includes six domains: physical health; psychological well-being; level of independence; social relationships; environment; and spirituality, religion and personal beliefs. There are 24 facets or sub-domains and four questions per facet. The factor structure was confirmed using confirmatory factor analysis, and the instrument was found to discriminate between healthy and ill populations (WHOQOL Group, 1998). The reliability (consistency, stability) and validity (face, content, convergent, divergent) of the instrument has been demonstrated in previous studies (WHOQOL Group, 1998). In this study, the consistency reliability for the measures was supported with Cronbach alpha scores of .88 for the spirituality facet, and .80 for the support facet. Health and QOL were measured with single item global measures.

The spirituality, religion, and personal beliefs facet of the WHOQOL was described as follows: “This facet examines the person’s personal beliefs and how these affect quality of life. This might be by helping the person cope with difficulties in his/her life, giving structure to experience, ascribing meaning to spiritual and personal questions, and more generally providing the person with a sense of well-being. The facet addresses people with differing religious beliefs (e.g., Buddhists, Christians, Hindus, Muslims), as well as people with personal and spiritual beliefs that do not fit within a particular religious orientation…”(WHOQOL Group, 1995). The four items measuring spirituality relate to personal beliefs give meaning, feel life is meaningful, personal beliefs give strength to face difficulty, and personal beliefs help to understand difficulty.

Overall QOL was measured using a single global item on the WHOQOL-100. Health satisfaction was measured on a 5-point Likert scale from very dissatisfied to very satisfied, with 5 representing the highest possible score. Social support was measured using the WHOQOL-100 facet score, calculated as the mean of four items (count on others, support from friends, satisfaction with support from family, and satisfaction with support from friends) multiplied by a factor of four. Spirituality was measured using the WHOQOL-100 facet score, calculated as the mean of four items (personal beliefs give meaning, feel life is meaningful, personal beliefs give strength to face difficulty and personal beliefs give help to understand difficulty) multiplied by four.

The study received approval from the human research ethics committee of the University. Informed consent forms were signed by all participants.

Findings

The mean age in the sample was 74.36 (SD=8.58) with a range from 60 to 99 years; 73% were female and 27% were male. They were well educated; 63.6% reported technical college or

university education, 3.7% reported primary school education and 22.2% reported high school education. Forty-five percent were married or partnered, 4.4% were never married, and 47.7% were separated, divorced or widowed. Most (60.2%) lived unsupported in their own homes, while 29.2% lived in their own homes with support from a family member or other caregiver, 3.4% lived in residential care or nursing home settings, and 1.4% lived in sheltered housing.

The mean QOL score on the 5-point Likert scale was 4.11 (SD=.65) [possible range from 1 to 5. The mean health satisfaction rating was 3.65 (SD=.94) [possible range from 1 to 5]. The mean score on the spirituality domain was 14.18 (SD=3.53) [possible range from 4 to 20] and the mean score on social support was 16.07 (SD=2.76) [possible range from 4 to 20]. Higher scores on each variable reflected higher ratings of the concept.

Bivariate correlations among the variables were examined. There were strong and statistically significant relationships between health satisfaction and QOL (r=.46) and support and QOL (r=.53). There were also significant relationships among the spirituality score and QOL (r=.19) item, spirituality and social support (r=.20), spirituality and health satisfaction (r=.20), and support and health status (r=.35). Age and gender had weak and insignificant relationships with overall QOL (see Table 1). There was no evidence of collinearity among the variables.

To identify the significant predictors of QOL in older adults, a forward entry multiple regression equation was calculated, with QOL as the dependent variable and age, gender, spirituality, health satisfaction, and support as independent variables. Pairwise deletion of missing variables was used.

The regression model explaining QOL was highly significant ($F=48.23$, $df=5$, $p<.001$) and explained 36.5% of the variance in overall QOL (see Table 2). The strongest predictor of overall QOL was social support ($t=9.87$, $p<.001$); followed by satisfaction with health ($t=6.854$, $p<.001$). Contrary to the hypothesis, spirituality was not a significant predictor of QOL. An

increase of one SD on the support scale would increase the predicted value of QOL by .42 standard deviations above the mean when health status, spirituality, age and gender were controlled. An increase of one standard deviation on the health satisfaction scale would increase the predicted value of QOL by .29 standard deviations above the mean when support, spirituality, age and gender were controlled). Neither gender nor spirituality predicted overall QOL. Gender, age and spirituality, together explained less than 1% of the variance in overall QOL. The model indicates that QOL is significantly higher among those with strong social support and positive health perceptions.

Discussion

Spirituality was not a significant predictor of QOL of older adults in this sample. This was somewhat surprising given that in many studies fairly consistent findings have been of positive relationships with physical health, mental health and substance abuse outcomes (Koenig, 2002; Larson et al., 1998). It may be that spirituality has an impact on health status or other variables and not QOL. These findings support those of Raphael et al. (1997) who examined relationships between spiritual beliefs and life satisfaction in older adults. However, they conflicts with the findings of Bartlett et al. (2003) in a group of people with arthritis and Brady et al. (1999) who found that spirituality was related to QOL in people with cancer. It may be that there are differences in relationships among variables when individuals are affected by a serious or life-threatening illness, and this self-selected sample consisted largely of people who considered themselves to be healthy. It is also possible that other confounding or moderating factors were not considered.

A major question pertains to whether the spirituality measure used in this study is reliable and valid. While psychometric properties would suggest that it is (WHOQOL Group, 1998), it may be that the true essence of spirituality was not captured with these four items. The nature of

the items (personal beliefs give meaning, the person feels life is meaningful, personal beliefs give strength to face difficulty and personal beliefs give help to understand difficulty) do not reflect the transcendent aspects of spirituality and tap primarily existential aspects of spirituality. At the present time, there is no ideal measure of spirituality; in the future, it may be useful to replicate the study with other measures. Indeed, the WHOQOL Group has been working on a module to measure Spiritual, Religious and Personal Beliefs (Skevington, personal communication). Some authors (Bash, 2004) argue that spirituality cannot be measured with a scale and that perhaps only qualitative research can be helpful in gaining insights into the ephemeral nature of this concept. However, many abstract concepts can be accurately measured and it may be advisable in future research to use other measures of spirituality that more fully capture various aspects of the concept.

The major predictors of QOL in this study were health status and social support. They each had independent and important direct effects explaining a significant proportion of the variance of QOL. This is consistent with other studies; the effects of health status on QOL of people with chronic illnesses have been well documented, as have the effects of social support on both health and QOL (Johansson, 2003). Social support in particular has been found to explain QOL in previous studies (Bowling, Banister, Evans & Windsor, 2002; Sarvimaki & Stenbock-Hult, 2000). It is known that older adults receive considerable support from their church communities, and this could be explored further in relation to spirituality and QOL. Specifically, the nature of the support, who provides it, and the activities that are most supportive could be explored.

Raphael et al. (1997) also found significant positive associations between perceived physical health and QOL of older adults (and no relationships with spirituality and QOL). Similarly, Hilleras et al. (2001) and Bowling et al. (2002) found that there was a positive link

between health perceptions and QOL, but found no empirical support for the effect of comorbidity on QOL. While it has been recognized that spiritual beliefs are important in dealing with various life crises, it is not always clear whether spirituality has a direct effect on QOL, or whether it is mediated by social support, health status or other variables.

Limitations

Because this was a secondary analysis, we were unable to explore other possible variables of interest (such as religion and religiosity) and we were limited to the measures used in the original study. It would have been useful have multiple indicators of all of the concepts, particularly spirituality and QOL. There are other variables that may be important to QOL of older adults for which data were not available. For instance, symptoms and the symptom experience have been found to explain a significant proportion of QOL (Jablonski, 2004). Spirituality might operate to help people continue to value themselves and their lives despite symptoms and illness.

Data were collected from self-selected older adults who were not representative of the general population; because healthy older adults were overrepresented in the sample, it is very possible that they responded differently than others who are less healthy. This study is also limited in that people from only one region of Canada were studied. It is known that there are significant differences in variables such as QOL and church attendance between people in different countries (Bibby, 2002), and it would be inappropriate to generalize these findings to other regions.

Implications for Nursing Research and Practice

The roles of family, friends, and spiritual communities in offering support are important, and nurses' efforts to facilitate maintenance of supportive networks are likely to promote the QOL of older adults. Similarly, optimizing health status through various health promotion

strategies is likely to enhance QOL of older adults. While the role of spirituality in improving QOL of older adults is not clear from the findings of this study, spirituality and considering spiritual needs remains an important aspect of the care of the older adult.

Further research explaining the relationships between QOL and spirituality, using other measures of spirituality or with multiple indicators of the concept, is important. Also, research of a qualitative nature that explores the meaning of QOL and spirituality to older adults could provide us with a deep and rich understanding of how spirituality is experienced and whether it is important to perceptions of health and QOL. Very few participants in this study lived in nursing homes or extended care facilities; further research pertaining to the ways to optimize QOL of this population is also warranted.

Conclusion

While there has been increasing interest in spirituality in both the social sciences and health professions, there has been limited research that has explored the relationships between spirituality and QOL of older adults. In this study, we found that spirituality was not a significant predictor of QOL of the older adults in this community based sample, when other significant variables such as social support and health status were controlled. Given measurement issues and homogeneity of the sample, further research is warranted.

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Table 1

Pearson Product Moment Correlations among Variables

	QOL	Gender	Age	Health	Spirituality	Support
QOL	1.0					
Gender	.07	1.0				
Age	-.07	-.04	1.0			
Health	.46***	.06	-.16***	1.0		
Spirituality	.19***	-.08	-06	.20***	1.0	
Support	.53***	-.01	-.03	.35***	.20***	1.0

Table 2

Regression Model of QOL with Gender, Age, Health Status, Spirituality and Support as Dependent Variables

Independent Variables	b	standard error		standardized beta
Social support	.09***	.01		.42
Health satisfaction	.20***	.03		.29
Spirituality	.009	.007		.05
Age	-.00005	.003		-.008
Gender	-.08	.06		.06
Constant	1.99***	.30		
R^2=.365	ANOVA	df	SS	MS
	Regression	5	64.12	12.82
	Residual	405	107.70	.27
	F=48.23	p=.000		

*** p<.001