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Re-examining Definitions of Spirituality in Nursing Research

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Abstract

Aim—This article presents a discussion of the definition of spirituality and its limitations for nursing research. It proposes a definition that will capture more accurately the role of spirituality in health outcomes.

Background—Studies have increasingly examined spirituality in nursing research as a coping mechanism attenuating the negative impact of traumatic stress on mental health. Existing definitions of spirituality in nursing research include elements of positive emotional states (meaning, purpose, general well-being) which confound mental health outcomes.

Data sources—Medline and CINAHL databases were searched from 2007–2011 for research articles examining spirituality definitions and measures used by nurse researchers.

Discussion—An analysis of the definitions of spirituality in nursing research reveals inconsistencies and confounding mental health concepts. The authors propose defining spirituality in the context of religious involvement when conducting research, while using a broader definition of spirituality when providing spiritual care. They argue such definition provides a more appropriate method of measuring this concept in research aimed at evaluating mental health outcomes while preserving the currently used patient- defined definition of spirituality when providing spiritual care.

Nursing Implications—A consistent definition of spirituality in nursing research evaluating mental health outcomes, distinct from ‘spiritual care’ in a clinical setting, is essential to avoid tautological results that are meaningless. Appropriate definitions will enable nursing researchers to more clearly identify resilience mechanisms and improved health outcomes in those exposed to traumatic stress.

Conclusion—A definition of spirituality that focuses on religious involvement provides a more uniform and consistent measure for evaluating mental health outcomes in nursing research.

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Spirituality; nursing; research methods ; psychology; mental health; holistic care; spiritual care

INTRODUCTION

Spirituality has become an increasingly common theme in the nursing literature with over 20 different published concept analyses in the last 2 decades (Taylor 2008, Pesut *et al.* 2009, Clarke 2009). This large number of definitions points to a lack of conceptual clarity in this field. Some nursing scholars see these varied conceptualizations as appropriate due to the diversity of culture, individualized preferences and personal spiritual definitions (Paley 2008a, Pesut 2008a, Pike 2011). However, others argue that the most recent literature on nursing and spirituality has not gone through a rigorous analysis of the used definitions, particularly in relation to measurement of outcomes, suggesting a lack of critique in this field (Clarke 2009, Paley 2008, Pesut 2008b, Swinton 2006, Koenig 2008). Currently, there is no 'gold standard' for the definition of spirituality that can be established independent of the historical use of the term in the English language or the Greek or Latin roots from which the word 'spirituality' is derived.

While one can argue, based on nursing's founder Florence Nightingale's (2009) statements in *Notes on Nursing*, that caring for the whole person -including one's spiritual needs- has been at the heart of the nursing discipline since its founding (O'Brien 1999, Ross 2009, Hsiao 2010), rigorous research in this area may still be in its infancy as inconsistent definitions make it difficult to measure health outcomes related to spirituality. There is little disagreement that spirituality is an area relevant for nursing education, practice and research; however, adequate definitions of spirituality continue to be a topic of much debate and little consensus in the nursing literature (O'Brien 1999, Berry 2005; Miner-Williams 2006, Swinton 2006, O'Connell & Skevingtonl 2007, Pesut 2008a, Pesut 2008b, Pesut *et al.* 2008, Tinley & Kinney 2007, Taylor 2008, Koenig 2008, Clarke 2009, Paley 2009, Pesut *et al.* 2009, Pike 2011, Hsiao 2010). The purpose of this article is to point out the limitations and unresolved questions that provide a gap in this field while proposing a definition for use in nursing research that may close the gaps, improve the rigor of research in this area and capture more accurately the influence of spirituality on health outcomes, particularly mental health. This discussion aims to achieve this purpose by: first, examining different philosophical paradigms used in this debate; secondly, reviewing recent nursing research (2007–2011) in an attempt to capture definitions and measures of spirituality currently used; thirdly, drawing conclusions and making recommendations that may strengthen nursing science in this field.

Problematic Definitions of Spirituality in Research

Below is one example of a potentially problematic definition: **'**Spirituality is a personal search for meaning and purpose in life, which may or may not be related to religion (Tanyi 2002, p. 690).' This statement lists 'a search for meaning and purpose' as part of the definition of spirituality, when we know that a lack of meaning and purpose is a symptom of mood disorders such as depression or anxiety (APA, 2000). Does that mean that highly

spiritual people do not get depressed or anxious, while those who do are not spiritual? When the goal is measuring emotional wellbeing as an outcome, this definition brings a bias that makes psychological outcomes indistinguishable from the concept of spirituality itself rendering the 'results' or such outcomes of spirituality questionable (Clarke 2009, Koenig 2007a, Koenig 2007b, Tsuang & Simpson 2008).

Another important aspect is that spirituality is seen by the nursing discipline to be an innate characteristic of individuals beyond one's country of origin, therefore making this an issue of international relevance (Baldacchino 2001, Hsiao 2010, Lundberg & Kerdonfag 2010, Mok *et al.* 2010). It is well documented that conceptualizations of spirituality can be influenced by one's culture and philosophical backgrounds, which may be religious or secular in nature (Pike 2011, Hsiao *et al.* 2010, Lundberg & Kerdonfag 2010, Mok *et al.* 2010, Swinton 2006). Currently, these differences seem to add to the dilemma making it difficult to provide consensus on a definition for spirituality in research because of the different contexts from which researchers may come, namely a cultural standpoint or upbringing that may see spirituality rooted in religion versus a more humanistic perspective, or vice-versa (Paley 2008). In contrast, principles of rigorous research are more easily agreed on and translated across cultures than are the definitions of spirituality. Some argue that research methodology in this field must follow universal principles of scientific rigor in measurement (Koenig 2007a, Clarke 2009, Taylor 2008, Paley 2009). These researchers disagree with other scholars who argue that one must ensure the appropriate 'elasticity' in definition of spirituality as a broad concept that may vary according to personal philosophical preferences (Sessana *et al.* 2011).

In sum, while the debate goes on, many critical voices have challenged the current conceptualizations of spirituality, particularly for research purposes. Swinton (2006) and others believe nurses seem unprepared to answer such challenges. It is possible that as nurses from every continent continue to pursue rigorous nursing research in spirituality and health with less emphasis on personal preferences (Clarke 2009) and more accurate translational outcomes, we may see increased consensus of methods as well as conceptualizations and measurements of spirituality that can be used across international borders. It is not enough to debate this issue from a cultural or personal perspective alone, although considering cultural differences is essential (Swinton 2006, Clark 2009). Regardless of where one may come from around the globe, as nursing continues to expand and yield valuable research contributions for determining the impact of spirituality on one's mental and physical health, nurse researchers must be critical in their use of definitions and measurement instruments. We must forgo inconsistent definitions of spirituality that render the findings from research examining relationships with mental health meaningless and not interpretable.

Background

This lack of conceptual clarity of the term spirituality understandably reflects a pluralistic, post-modern society (Pesut *et al.* 2008, Paley 2008). The nature of one's spiritual experience varies and can either produce negative emotions (guilt, bitterness) during trying life experiences resulting in negative mental health outcomes (Pargament *et al.* 1998, Koenig *et*

al. 2013) or produce meaning and purpose for one's life and these differences can be very personal in nature (Neuman 1995, Watson 1999, Baldacchino & Draper 2001, Hsiao 2010). However, in the latter case meaning and purpose are 'a result of' the spiritual experience or spirituality, rather than the essence of the spiritual experience or spirituality. The outcome must be clearly distinct from the predictor.

Traditionally in nursing, spirituality was rooted in religious experience and a relationship with a transcendent Superior God (O'Brien 1999, Taylor 2003, Pesut *et al.* 2008, Hsiao 2010); however, in the last decades many in nursing attempted to change that original definition to be inclusive of others who do not subscribe to a religious worldview but rather see spirituality as more related to a relationship with themselves, others or the environment (Reed 1992, Narayanasamy 1999, Burkhart & Nagai-Jacobson 2000, Sellers 2001, O'Hara 2002).

Mental Health Contamination

Current definitions in nursing have focused on distancing spirituality from religion (Lane 1987, Burkhartdt 1989, Emblen 1992, Buck 2006, McBrien 2006, Sessanna *et al.* 2007) while focusing more on meaning, purpose, hope, value, emotion, connectedness, transcendence, existential experience, power/force/energy and beliefs (Chiu *et al.* 2004, McCarroll *et al.* 2005, Miller-Williams 2006, Ellis & Narayanasamy 2009). Tanyi (2002) and Pesut *et al.* (2009) point out that nursing should be concerned with spirituality, rather than religion. However, meaning and purpose in life and a sense of peace -concepts used in several spirituality studies – are known as core mental health symptoms according to the American Psychiatric Association (APA) *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).* This gold standard for mental health diagnosis in the United States lists worthlessness (lack of purpose and meaning in life), sadness, loss of interest or pleasure (lack of peace), as two of the nine cardinal symptoms of major depressive disorder and that of some anxiety disorders as well (APA, 2000). Based on this fact we argue that there is mental health contamination in many commonly used definitions of spirituality used in nursing research, since while there is no gold standard definition of spirituality there is more agreement on a gold standard definition of mental health.

Furthermore, there are other problems. If these mental health concepts are included in the definition of spirituality and if the word 'spiritual' is defined a priori as good mental health states, we conclude that this excludes nearly the entire population of people with psychiatric illness from being spiritual and it links negative mental health outcomes (such as depression or anxiety) to a lack of spirituality, which is not necessarily true. Highly spiritual people can also be depressed or anxious. Today, advance practice nurse (APRN) clinicians and researchers must follow the DSM-IV mental health diagnostic criteria (or similar diagnostic criteria used elsewhere) in practice and as such we must consider that as nursing has expanded its definition of spirituality, moving away from religion to include mental health states and concepts, it has infringed on the DSM-IV mental health definitions providing mental health contamination (APA, 2000).

While it is accepted that definitions of spirituality in a clinical setting vary and may be personal in nature, this paper focuses not on the provision of spiritual care but on the

definition of spirituality used in research evaluating health outcomes. In such case, should we use a definition of spirituality that excludes or is distant from religion?

Philosophical Views in Research on Spirituality

To assist us in answering this question we must understand scientific nursing philosophies and critically consider which paradigms may provide the most appropriate approach for the most meaningful and accurate research results. Tinley and Kinney (2007) described three philosophical approaches to the study of spirituality: The first one is the 'empiricist' approach, which focuses on the need to have an objective measurement of the concept so it can be verified (Tinley & Kinney 2007, p. 72). In this view, one needs to be cautious to avoid bias, confounding and must ensure methodology that will provide explanation and predictions that can be generalized to other groups. This approach is often linked to quantitative research methods. A second approach is called by Tinley and Kinney (2007) as 'interpretivism' and draws from anti-reductionism and deterministic views in the study of one's experience (p.72). In this view, nothing is more important than the collective, cultural meaning each individual has, so the focus is not on the objective measures which minimize bias, but rather on the uniqueness of one's experience and the assigned meaning they place on them. This paradigm naturally fits qualitative methods that are fully open to the uniqueness of an individual's experience. Lastly, the 'poststructuralism' paradigm does not attempt to measure concepts. Rather it views knowledge and truth as incomplete and biased. Poststructuralism puts the previous two paradigms into question (Tinley & Kinney 2007, p. 27).

As we analyze nursing research in the field of spirituality we will see these three philosophical views expressed in diverse spirituality definitions. Tinley and Kinney (2007) conclude that each paradigm may be appropriate in answering different questions. That is precisely what we argue here while encouraging nurse researchers to carefully consider the questions and outcomes of their research. We ask, which approach is more appropriate to examine spirituality's relationship to and impact on mental and physical health outcomes? Several nursing authors have contributed to the debate on defining spirituality through the lens of the above philosophical paradigms.

Berry (2005) notes that the inconsistencies in definitions go from biological origins of spirituality, to animating energy forces and finally to more traditional definitions rooted in religious beliefs and practices. This variance in definitions has gone against the trend largely accepted by the scientific community to become more specific and consistent on definitions and conceptual measurements in research (Berry 2005). Most studies lack consistent measures making it difficult to compare across studies as well as to test hypotheses (Cranford & King 2011, Elliot 2011, McCarthy & Lender 2011, Noble & Jones 2010, Shrubsole 2010, Nixon & Narayanasamy 2010). Berry's critique is in part reflective of the 'empiricist' perspective.

In contrast, others advocate for not having one consistent definition but rather being inclusive and open to individual interpretations (Reed 1992, Narayanasamy 1999, Burkhart & Nagai-Jacobson 2009, Sellers 2001, O'Hara 2002, Swinton 2006, Pike 2011). One argument is that spirituality must be contextualized to the individual and culture and that it is

a changing concept which may have many meanings according to the situation (Pike 2011). Others add that the ambiguity of this concept can provide richness in translating individual differences in the perception of spirituality; however this has not been confirmed by systematic reviews or research (Clarke 2005). In fact, this proposition is not in line with quantitative methods which require consistent definitions. This inclusive and generous view of spirituality seems to be reflective of the 'interpretist' paradigm (Tinley & Kinney 2007).

However, Paley (2009) disagrees with this notion, stating that this definition of spirituality which covers everything from music or art appreciation to political views, from contemplation of nature to relationships, from work to sporting events, is a stretch that makes even atheists, agnostics, humanists and hedonists spiritual one way or another. He proposes 'methodological agnosticism' so as to embrace a belief in favor of a 'utilitarian' perspective that evaluates spirituality and theology in the same way (Paley 2009, p. 1971). This idea is closest related to 'poststructuralism' where the goal is to reform the inequities of the society and to challenge both of the other paradigms (Tinley & Kinney 2007).

The question remains, which paradigm is more appropriate in the scientific quest of identifying and understanding how spirituality is related to and affects health outcomes? Paley (2009) asserts the evidence is not confirmatory on the health benefits of religion or spirituality, citing Sloan (1999, 2006) - a critic of the current body of literature produced in the area of religion, spirituality and health - who claims a lack of rigor in methodologies. Interestingly, a recent comprehensive review documented nearly 3000 quantitative studies in this field, including several studies with rigorous definitions and measures (Koenig *et al.* 2012). However, only a fraction of those were conducted by nurse researchers and a fraction were considered well designed studies examining the health effects of spirituality and religion (Koenig *et al.* 2012). The problem is due in part to poor definitions and biased measures contaminated with the mental health outcomes.

If there is a benefit that spirituality and religion can bring that could foster resilience and improve health (Baldacchino & Draper 2001) nurse researchers should be interested in pursuing the answer to this question. After all, improving the health and well-being of the whole person (mentally, physically and spiritually) has been at the heart of nursing since its inception (Nightingale 2009, O'Brien 1999, Ross 2009, Persut *et al.* 2008, Hsiao 2010). To shed light into this issue a review of current nursing research articles was completed.

Data Sources

To evaluate better the research led by nurses in the area of spirituality and health outcomes Medline and CINAHL databases were searched for current nursing research articles. The search was conducted for research articles from January 2007 - December 2011 to answer two questions. The first question was to identify nursing research articles on spirituality and health outcomes published over the chosen recent years; the second question sought to evaluate the methods and measures reported by primary nurse researcher authors of these papers. This review focus on nursing research articles was purposeful as a way to measure the practice of nursing research. For that reason interdisciplinary studies were excluded.

To answer these questions and choose the dates to focus the literature review, a preliminary search was undertaken in Pubmed (including Medline) followed by a search of the CINAHL database between 1982–1991, 1992–2001 and 2001–2011 consecutively. The search used the words 'spiritual', 'spirituality' and 'nursing', followed by 'religion' and 'nursing.' Other inclusion criteria were: research articles only, English language, CINAHL and Medline articles with nurses as first authors. The PubMed search revealed 7 research articles between 1982–1991; 184 research articles between 1992–2001; and 401 articles between 2002–2011. The same search on CINAHL revealed 1 article between 1982–1991 (nurse not first author); 50 articles between 1992 and 2001 (nurses not first authors); and 281 between 2002–2011 (19 nurses as first authors; Table 1). This preliminary search showed evidence of the increased interest in nursing research on this topic over the years, particularly noting that nurses only emerged as first authors in the recent 15 years (1997–2011), with no nurses as primary author before this time.

Next, a search was undertaken using the words 'religion' and 'nursing'; as a result a larger number of research articles were produced, again with increased numbers over the last decade. In PubMed three articles were found from 1982–1991; 167 articles from 1992–2001; and 489 articles from 2002–2011. This same search on CINAHL revealed two articles from 1982–1991 (no nurses as first authors); 22 articles from 1992–2001 (no nurses as first authors); and 133 articles from 2002–2011 (ten nurses as first authors). A surge of nurses as primary authors was noted in the last ten years (although fewer in number compared with the search using 'spirituality' terms). Five of the ten articles with nurses as first authors were duplicated in the previous ten articles (using 'spirituality' terms), thus all five new articles with nurses as primary authors were added to the 19 articles retrieved using 'spiritual' or 'spirituality' terms, totaling 24 papers. Four were excluded since the articles did not focus on spirituality, leaving a total of 20 articles for examination (Table 1).

This literature search addressed the first research question and confirmed a strengthening interest by nurse researchers in leading studies and publications discussing spirituality, religion and health in recent years. The 20 articles with nurses as first authors chosen from 2007–2011 were then assessed to address the second research question by demonstrating:

1. The method of research conducted (qualitative, quantitative) and the outcome variable studied
2. Whether or not the definition of spirituality included psychological or mental health concepts
3. Whether the definition was independent from religion or linked to religion
4. Which measure was used to assess spirituality and whether the items were contaminated with psychological or mental health concepts (Table 2).

DISCUSSION

General Findings from Current Nursing Research on Spirituality

Among the 20 articles examined, three used mixed methods (quantitative & qualitative), eight were quantitative and nine were qualitative (Table 2). Representation from across

cultures was evident as five of them represented countries outside the USA, with 12 articles from the USA, four articles from the UK, one from Taiwan, one from Sweden on Thai culture, one from China and one from Korea.

The purpose of the studies varied with five articles focusing on mental health outcomes, five on quality of life, four on parish/faith community nursing, five on end of life health outcomes, five related to nursing students or nurses' perspectives on spiritual care/ spirituality, three examining cultural differences in spiritual care or spirituality perceptions and three focusing on the delivery of spiritual care or meeting spiritual needs –some had more than one purpose. Definitions of spirituality were lacking in eight articles, even though the key words of 18 of them were 'spirituality' or 'spiritual'. Twelve articles had a definition of spirituality but nine of them were contaminated with mental health concepts such as meaning, purpose or positive emotions. Fifteen articles included links to religion in the definitions, whereas five maintained spirituality as independent from religion. This finding may support a trend by nurse researchers to include religion in the definition of spirituality. In terms of measures used, four of six articles measuring spirituality did not report information on instrument validity.

Qualitative studies included focus groups, face-to-face interviews, or a written survey with open ended questions or semi-structured format. One of them provided a definition of spirituality a priori which was contaminated with mental health concepts as exemplified earlier in this manuscript and the author noted the limitation of this method. Of the eight quantitative studies, six reported using an instrument to measure aspects of spirituality or spiritual well-being and the remaining used surveys. Instruments used were: Spiritual Needs Inventory, Hospice Quality of Life, Spiritual Perspective Scale, Pearlman-Mayo Survey, Health Related Quality of Life, Spiritual Health Scale. Among the tools and questions reported in the 20 studies, five did not have contamination with mental health while nine of them did. The other six did not provide enough information for assessment. More importantly, overall seven out of 20 studies had mental health confounding and four out of five studies examining relationships between spirituality and mental health outcomes used contaminated measures of spirituality that included psychological or mental health concepts (Noble & Jones 2010, Nixon & Narayanasamy 2010, Schlairet *et al.* 2010, Chae & Seo 2010, Griggs 2010, Lundberg & Kerdonfag 2010; Mok *et al.* 2010). This confounding the measurement of spirituality with mental health puts the meaning of the results in question.

Overall, the evaluation of spirituality definitions and measures used in recent nursing research articles revealed inconsistencies in measurement across all articles, with most definitions including aspects of religion (15 of 20) and the inclusions of mental health contamination as part of spirituality (7 of 20) raising questions on the results.

Defining Spirituality in Religious Involvement: Why and How

Nurse researchers may choose appropriate definitions of spirituality and to inform this decision it is helpful to examine what paradigms best answer the question at hand. For questions focusing on spiritual care in a clinical setting perhaps the 'poststructuralism' perspective with 'elastic' definitions of spirituality may be relevant and appropriate (Paley 2009). However, if we want to measure the relationship between spirituality and mental or

physical health, a paradigm that values unbiased instruments uncontaminated with mental health concepts (i.e. 'empiricist') may be a better fit. In this case, measures should not be ambiguous but instead, consistent definitions and measures must be used (Berry 2005, Koenig *et al.* 2012, Hill & Hood, 1999). To improve the quality of the methods and results of nursing research in the field of spirituality and health we propose that spirituality in research is better served if defined in the context of religious involvement. Several researchers seem to suggest this is a concept more easily measured, agreed on and quantifiable (Berry 2005, George *et al.* 2002, Koenig *et al.* 2012, Hill & Hood 1999).

Religious involvement has been increasingly examined by other disciplines in relationship to mental health (Southwick *et al.* 2005, Koenig 2010, Pargament *et al.* 1998) and is defined as either an institutional affiliation, beliefs, practices, or adopted behaviors which are guided by a religious denomination or community of faith (Koenig *et al.* 2012). Religious involvement contains constructs such as religious coping, intrinsic religiosity, religious attendance and religious support (Koenig *et al.* 2012) and researchers found that it serves as psychological resource for coping with stress and trauma (Ahrens *et al.* 2010, Gillum *et al.* 2006,Koenig 2013, Pargament 1997, Southwick *et al.*l 2005, Sternthal *et al.* 2010, Taylor 2004, Watlington & Murphy 2006, Yick 2008).

Among the constructs of religious involvement, *intrinsic religiosity* is of particular interest for this discussion and is defined as an inner commitment to one's faith resulting in integration of religious beliefs and practices into one's life (Koenig & Cohen 2002). *Intrinsic religiosity* has been used as a proxy for spirituality and defined as such in several clinical trials and many rigorous studies of religion/spirituality and health (Koenig *et al.* 2012). Studies demonstrated *intrinsic religiosity* to be a strong predictor for low scores of depression and it has been validated as a measurement tool in different ethnicities and faith groups (Koenig *et al.* 2012). Thus, we suggest that spirituality in nursing research should be measured in religious involvement as a proxy of the *intrinsic religiosity* construct. As such, we submit that an appropriate definition of spirituality in nursing research is:

> Spirituality is distinguished from other things –humanism, values, morals and mental health – by its connection to the transcendent. The transcendent is that which is outside of the self and y*et al.*so within the self – and in Western traditions is called God, Allah, HaShem, or a Higher Power and in Eastern traditions is called Ultimate Truth or Reality, Vishnu, Krishna, or Buddha. Spirituality is intimately connected to the supernatural and religion, although also extends beyond religion (and begins before it). Spirituality includes a search for the transcendent and so involves traveling along the path that leads from non-consideration to a decision not to believe to questioning to belief to devotion to surrender (Koenig *et al.* 2012, p.46).

The above definition for spirituality allows researchers to adequately measure spirituality in the context of religious involvement with more consistency in research, while using constructs that are in nature distinct from mental health.

Implications for nursing

The discussion presented here is particularly relevant to nursing research and nursing education. For nursing research, first we conclude there is a need for more published studies evaluating the link between spirituality and health outcomes, as most articles reviewed focused on clinical practice and not on health outcomes research.

Another issue relevant to nursing research is choosing adequate definitions for spirituality and health research. Other disciplines have documented research using the spirituality definition proposed here and found that spirituality predicted fewer depressive symptoms during hospitalizations and those with high scores of intrinsic religiosity (spirituality) remitted 50% faster from depression than did those with lower intrinsic religiosity scores (Koenig *et al.* 1998, Koenig 2007, Koenig *et al.* 2012). Several studies have also linked religious attendance, religious involvement and intrinsic religiosity with reduced mortality and better mental and physical health outcomes (Koenig 2007, Lee *et al.* 2003, Fraser 2003, Koenig *et al.* 2012). These results are significant because the measures used were free from mental health contamination. However, among thousands of studies in this field, this review suggests that most of the nursing research articles over the last twenty years did not include measures of spirituality distinct from mental health concepts. The majority of nursing research studies have looked at cancer, palliative care and spirituality using measures contaminated with mental health that result in questionable claims about the benefits of spirituality on mental health or quality of life (Noble & Jones 2010, Nixon & Narayanasamy 2010, Schlairet *et al.* 2010, Chae & Seo 2010, Griggs 2010, Lundberg & Kerdonfag 2010, Mok *et al.* 2010). The predictors and outcomes have been linked by the concept and definition of spirituality, thereby leading to tautological results (Hill & Pargament 2003, Koenig 2008, Koenig *et al.* 2012). We must change course if we are to accurately evaluate any impact of spirituality on mental and physical health outcomes. We concur it is imperative for nursing researchers to consider improving the use of research methods so we can substantially contribute to the growing body of literature examining the health benefits of spirituality and religion (Berry 2005, Florczak 2010, Koenig *et al.* 2002, Facit Institute 1999, Koenig *et al.* 2012). For this end, using a mixed method approach (quantitative and qualitative) may be ideal, allowing the researcher to use consistent validated instruments while also exploring further one’s experience of coping through spirituality freely.

A final implication is relevant for nursing education. It is critical that educators consider promoting learning opportunities about spirituality in research and its conceptualization. By doing so they can stimulate critical thinking among students on how to choose adequate methods to answer research questions, as well as how to best incorporate a holistic perspective in nursing research that captures meaningful results, ultimately advancing understanding on how spirituality influences health. Such implications for nursing research and nursing education are relevant around the world and can be used cross-culturally in populations from diverse religious affiliations, beliefs and ethnic backgrounds.

CONCLUSION

A critical step in re-evaluating our definitions of spirituality as proposed in this article is to begin by evaluating our own worldview, biases and dearly held philosophical paradigms

about this debated topic. As nurse researchers take this step, we may be better able to think through the questions posed in this discussion in reference to research on health, without the fear of excluding individuals who may choose to define their own spirituality in a different way. We believe appropriate definitions and methods - according to the setting and research question - may transform the way nurses do research in spirituality and health by allowing us to capture more accurately the impact it may have on health outcomes. We propose this definition should be distinct from one used in a clinical setting. This distinction is critical to ensure inclusive spiritual care to anyone (religious or not) while also carrying strong research aimed at identifying effective coping strategies for better mental health outcomes. As we are able to more clearly identify mental and physical health outcomes of spirituality based on strong methodology (both quantitative and qualitative), using unbiased definitions free from mental health contamination, we will be in a better position to advance research evaluating mechanisms by which coping through spirituality during stress and adversity may be a protective factor for health. Further work is needed by nurse researchers to clarify not only the influence of spirituality on health but also identify the psychoneuroimmunology mechanisms by which that influence may occur. Such psychobiological findings could strengthen the science in the field informing future nursing practice and policy related to the care of vulnerable populations exposed to violence, trauma, adversity and illness.

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References

Ahrens CE, Abeling S, Ahmad S, Hinman J. Spirituality and Wellbeing: The relationship between religious coping and recovery from sexual assault. Journal of Interpersonal Violence. 2010; 25(7): 1242–63.10.1177/0886260509340533 [PubMed: 19729675]

American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders - Text Revision (DSM-IV-TR). 4. 2000.

Baldacchino D, Draper P. Spiritual coping strategies: a review of the nursing research literature. Journal of Advanced Nursing. 2001; 34(6):833–841.10.1046/j.1365-2648.2001.01814.x [PubMed: 11422554]

Berry D. Methodological pitfalls in the study or religiosity and spirituality. Western Journal of Nursing Research. 2005; 27(5):628–647.10.1177/0193945905275519 [PubMed: 16020569]

Buck HG. Spirituality: an analysis of the concept. Holistic Nursing Practice. 2006; 3:69–77.

Buck HG, Overcash J, McMillan SC. The geriatric cancer experience at the end of life: Testing an adapted model. Oncology Nursing. 2009; 36(6):664–673.10.1188/09.ONF.664-673

Burkhart, MA.; Nagai-Jacobson, MG. Spirituality and health. In: Dossey, BM.; Keegan, L., editors. Holistic Nursing: A Handbook for Practice. Jones and Bartlett Publishers; Sudbury, MA: 2009. p. 618

Chae YR, Seo K. Helath-related quality of life in women with breast cancer in Korea: Do sociodemographic characteristics and time since diagnosis make a difference? Oncology Nursing Forum. 2010; 37(4):E295–E303.10.1188/10.ONF.E295-E303 [PubMed: 20591793]

Chiu L, Emblen J, Van Hofwegen L, Sawarzky R, Meyhoff H. An integrative review of the concept of spirituality in the health sciences. Western Journal of Nursing Research. 2004; 26:405–428.10.1177/0193945904263411 [PubMed: 15155026]

Clarke J. Religion and spirituality: A discussion paper about negativity, reductionism and differentiation in nursing texts. International Journal of Nursing Studies. 2005; 43:775–785.10.1016/j.ijnurstu.2005.10.006 [PubMed: 16325186]

Clarke J. A critical view of how nursing has defined spirituality. Journal of Clinical Nursing. 2009; 18:1666–1673.10.1111/j.1365-2702.2008.02707.x [PubMed: 19646113]

Cranford C, King CR. Nurse practitioner students' perceptions of fibromyalgia pain and quality of life. Medsurg Nursing. 2011; 20(4):169–177. [PubMed: 21941928]

Elliot R. Spirituality, mental health nursing and assessment. Journal of Community Nursing. 2011; 25(3):4–10.

Ellis HK, Narayanasamy A. An investigation into the role of spirituality in nursing. British Journal of Nursing. 2009; 18(14):886–889. [PubMed: 19633601]

Emblem J. Religion and spirituality defined according to current use in nursing literature. Journal of Professional Nursing. 1992; 8:41–47.10.1016/8755-7223(92)90116-G [PubMed: 1573115]

Fetzer Institute. A Report of the Fetzer Institute/National Institute on Aging Working Group. Kalamazoo, Michigan: The Fetzer Institute; 1999. Multidimensional Measurement of Religiousness/Spirituality for Use in Health Research. Available at http://www.fetzer.org/research/248-dses [Accessed Jan 12, 2012]

Florczak K. Gathering information on Spirituality: From whose perspective? Nursing Science Quarterly. 2010; 23(3):201–205.10.1177/0894318410371836 [PubMed: 20558644]

Fraser, GE. Diet, life expectancy and chronic disease: Studies of Seventh-Day Adventists and other vegetarians. Oxford University Press; 2003.

Gillum TL, Sullivan CM, Bybee DI. The Importance of spirituality in the lives of domestic violence survivors. Violence Against Women. 2006; 12:240.10.1177/1077801206286224 [PubMed: 16456150]

George LK, Ellison C, Larson D. Explaining the relationship between religious involvement and health. Psychological Inquiry. 2002; 13:190–200.

Gerow L, Conejo P, Alonzo A, Davis N, Rodgers S, Domian EW. Creating a curtain of protections: nurse's experiences of grief following patient death. Journal of Nursing Scholarship. 2010; 42(2): 122–129.10.1111/j.1547-5069.2010.01343.x [PubMed: 20618596]

Greasley P, Chiu LF, Gartland M. The concept of spiritual care in mental health nursing. Journal of Advanced Nursing. 2001; 33(5):629–637.10.1046/j.1365-2648.2001.01695.x [PubMed: 11298199]

Griggs C. Community nurses' perceptions of a good death: a qualitative exploratory study. International Journal of Palliative Nursing. 2010; 16(3):139–149.

Hill, PC.; Hood, RW. Measures of religiosity. Birmingham, AL: Religious Education Press; 1999.

Hill PC, Pargament KI. Advances in the conceptualization and measurement of religion and spirituality. American Psychology. 2003; 58:64–74.10.1037/0003-066X.58.1.64

Hsiao Y, Chien L, Wu LW, Chiang C, Huang S. Spiritual health, clinical practice stress, depressive tendency and health promoting behaviors among nursing students. Journal of Advanced Nursing. 2010; 66 (7):1612–1622.10.1111/j.1365-2648.2010.05328.x [PubMed: 20492024]

Koenig HG. Religion, spirituality and medicine in Australia: Research and clinical practice. Medical Journal of Australia. 2007a; 186:S46.

Koenig, HG. Spirituality in Patient Care. 2. Philadelphia, PA: Templeton Foundation Press; 2007b.

Koenig HG. Spirituality and mental health. International Journal of Applied Psychoanalytic Studies. 2010; 7(2):116–122.

Koenig, HG. Role of religion and spirituality in coping with acute and chronic illness. In: Pargament, KI.; Exline, J.; Jones, J.; Mahoney, A.; Shafranske, E., editors. APA Handbook of Psychology, Religion and Spirituality. Washington, DC: American Psychological Association; 2013.

Koenig, HG.; Cohen, HJ. The Link Between Religion and Health: Psychoneuroimmunology and the Faith Factor. New York: Oxford University Press; 2002.

Koenig HG, George LK, Peterson BL. Religiosity and remission from depression in medically ill older patients. American Journal of Psychiatry. 1998; 155:536– 42. [PubMed: 9546001]

Koenig, HG.; King, D.; Carson, V. Handbook of Religion and Health. New York: Oxford University Press; 2012.

Koenig, HG.; McCullough, ME.; Larson, DB. Handbook of religion and health. New York: Oxford University Press; 2001.

Lane JA. The care of the human spirit. Journal of Professional Nursing. 1987; 3:332–337.10.1016/S8755-7223(87)80121-7 [PubMed: 3429744]

Lee, JW.; Stacey, GE.; Fraser, GE. Social support, religiosity, other psychological factors and health. In: Fraser, GE., editor. Diet, life expectancy and chronic disease: Studies of Seventh-day Adventists and other vegetarians. New York: Oxford University Press; 2003. p. 149-176.

Lundberg P, Kerdonfag P. Spiritual care provided by Thai nurses in intensive care units. Journal of Clinical Nursing. 2010; 19:1121–1128.10.1111/j.1365-2702.2009.03072.x [PubMed: 20492057]

McBrien B. A concept analysis of spirituality. British Journal of Nursing. 2006; 15(1):42–4. [PubMed: 16415748]

McCarroll, P.; O'Connor, T.; Meakes, E.; Meier, A.; O'Connor, TSJ.; VanKatwykm, PL. Spirituality and Health: Multi-Disciplinary Explorations. Wilfrid Laurier University Press; Waterloo: 2005. Assessing plurality in spirituality definitions; p. 43-59.

McCarthy VL. A new look at successful aging: exploring a mid-range nursing theory among older adults in a low-income retirement community. Journal of Theory Construction & Testing. 2011; 15(1):17–23.

Miner-Williams D. Putting a puzzle together: making spirituality meaningful for nursing using an evolving theoretical framework. Journal of Clinical Nursing. 2006; 15:811–821.10.1111/j.1365-2702.2006.01351.x [PubMed: 16879374]

Mok E, Wong F, Wong D. The meaning of spirituality and spiritual care among the Hong Kong Chinese terminally ill. Journal of Advanced Nursing. 2010; 66(2):360–370.10.1111/j.1365-2648.2009.05193.x [PubMed: 20423419]

Narayanasamy A. A review of spirituality as applied to nursing. International Journal of Nursing Studies. 1999; 36:117–125. [PubMed: 10376221]

Neuman, B. The Neuman Systems Model. 3. Appleton and Lange; Norwalk: 1995.

Nixon A, Narayanasamy A. The spiritual needs of neuro-oncology patients from patients' perspective. Journal of Clinical Nursing. 2010; 19:2259–2270. [PubMed: 20529167]

Nightingale, F. Notes on Nursing: What It is and What it is Not. Fall River Press; New York: 2009.

Noble A, Jones C. Getting it right: oncology nurses' understanding of spirituality. International Journal of Palliative Nursing. 2011; 16(11):565–569. [PubMed: 21135791]

O'Brien, ME. Spirituality in Nursing: Standing on Holy Ground. Jones and Bartlett; London: 1999.

O'Hara DP. Is there a role for prayer and spirituality in health care? Complementary and Alternative Medicine. 2002; 86:22–46.10.1016/S0025-7125(03)00070-1

O'Connell KA, Skevington SM. To measure or not to measure? Reviewing the assessment of spirituality and religion in health-related quality of life. Chronic Illness. 2007; 3:77–87.10.1177/1742395307079195 [PubMed: 18072699]

Paley J. Spirituality and secularization: nursing and the sociology of religion. Journal of Clinical Nursing. 2008a; 17:175–186.10.1111/j.1365-2702.2008.02401.x [PubMed: 17419777]

Paley J. Spirituality and nursing: a reductionist approach. Nursing Philosophy. 2008b; 9:3–18.10.1111/j.1466-769X.2007.00330.x [PubMed: 18154633]

Paley J. Religion and the secularization of health care. Journal of Clinical Nursing. 2009; 18:1963–1974.10.1111/j.1365-2702.2009.02780.x [PubMed: 19638056]

Pargament, K. The Psychology of Religion and Coping. New York, NY: Guilford Press; 1997.

Pargament KI, Smith BW, Koenig HG, Perez L. Patterns of positive and negative religious coping with major life stressors. Journal for the Scientific Study of Religion. 1998; 37(4):710–24.

Pesut B. A conversation on diverse perspectives of spirituality in nursing literature. Nursing Philosophy. 2008a; 9:98–109.10.1111/j.1466-769X.2008.00341.x [PubMed: 18336707]

Pesut B. A reply to 'Spirituality and nursing: a reductionist approach' by John Paley. Nursing Philosophy. 2008b; 9:131–138.10.1111/j.1466-769X.2007.00339.x [PubMed: 18336710]

Pesut B, Fowler M, Taylor E, Reimer-Kirkham S, Sawatzky R. Conceptualizing spirituality and religion for healthcare. Journal of Clinical Nursing. 2008; 17:2803–2810.10.1111/j.1365-2702.2008.02344.x [PubMed: 18665876]

Pesut B, Fowler M, Reimer-Kirkham S, Taylor EJ, Sawatzky R. Particularizing spirituality in points of tension: enriching the discourse. Nursing Inquiry. 2009; 16(4):337–346.10.1111/j.1440-1800.2009.00462.x [PubMed: 19906284]

Pike J. Spirituality in nursing: a systematic review of the literature from 2006–2010. British Journal of Nursing. 2011; 20(12):743–749. [PubMed: 21727836]

Reed PG. An emerging paradigm for the investigation of spirituality in nursing. Research in Nursing and Health. 1992; 15:349–357.10.1002/nur.4770150505 [PubMed: 1529119]

Ross L. Commentary on Paley J (2008) Spirituality and secularization: nursing and the sociology of religion. Journal of Clinical Nursing. 2009; 17:175–186.10.1111/j.1365-2702.2008.02401.x

Schlairet M, Heddon MA, Griffis M. Piloting a needs assessment to guide development of a survivorship program for a community cancer center. Oncology Nursing. 2010; 37(4):501–518.10.1188/10.ONF.501-508

Sellers SC. The spiritual care meanings of adults residing in the Midwest. Nursing Science Quarterly. 2001; 14:239–248.10.1177/08943180122108355 [PubMed: 11873345]

Sessana L, Finnel D, Jezewski MA. Spirituality in nursing and health-related literature: a concept analysis. Journal of Holistic Nursing. 2007; 25(4):252–262.10.1177/0898010107303890 [PubMed: 18029966]

Sessana L, Finnel DS, Underhill M, Chang YP, Peng HL. Measures assessing spirituality as more than religiosity: a methodological review of nursing and health-related literature. Journal of Advanced Nursing. 2011; 67(8):1677–1694. [PubMed: 21371082]

Shores C. Spiritual perspectives of nursing student. Nursing Education Perspectives. 2010; 31(1):8–11. [PubMed: 20397473]

Shrubsole J. A call to Christian health ministry: being God's agent. Journal of Human Caring. 2010; 14(3):22–28.

Sloan RP, Bagiella E. Claims about religious involvement and health outcomes. Annals of Behavioral Medicine. 2002; 24:14–21.10.1207/S15324796ABM2401_03 [PubMed: 12008790]

Sloan RP, Bagiella E, Powell T. Religion, spirituality and medicine. Lancet. 1999; 353:664–667.10.1016/S0140-6736(98)07376-0 [PubMed: 10030348]

Solari-Twandell A. Providing coping assistance for women with behavioral interventions. Journal of Gynecology and Neonatal Nurses. 2010; 39:205–211.10.1111/j.1552-6909.2010.01109.x

Southwick SM, Vythilingam M, Charney DS. The psychobiology of depression and resilience to stress: implications for prevention and treatment. Annual Reviews Clinical Psychology. 2005; 1:255–291.10.1146/annurev.clinpsy.1.102803.143948

Sternthal MJ, Williams DR, Musick MA, Buck AC. Depression, anxiety and religious life: A search for mediators. Journal of Health and Social Behavior. 2010; 51(3):343–59.10.1177/0022146510378237 [PubMed: 20943594]

Swinton J. Identity and resistance: why spiritual care needs 'enemies'. Journal of Clinical Nursing. 2006; 15:918–928.10.1111/j.1365-2702.2006.01651.x [PubMed: 16879384]

Tanyi R. Towards a clarification of the meaning of spirituality. Journal of Advanced Nursing. 2002; 39:500–509.10.1046/j.1365-2648.2002.02315.x [PubMed: 12175360]

Tanyi R, McKenzie M, Chapek C. How family practice physicians, nurse practitioners and physician assistants incorporate spiritual care in practice. Journal of the American Academy of Nurse Practitioners. 2009; 21(12):690–697.10.1111/j.1745-7599.2009.00459.x [PubMed: 19958420]

Taylor EJ. Nurses caring for the spirit: Patients with cancer and family caregiver expectations. Oncology Nursing Forum. 2003; 30:585–590.10.1188/03.ONF.585-590 [PubMed: 12861319]

Taylor EJ. What is spiritual care in nursing? Findings from an exercise in content validity. Holistic Nursing Practice. 2008; 22(3):154–159.10.1097/01.HNP.0000318024.60775.46 [PubMed: 18453895]

Taylor JY. Moving from surviving to thriving: African American women recovering from intimate male partner abuse. Research and Theory for Nursing Practice: An International Journal. 2004; 18(1):35–50.10.1891/rtnp.18.1.35.28056

Thompson P. Clergy knowledge and attitudes concerning faith community nursing: toward a three-dimensional scale. Public Health Nursing. 2010; 27(1):71–78.10.1111/j.1525-1446.2009.00828.x [PubMed: 20055970]

Tsuang MT, Simpson JC. Commentary on Koenig (2008) 'Concerns about measuring 'spirituality' in research.'. Journal of Nervous and Mental Disease. 2007; 196 (8):647–649.10.1097/NMD.0b013e3181813570 [PubMed: 18974679]

Walton J. Can a one-hour presentation make an impact on cultural awareness? Nephrology Nursing Journal. 2011; 38(1):21–20. [PubMed: 21469551]

Watlington CG, Murphy CM. The roles of religion and spirituality among African American survivors of domestic violence. Journal of Clinical Psychology. 2006; 62(7):837–57.10.1002/jclp.20268 [PubMed: 16703603]

Watson, J. Nursing: Human Science and Human Care: A Theory of Nursing (reprint). Jones and Bartlett; Sudbury: 1999.

Williams, D. Session 3: Research on Faith and Wellbeing. Andrews University Press; 2011. A Christian Worldview and Mental Health: Scientific research on the study of spirituality and mental health; p. 187-191.

Yick AG. A metasynthesis of qualitative findings on the role of spirituality and religiosity among culturally diverse domestic violence survivors. Quality Health Research. 2008; 18(9):1289–306.10.1177/1049732308321772

Ziebarth D, Miller C. Exploring parish nurses' perspectives of parish nurse training. The Journal of Continuing Education in Nursing. 2010; 41(6):273–279.10.3928/00220124-20100401-01

SUMMARY STATEMENT

What is already known about this topic

- Historically, a hallmark of nursing is caring for the whole person and recognizing health results from a balancing act of one's physical, mental, social and spiritual needs.
- Studies in spirituality have been criticized by the use of inconsistent definitions and unquantifiable measures often contaminated with mental health concepts.
- Many in nursing have attempted to define spirituality independent of religion providing an inclusive and independent conceptualization open to individual differences.

What this paper adds

- Current nursing research literature (2007–2011) confirms that the most common definitions and measures of spirituality are inconsistent and contaminated with mental health concepts which confound mental health outcomes.
- To adequately quantify the relationship of spirituality, religion and mental health researchers must consider a spirituality definition that is not tautological in nature.
- Defining spirituality in the religious involvement context provides a construct less likely to be contaminated with items assessing mental health and more valid for research on health outcomes.

Implications for practice and/or policy

- The definitions of spirituality in research aimed at evaluating mental health outcomes should be distinct from definitions used in the clinical setting for purposes of providing spiritual care.
- Spiritual care or spiritual assessment in the clinical setting should be inclusive and open to cultural and individually appropriate definitions and conceptualizations.
- Appropriate definitions of spirituality can transform nursing research aimed at determining the relationship between spirituality and mental health, while facilitating the identification of protective factors and resilience mechanisms.

TABLE 1

Search of Nursing Research Articles	Decade 1982– 1991	1992– 1996	1997– 2001	Decade 1992–2001	2001– 2006	2007– 2011	Decade 2001–2011
Spirituality & nursing (Pubmed)	7	52	132	184	231	170	401
Spiritual/ity & nursing (CINAHL)	1	8	42	50	146	135	281
1st author RN (CINAHL)	0	0	0	0	0	**19**	**19**
Religion and nursing (Pubmed)	3	33	105	138	266	224	491
Religion and nursing (CINAHL)	2	5	17	22	56	77	143
1ST Author RN (CINAHL)	0	0	0	0	0	**10**	**10 (5 included among the 19 above)**
Articles reviewed (1st author RN)							**24**
FINAL # articles for review (1st author RN)							**20 (4 excluded- health outcomes or spirituality not a primary focus)**

TABLE 2

AUTHORS/COUNTRY	DESIGN AND INSTRUMENTS USED	DEFINITION INCLUDES RELIGIOUS INVOLVEMENT	MENTAL HEALTH CONFOUNDING
Cranford & King (2011) US	• Qualitative/ quantitative • Used quality of life and pain perception questionnaires	Yes	Yes. Use of 'hopeless, lost, meaningless' noted in definition
Elliot (2011) UK	• Critical review of qualitative methods (focus groups, questionnaires, semi-structure interview)	No Separated from religion in part	No. No mention of mental health, except that 'the daughter attempted suicide the last week'
McCarthy & Lender (2011) US	• Quantitative • No specific measures of spirituality used	No Defined as meaning in life and spiritual perspective	No. Mental health outcome not included but adaptation, successful aging related to existential domain included
Walton (2011) US	• Qualitative/ quantitative • No clear definition • Goal to test awareness of knowledge with pre/ post tests after 1 hr of class in school	Yes	No. No measures of mental health included
Noble & Jones (2010) UK	• Qualitative/ quantitative • 4group interviews, no questions identified	Yes - some religious and spirituality connections included	Yes. Mental health contamination noted
Shrubsole (2010) US	• Qualitative study Narrative inquiry such as 'why participants became involved in health and co- participants in community building'	Yes	No. No mention of health outcomes included
Nixon & Narayanasamy (2010) UK	• Qualitative study • Goal to identify spiritual needs of neuro-oncoly and how nurses may support them	No - question included 'being spiritual'	Yes. Mental health contamination and psychological subcategories used
Hsiao *et al.* (2010) Taiwan	• Quantitative cross-sectional • Questionnaires below: • spiritual health scale	Yes. Overlapping meaning with religion – definition included deal with pain through religious belief	Yes. Measured depression and stress levels. Questions contaminated with inclusion of meaning, purpose in life and depressive symptoms

AUTHORS/COUNTRY	DESIGN AND INSTRUMENTS USED	DEFINITION INCLUDES RELIGIOUS INVOLVEMENT	MENTAL HEALTH CONFOUNDING
	• perceived clinical practice stress scale • Beck inventory • health promotion behavior		
Schlairet *et al.* (2010) US	• Quantitative - Modified survey on needs assessment of CA survivors (including spiritual) • City of Hope quality of life model, parlman-mayo survey of needs (includes spiritual issues)	Yes – questions included 'loss of faith 'besides question of perceived spiritual needs	Yes. Definition includes emotional needs such as spiritual distress
Ziebarth & Miller (2010) US	• Qualitative descriptive design • Interviews with parish nurses	Yes, nurses in faith communities. Spirituality and spiritual care in the context of faith community	No Mental health outcomes measured
Gerow *et al.* (2010) US	• Qualitative semi-structured interviews to evaluate protection to mitigate grieving process	Yes. One of the themes chosen was 'spiritual worldview' and included religious beliefs, spiritual well being, their faith in afterlife and God's help	No. Emotional wellbeing, adequate coping. Nurses incorporated their spiritual worldview to cope.
Lundberg & Kerdonfag (2010) Sweden, but Thai culture	• Qualitative explorative • In depth interview	Yes. Mixed. Definition comes from the word 'spirits' the essential part that controlled the mind and the body – may concern religiosity, sacred beliefs and rituals for finding meaning	Yes. Includes meaning and purpose thus it is contaminated with mental health outcomes
Griggs (2010) UK	• Qualitative explorative • Semi structures interviews	No. No clear definitions. Linked to words like peace, holism	No patient focused health outcome RNs perceptions
Mok *et al.* (2009) Hong Kong (CHINA)	• Qualitative • Interviews to evaluate palliative care and the meaning of spirituality to terminally ill Chinese	Yes. Spirituality as multidimensional, mixed with faith and possibility of afterlife	Yes. Definition includes meaning of life and spiritual wellbeing
Shores (2010) US	• Quantitative • Used Reed's perspective scale (SPS). • Descriptive comparative study of	Yes. Spirituality used reading spiritual materials, spiritually related interaction and mixed with religious behaviors such as prayer, meditation	No. Religious/spiritual behaviors seen as coping mechanisms for loneliness and anxiety. Expression of spirituality seen as sources for wellbeing, comfort, strength and energy

AUTHORS/COUNTRY	DESIGN AND INSTRUMENTS USED	DEFINITION INCLUDES RELIGIOUS INVOLVEMENT	MENTAL HEALTH CONFOUNDING
	BSN nursing students		
Thompson (2010) US	• Quantitative • Survey designed and administered for clergy	Yes. Definition included prayer and religious practices.	No measures of health outcomes.
Tanyi *et al.* (2008) US	• Qualitative in nature • Structured interviews	No. Themes that emerged included 'spiritual practices, but not necessarily religious ones. Spirituality seen as ambiguous and different from religion	No. Health outcome not measured, although positive health outcomes of spirituality are mentioned in the article.
Buck *et al.* (2009) US	• Quantitative Cross sectional • Uses quality of life and spiritual needs inventory scale	Yes. Spiritual experience includes religion and is expressed in the need for inspiration from religious beliefs and practices, such as forgiveness, surrender and religious coping	No. Mental health and physical health outcomes noted, no contamination Definition is separate from mental health. Physiologic, psychological symptoms tracked.
Chae & Seo (2010) Korea	• Quantitative Cross sectional descriptive study • Used Health Related Quality of Life (HRWQOL) scale to measure outcomes	Yes. Spiritual wellbeing had 2 items and they included religion	No. Psychological wellbeing scores were higher for people who were religious and had higher spiritual scores.
Solari-Twandell (2010) US	• Quantitative descriptive • Survey mailed to parish nurses to assess differences of the terms religion from spirituality	Yes. Spirituality definition and spiritual care were associated with religious practices or rituals for coping.	No outcomes measured.