

# Religiosity and quality of life among breast cancer patients: an integrative literature review

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## ABSTRACT

This paper examines recent data on the relationship between religiosity and quality of life. It also identifies emerging issues arising from the link between religion and quality of life. An integrative research review design implemented to review the existing articles on religiosity and quality of life. Search was conducted between January and February, 2021 in three online databases (PubMed, PsycINFO, and ScienceDirect) using MeSH keywords such as 'religion' or 'religiosity', 'quality of life' and 'breast cancer.' Initial search resulted on 264 articles, however only nine articles met eligibility criteria for review. The seven of the studies employed a cross-sectional design and two studies implemented prospective design. The definition of religiosity and quality of life were varying in included study. Most of studies reported positive correlation and direct effect between religiosity and quality of life. Two studies reported no association between religiosity and quality of life. Two studies investigate the role of religiosity as moderating variabel; religiosity mediated relationship between posttraumatic growth and quality. A greater emphasis on the importance of religiosity in healthcare services and partnerships with other community groups benefit in improved service competence and cooperative relationships between healthcare providers and faith-based institutions.

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## 1. INTRODUCTION

Breast cancer is one of the most common cancers among women [1]. Breast cancer diagnosis and treatment methods raise a number of obstacles for women, all of which have an effect on their general health and well-being [2]. Despite significant advancements in detection, therapeutic interventions, and outcomes over the last decade, breast cancer has a detrimental effect on women's quality of life due to psychological problems and physical symptoms, most notably the adverse effects of systemic chemotherapy [3], [4]. Many studies conducted over the last decade showed a decrement in the quality of life for patients with breast cancer, both following treatment and long term [5], [6]. Therefore, improving the quality of life is critical for all patients with breast cancer. As a result, the coping mechanisms that patients use to deal with these difficulties may play a role in predicting their quality of life.

Quality of life is a multidimensional construct that incorporates an individual's physical, emotional, and social task performance [7]. Individual contexts, as well as subjective satisfaction, are likely to influence quality of life. Other studies have reached similar conclusions, concluding that one's spiritual well-being is a significant feature of quality of life since it affects the subjective domain [5], [6]. The concept of quality of life is continuous since it encompasses overall satisfaction that is related with physical, mental,

environmental, and spiritual well-being. However, quality of life is continually changing depending on the experienced life that results from various factors, in particular those relating to self- transcendence and connections to the sacred [8].

Religiousness plays an important role through the influence of their cognition, influence, motivation and behavior in the lives of many people [9]. Religion encompasses an organization of a plethora of beliefs, customs, and faith. Although spirituality and religiosity are affiliated, they are distinct and therefore should not be regarded as identical or co-existent [10], [11]. For example, while a religious person may believe in Jesus Christ, a spiritual person will not accept taxonomy is similar to Christianity [11], [12]. Whereas religion is expressed as institutional and publicly as well as an individual act, private expressions of religion are found elsewhere [11]–[13].

There is compelling evidence that religious beliefs can act as a buffer against depression and enhance in the healing process associated with medical illnesses [14]. Religion has been related to higher levels of life satisfaction and better psychological wellbeing [15], [16], and studies have shown that it can enhance general health status [17], increase a patient's ability to recover from either a physical illness [18], and predict longevity in older adults [19]. The relationship between religiosity and quality of life in breast cancer patients has been debated across cultures, with conflicting results. There have been a number of studies which show that being religious has improved the quality of women's life [20], [21]. However, others have indicated that religiosity and quality of life are not linked [22], [23] or have found only a link in several aspects of the quality of life [24], [25].

A number of recent publications have shown that spiritual involvement or religiosity appears to enhance the quality of life, but these observations apply mostly to elderly people [26], [27]. Several aspects of religiosity were found to be associated with health and well-being. Evidence from this review shows that religious participation is connected with improved mental health outcomes in 72.1% of cases [27], while on the other evidence found that religious involvement is linked to improved mental health outcomes in about 2 in more than one-thirds of the studies [26]. There appears to be no recent review study which appraises the relationship between religiosity and quality of life in breast cancer patients. This paper adds to the ongoing discussion on how religious functioning affects quality of life perceptions. This paper examines recent data on the relationship between religiosity and quality of life. It also identifies emerging issues arising from the link between religion and quality of life.

## 2. RESEARCH METHOD

An integrative research review design is used to review the existing articles on religiosity and quality of life. Integrative analysis is a systematic method that is "limited to relevant research which contribute to new information related to the study goals" [16], [28]. An integrative review can be chosen for a better description of a matter to be synthesized from various disciplinary sources [29]. In comparison to other forms of research methods, an integrative review has a more versatile and holistic review design (involving both quantitative and qualitative studies). It enables more deliberate selection and inclusion of different data sources and scientific contributions that demonstrate the relationship between religiosity and quality of life in varied and wide-ranging sampling frames. As a result, we have identified and incorporated representative research outlets that have the capacity to define and evaluate the connections between religiosity and quality of life.

### 2.1. Data sources

As illustrated in Figure 1, a search was conducted between January and February, 2021 using three online databases (PubMed, PsycINFO, and ScienceDirect) using MeSH keywords such as 'religion' or 'religiosity', 'quality of life' and 'breast cancer,' and later refined using the following keyword strings: 'religiosity and quality of life and breast cancer'. To ensure the relevance of our literature search, we decided to use only the world's leading electronic databases such as PubMed, PsycINFO, and ScienceDirect. The first author retrieved and reviewed study abstracts containing the related keywords as shown in Figure 1, and the results of the studies were checked by the second and third reviewers.

In the initial search, more than 264 articles have been found, from which 181 articles have been selected, while 145 have been rejected, since they do not satisfy the criteria. Following extensive screening and full reading, 37 selected articles had been selected and 28 studies had been excluded for failure to fulfill the selection criteria. Finally, nine articles meet eligibility criteria for review.

### 2.2. Inclusion criteria

The following criteria were used to determine whether studies should be included or excluded from the review: i) peer-reviewed articles in English; ii) cross-sectional, length and quality studies; iii) research on the relationship between religiosity and quality of life; iv) studies examining spiritual factors of one or two or all of the quality-of-life aspects. Reviews paper was not considered.

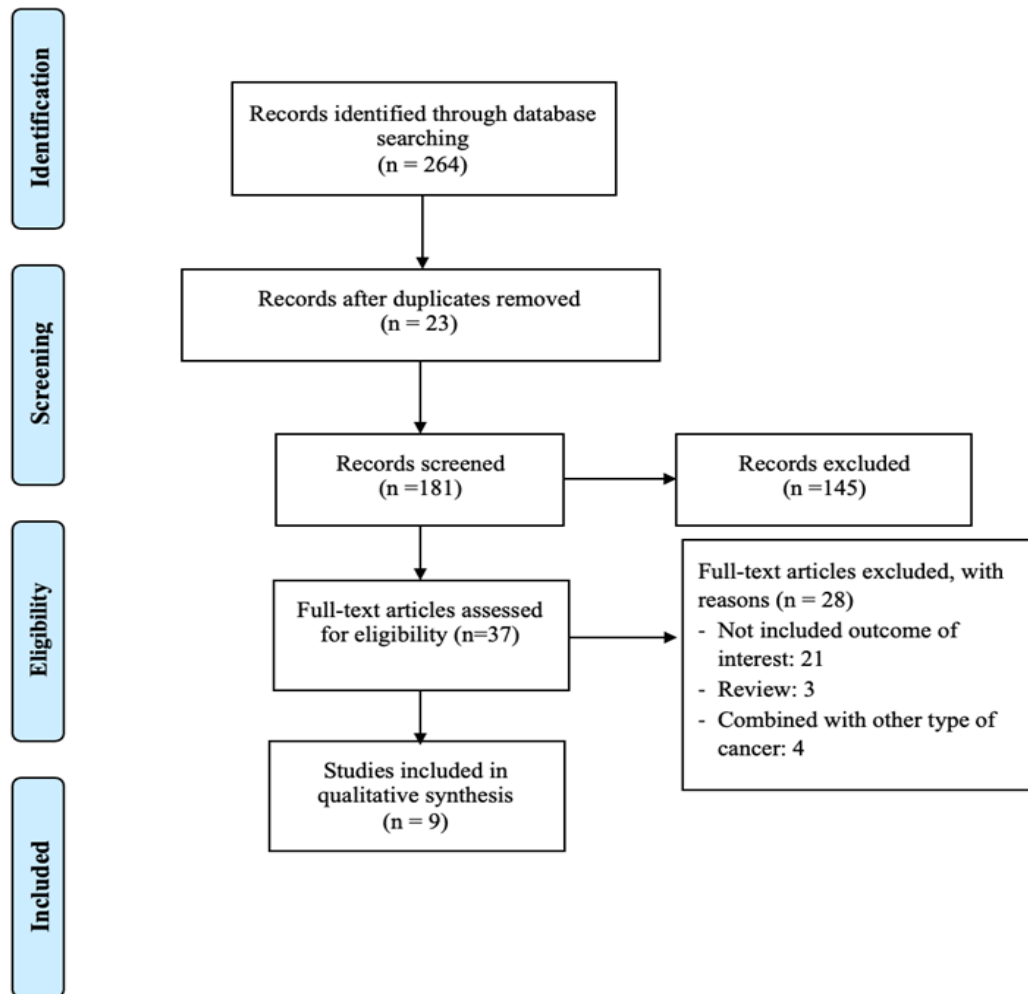


Figure 1. PRISMA flow chat

### 2.3. Quality appraisal

No gold standard is established to evaluate and analyze reviews' content [28], [30]. Extracting methodological characteristics from primary studies has been proposed to be advantageous for assessing the overall quality of research in systematic reviews and meta-analyses. Table 1 summarizes the methodological details that we deemed significant for evaluating the quality of the study we chose. The criteria for evaluation are the data and sample quality as determined by Cronbach's alpha, sample size, and response. Sampling methods and sample representativeness have been evaluated. The studies were categorized as 'low,' 'medium,' 'low' and 'high' representativeness.

### 2.4. Data analysis

Several study characteristics were gathered, including the author(s)' names, the country in which the study was performed, sample size, research design, context, and sampling technique. Data were extracted from studies exploring the relationship between religiosity and quality of life using Whittemore and Knafl's five-step guidelines: i) identify the research issue and/or the intent of the analysis; ii) perform a systematic literature review of recent studies; iii) evaluate and summarize the content and outcomes of the selected papers; iv) review selected quality articles to define potential concepts; v) arrange and objectively examine the concepts in line with the research issue [29].

## 3. RESULTS AND DISCUSSION

Table 1 summarizes the methodological aspects of all publications analyzed. Between 2005 and 2019, all studies were published. The quantitative studies analyzed indicate a high degree of dependability

for both religiosity and quality of life assessments. The response rates of participants ranged from 80% (the lowest) to 86% (the highest), and only three research published response rates [20], [24], [31]. Except for two studies, other quantitative researches employed large sample sizes (above 100 participants). Most studies showed intermediate representativeness, three had poor representativeness, and one had high representativeness [32]. The majority of studies conducted in cross-sectional design and only two studies employed prospective design [32].

Religiosity was measure using Santa clara strength of religious faith questionnaire (SCSOLF) instrument in two studies [31], [33], two studies used the Duke Religious Index, one study used the brief measure of religious coping [34], two studies used religious coping (RCOPE) [21], [22], one study used systems of belief inventory-15 revised [24], [35] used Serajzadeh's muslim religiosity questiossnaire. Quality of life was measured using a functional assessment of cancer therapy-general (FACT-G) [21], [24], [33], two studies used short form-36 health survey [35], and other studies used quality of life index (QLI), European organization for the research and treatment of cancer (EORTC) Quality of life questionnaire core 30, and international breast cancer study group quality of life.

Table 1. Methodological characteristics of the studies

Author, year	Response rate, %	N	Random	Sample representativeness	Instrument/Cronbach' Alpha/Validity	Design
[31]	83.33	115	No	Moderate	Santa clara strength of religious faith questionnaire (SCSOLF) and International Breast Cancer Study Group Quality of Life (IBCSG-QL)/not reported	Cross-sectional
[32]		802	No	High	The Duke Religion Index & the short Form-36 Health Survey/Cronbach alpha: 0.91 & good reliability and validity, respectively	Prospective design
[20]	86%	284 at baseline, 231 were re-examined	No	Moderate	The Duke Religious Index & European Organization for the Research and Treatment of Cancer (EORTC) Quality of Life Questionnaire Core 30/not reported	Prospective design
[36]		205	No	Moderate	The Santa Clara Strength of Religious Faith Questionnaire & Functional assessment of cancer therapy—breast cancer (FACT-B)/Cronbach alpha: 0.94 and 0.83, 0.76, 0.82, 0.91 and 0.65 for physical, social/family, emotional, functional and additional concerns respectively	Cross-sectional
[34]		57	No	Low	The Brief Measure of Religious Coping and the Quality-of-Life Index (QLI)—Cancer III Version/Reliable	Cross-sectional
[22]		100	No	Low	Religious Coping (RCOPE) Pargament/functional Assessment of Cancer Therapy Scale (FACT-B) & Functional Assessment of Chronic Illness Therapy-Spiritual/Cronbach alpha: 0.69, 0.90, and 0.93, respectively	Cross-sectional
[24]	80	117	No	Moderate	Systems of Belief Inventory-15 Revised (SBI-15R) and Functional Assessment of Cancer Therapy-General (FACT-G)/SBI-15R to have sound psychometric properties via tests of reliability and validity.	Cross-sectional
[35]		84	No	Low	Serajzadeh's Muslim Religiosity questiossnaire and Short Form Survey/For internal consistency, the reliability of the total score was 0.867 and All 8 subscales have been shown to be reliable.	Cross-sectional
[21]		224	No	Moderate	Religious coping (brief RCOPE) and FACT-B FACT-General score (FACT-G)/good reliability and validity	Cross-sectional

Table 2 shows relationship between religiosity and quality of life, only one used an explicit theoretical framework to guide the research [22]. The relationship between religiosity and quality of life has been studied in several countries, including Croatia, the USA, Korea, Iran, Romania, and Ghana, but the majority of the research was carried out in the USA and Iran. However, the definition of religiosity and quality of life were varying in included study.

Table 2. Relationship between religiosity and quality of life in breast cancer patients

Author, year	Conceptual framework	Country	Main finding
[31]	No	Croatia	<ul style="list-style-type: none"> <li>Individuals who are moderately religious had the lowest perceptions of physical health (<math>F=3.105</math>; <math>df=-2.112</math>; <math>p=0.049</math>).</li> <li>There is no evidence of significant interaction between religiosity categories or agreement on specific statements about quality-of-life domains.</li> </ul>
	No	USA	<ul style="list-style-type: none"> <li>Higher religiosity ratings were associated with improved mental health in the quality-of-life category (<math>p 0.01</math>).</li> <li>The association between posttraumatic growth and quality of life is mediated by religion.</li> </ul>
[32]	No	USA	<ul style="list-style-type: none"> <li>One year following surgery, the religiosity scores of Protestant respondents were significantly associated with their quality-of-life scores.</li> <li>In the Buddhist group, religious activity subscale scores were positively connected with global subscale scores on the quality of life at one year.</li> <li>At one year, scores on the religious activity subscale of the quality of life were adversely linked with scores on the functioning subscale of the quality of life in the Catholic group.</li> </ul>
	No	Ghana	<ul style="list-style-type: none"> <li>Religion had no statistically significant effect on perceived quality of life (<math>b =0.436</math>, <math>t=1.447</math>, <math>p=.149</math>).</li> <li>Depression and anxiety had no discernible indirect effect on perceived quality of life via religiosity.</li> </ul>
[20]	A model of stress and coping (Lazarus & Folkman, 1984; Pargament, 1997)	USA	<ul style="list-style-type: none"> <li>A statistically significant inverse link exists between spiritual difficulty and overall quality of life, with women who had more spiritual struggle reporting lower overall quality of life.</li> </ul>
	No	Romania	<ul style="list-style-type: none"> <li>None of the quality-of-life subscales correlated significantly with religious coping patients who had cancer.</li> </ul>
[33]	No	USA	<ul style="list-style-type: none"> <li>Religiousness/spirituality was substantially connected with health-related quality of life (social, functional, and doctor-patient relationship) (<math>p0.05</math>).</li> </ul>
	No	Iran	<ul style="list-style-type: none"> <li>Patients with high religiosity had higher total and subscale scores for quality of life than patients with moderate religiosity (<math>P 0.0001</math>).</li> <li>There was a direct link between religiosity (total and subscales) and quality of life (<math>P 0.0001</math>).</li> </ul>
[22]	No	Iran	<ul style="list-style-type: none"> <li>Negative religious coping correlated negatively with most quality-of-life domains, including emotional and functional well-being.</li> <li>Religious coping explained a significant amount of variance in overall QOL (<math>R^2=0.22</math>, <math>P=0.001</math>).</li> <li>Positive religious coping was associated with improved QOL in both FACT-G and FACT-B main scales (<math>=0.29</math>; <math>p=0.002</math>).</li> </ul>

In all included studies, religiosity consist of belief, regardless of religious affiliation or denomination, religious activity, meaning, control, comfort, intimacy, life, practices of faith systems, and ritualistic. While, the majority of included studies defined quality of life includes physical well-being, social and family well-being, emotional well-being, and functional well-being as shown in Table 3. All studies investigated the relation between religiosity and quality of life. Most of studies reported positive correlation and direct effect between religiosity and quality of life [20], [21], [24], [31], [35]. Two studies reported no association between religiosity and quality of life [33], [34]. Two studies investigate the role of religiosity as moderating variabel; religiosity mediated relationship between posttraumatic growth and quality of life [32], and depression and anxiety did not have any significant indirect effect on quality of life through religiosity [33].

The studies included in this review examined the relationship between religiosity and quality of life among breast cancer patients. Patients with breasts cancer facing life-threatening disease with low survival rate [36], [37]. Furthermore, treatments such as radiotherapy may cause psychosocial distress, social dysfunction, and morbidity in patients with breasts cancer [3], [4]. Thus, religiosity play an essential role among breast cancer to improve their quality of life [38]–[42]. In this review found that only one study employs a theoretical framework to be used in future research because it offers a basis for hypothesizing conceptual models and testing the links between ideas and variables. This review also supports evidence that religiosity and quality of life among breast cancer patients can be different in different countries [38]. Future studies should aim to discern the levels of heterogeneity in religiosity and quality of life in order to fully explain the concept and provide better evaluation methods for healthcare profesional to analyze when developing their intervention plan. Deep understanding of the variation in religiosity and the quality of life would make it possible to adjust interventions to promote the quality of care [43], [44]. In addition,

longitudinal studies are appropriate to monitor the development of religiosity and the quality of life on the basis of various measures to promote religiosity and to determine the causality of the prediction factors.

These findings underline how important religiosity is to negotiate the quality of life on a day-to-day basis. In 75% of the reviewed studies, religiosity was identified as an independent variable that could improve quality of life, and one study demonstrated the role of religiosity as a mediator for the relationship between psychological problems and quality of life [32]. Psychosocial activities that comprise religiosity practices have become a useful coping resource for the improvement of life quality, and have played a significant role in how participants experience and negotiate their spiritual qualities [45]–[47]. However, other studies discovered no correlation between religiosity and life quality. This inconsistency may be explained by the use of disparate tools to assess religiosity and quality of life; the majority of religiosity was assessed using tools applicable to all religions. A previous studies suggested that differences in religion and cultural values could have an effect on personal perception of religiosity and life quality [21].

The study has shown that religiosity has an impact on quality of life in patients with breast cancer, and can vary depending on individual religious background or how religiousness practices in the case of Protestants, Buddhists or Catholics [20]. In the Catholic group, scores on the religious activity subscale were negatively correlated with scores on the functioning subscale of the quality of life in one year, while in Protestants and Buddhist religiosity accounted for the variance in quality of life. Other study conducted on the majority of Muslim participants found negative religious coping had a negative significant correlation with the majority of quality-of-life domains [21]. These various viewpoints suggest varying accounts of the beneficial effects of religiosity on quality of life, which appear to vary depending on the individual's social context. Overall, religiosity can be beneficial to quality of life because it provides symbolic experiences (such as meaning, social support, and spiritual connection) but may also be caused by social factors that influence how people use their religion [48]. To gain a better understanding of the role of quality of life on clinical outcomes, study should consider the “ways where its cultural identity impacts religious activity” [49].

This review revealed discrepancies in the themes used to describe religiosity and quality of life over the last ten years. However, regardless of which studies are being discussed, the various definitions associated with each study are depicted in Table 3. Despite the fact that the various conceptualisations all point to some sort of relational dynamics involving belief, faith, and ritualistic, the various definitions are depicted in Table 3. The terms “religion,” “religious participation,” “spirituality,” and “faith” are used by the vast majority of studies to describe the concepts of religiosity. In most cases, when researchers use these phrases to characterize religiosity, they are referring to a dynamic that deals with attachment to the sacred. To determine the aspects of religiosity that are inherent in nature, like as thought, prayer, and devotion to a greater force, they used categorical variables and metrics rather than quantitative variables.

Table 3. Definitions of religiosity and quality of life in include studies

Author, year	Religiosity	Quality of life
[31]	Religious included belief, regardless of religious affiliation or denomination Religious is one of the three widely accepted characteristics of religiosity. The first dimension is concerned with organized religious activity, whereas the second is concerned with private religious engagement.	Quality of life included physical well-being, mood and coping/perceived adjustment. Quality of life consists of physical component and mental component score.
[32]	Religious activity encompassed both public and private religious activities. Religious faith is religious faith independent of affiliation or denomination.	Quality of life consists of global and total functional scores. Quality of life consist of physical, social/family, emotional, functional and additional concerns.
[20]	Religion serves five fundamental religious functions: meaning, control, comfort, intimacy, and life. Transformation—as well as the pursuit of the sacred or spiritual. Religion serves five fundamental religious functions: meaning, control, comfort, intimacy, and life. Transformation—as well as the pursuit of the sacred or spiritual.	Quality of life was defined as life satisfaction in health and functioning, psychological/spiritual, social and economic, and family. Quality of life consists of physical well-being, social and family well-being, emotional well-being, and functional well-being.
[33]	By analyzing the beliefs and practices of religion systems, as well as social support from the religious and/or spiritual community, religiosity incorporates both dimensions. Religion is classified into four subscales: believing; emotional; consequential; and ceremonial.	Quality of life has been defined as a subjective, multidimensional concept that encompasses social well-being, functional well-being, and relationship with doctor. Qualities of life consist of physical component and mental component score.
[34]	Religion serves five fundamental religious functions: meaning, control, comfort, intimacy, and life. Transformation—as well as the pursuit of the sacred or spiritual.	Quality of life consists of physical well-being, social and family well-being, emotional well-being, and functional well-being.

The findings in this study come from a variety of countries across four continents; however, there are few studies conducted in Asia or eastern countries, which may have different concepts or levels of religiosity, which may have an effect on the findings. The response rate and representativeness of the studies included in this analysis were moderate, indicating that participation proportions could be strengthened. Finally, since there were few longitudinal studies related to the research design, more of these studies are required to gain a deeper understanding of the definition.

#### 4. CONCLUSION

Religiosity influences quality of life, and therefore, it also has an impact on health-care outcomes. Most of studies reported positive correlation and direct effect between religiosity and quality of life, two studies reported no association between religiosity and quality of life, and two studies investigate the role of religiosity as moderating variable. Numerous studies have demonstrated that religiosity is a strong predictor of life quality. This review provides constructive support for efforts to foster quality of life. A greater emphasis on the importance of religiosity in healthcare services and partnerships with other community groups may result in improved service competence and cooperative relationships between healthcare providers and faith-based institutions. Further research on the relationship between religiosity and health-related quality of life should be carried out in a variety of population and health contexts. Longitudinal intervention studies are required to determine the causal relationships between religiosity and quality of life.

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#### REFERENCES

- [1] Bernard W. Stewart and Christopher P. "World Cancer Report 2014," *International Agency for Research Cancer*, 2014. [Online]. Available: [https://www.who.int/cancer/publications/WRC\\_2014/en/](https://www.who.int/cancer/publications/WRC_2014/en/) (access Jul 4, 2022).
- [2] R. Dewi, L. Rahayuwati, and T. Kurniawan, "The Effect of Five-Finger Relaxation Technique to The Sleep Quality of Breast Cancer Patients," *Jurnal Keperawatan Padjadjaran*, vol. 6, no. 2, Aug. 2018, doi: 10.24198/jkp.v6i2.739.
- [3] J. Li *et al.*, "Worse quality of life in young and recently diagnosed breast cancer survivors compared with female survivors of other cancers: A cross-sectional study," *International Journal of Cancer*, vol. 139, no. 11, pp. 2415–2425, Aug. 2016, doi: 10.1002/ijc.30370.
- [4] D. Schoormans, K. Czene, P. Hall, and Y. Brandberg, "The impact of co-morbidity on health-related quality of life in breast cancer survivors and controls," *Acta Oncologica*, vol. 54, no. 5, pp. 727–734, Mar. 2015, doi: 10.3109/0284186x.2014.998277.
- [5] C. G. Ng *et al.*, "Anxiety, depression, perceived social support and quality of life in Malaysian breast cancer patients: a 1-year prospective study," *Health and Quality of Life Outcomes*, vol. 13, no. 1, Dec. 2015, doi: 10.1186/s12955-015-0401-7.
- [6] M. Kamińska *et al.*, "Life quality of women with breast cancer after mastectomy or breast conserving therapy treated with adjuvant chemotherapy," *Annals of Agricultural and Environmental Medicine*, vol. 22, no. 4, pp. 724–730, Dec. 2015, doi: 10.5604/12321966.1185784.
- [7] I. Teo, M. C. Fingeret, J. Liu, and D. W. Chang, "Coping and quality of life of patients following microsurgical treatment for breast cancer-related lymphedema," *Journal of Health Psychology*, vol. 21, no. 12, pp. 2983–2993, Jul. 2016, doi: 10.1177/1359105315589801.
- [8] B. D. Augustyn, T. W. Hall, D. C. Wang, and P. C. Hill, "Relational spirituality: An attachment-based model of spiritual development and psychological well-being," *Psychology of Religion and Spirituality*, vol. 9, no. 2, pp. 197–208, 2017, doi: 10.1037/rel0000100.
- [9] R. Misajon, "The psychology of ultimate concerns: motivation and spirituality in personality," *Journal of Happiness Studies*, vol. 2, no. 3, pp. 329–330, 2001, doi: 10.1023/a:1011889000131.
- [10] J. Dyson, M. Cobb, and D. Forman, "The meaning of spirituality: a literature review," *Journal of Advanced Nursing*, vol. 26, no. 6, pp. 1183–1188, Dec. 1997, doi: 10.1111/j.1365-2648.1997.tb00811.x.
- [11] C. L. Holt, S. N. Lukwago, and M. W. Kreuter, "Spirituality, breast cancer beliefs and mammography utilization among Urban African American Women," *Journal of Health Psychology*, vol. 8, no. 3, pp. 383–396, May 2003, doi: 10.1177/13591053030083008.
- [12] C. L. Holt, C. Lee, and K. Wright, "A spiritually based approach to breast cancer awareness: cognitive response analysis of communication effectiveness," *Health Communication*, vol. 23, no. 1, pp. 13–22, Jan. 2008, doi: 10.1080/10410230701626919.
- [13] M. M. Gullatte, O. Brawley, A. Kinney, B. Powe, and K. Mooney, "Religiosity, spirituality, and cancer fatalism beliefs on delay in breast cancer diagnosis in African American Women," *Journal of Religion and Health*, vol. 49, no. 1, pp. 62–72, Jan. 2009, doi: 10.1007/s10943-008-9232-8.
- [14] H. G. Koenig and D. B. Larson, "Use of hospital services, religious attendance, and religious affiliation," *Southern Medical Journal*, vol. 91, no. 10, pp. 925–932, Oct. 1998, doi: 10.1097/00007611-199810000-00006.
- [15] B. Aukst-Margetić and B. Margetić, "Religiosity and health outcomes: review of literature," *Collegium Antropologicum*, vol. 29, no. 1, pp. 365–371, 2005.
- [16] M. E. McCullough, W. T. Hoyt, D. B. Larson, H. G. Koenig, and C. Thoresen, "Religious involvement and mortality: A meta-analytic review," *Health Psychology*, vol. 19, no. 3, pp. 211–222, 2000, doi: 10.1037/0278-6133.19.3.211.
- [17] J. L. McBride, G. Arthur, R. Brooks, and L. Pilkington, "The relationship between a patient's spirituality and health experiences," *Family Medicine*, vol. 30, no. 2, pp. 122–126, 1998.
- [18] P. Pressman, J. S. Lyons, D. B. Larson, and J. J. Strain "Religious belief, depression, and ambulation status in elderly women with





- broken hips," *American Journal of Psychiatry*, vol. 147, no. 6, pp. 758–760, Jun. 1990, doi: 10.1176/ajp.147.6.758.
- [19] R. A. Hummer, R. G. Rogers, C. B. Nam, and C. G. Ellison, "Religious involvement and U.S. adult mortality," *Demography*, vol. 36, no. 2, pp. 273–285, May 1999, doi: 10.2307/2648114.
  - [20] J.-E. Jang *et al.*, "Religiosity, depression, and quality of life in Korean patients with breast cancer: a 1-year prospective longitudinal study," *Psycho-Oncology*, vol. 22, no. 4, pp. 922–929, Apr. 2012, doi: 10.1002/pon.3083.
  - [21] H. Zamanian *et al.*, "Religious Coping and Quality of Life in Women with Breast Cancer," *Asian Pacific Journal of Cancer Prevention*, vol. 16, no. 17, pp. 7721–7725, Dec. 2015, doi: 10.7314/apjcp.2015.16.17.7721.
  - [22] J. Manning-Walsh, "Social support as a mediator between symptom distress and quality of life in women with breast cancer," *Journal of Obstetric, Gynecologic & Neonatal Nursing*, vol. 34, no. 4, pp. 482–493, Jul. 2005, doi: 10.1177/0884217505278310.
  - [23] J. Q. Purnell and B. L. Andersen, "Religious practice and spirituality in the psychological adjustment of survivors of Breast Cancer," *Counseling and Values*, vol. 53, no. 3, pp. 165–182, Apr. 2009, doi: 10.1002/j.2161-007x.2009.tb00123.x.
  - [24] K. A. Wildes, A. R. Miller, S. S. M. de Majors, and A. G. Ramirez, "The religiosity/spirituality of Latina breast cancer survivors and influence on health-related quality of life," *Psycho-Oncology*, vol. 18, no. 8, pp. 831–840, Nov. 2008, doi: 10.1002/pon.1475.
  - [25] J. Lim and J. Yi, "The effects of religiosity, spirituality, and social support on quality of life: a comparison between Korean American and Korean breast and gynecologic cancer survivors," *Oncology Nursing Forum*, vol. 36, no. 6, pp. 699–708, Nov. 2009, doi: 10.1188/09.onf.699-708.
  - [26] G. A. Abdala, M. Kimura, H. G. Koenig, K. G. Reinert, and K. Horton, "Religiosity and quality of life in older adults: literature review," *Life Style*, vol. 2, no. 2, pp. 25–51, 2015, doi: 10.1914/2237-3756/lifestyle.v2.n2.p25-51.
  - [27] R. M. Bonelli and H. G. Koenig, "Mental disorders, religion and spirituality 1990 to 2010: A systematic evidence-based review," *Journal of Religion and Health*, vol. 52, no. 2, pp. 657–673, Feb. 2013, doi: 10.1007/s10943-013-9691-4.
  - [28] M. da Graça Oliveira Crossetti, "Integrative review of nursing research: scientific rigor required," *Revista Gaúcha de Enfermagem*, vol. 33, no. 2, pp. 12–13, Jun. 2012, doi: 10.1590/s1983-14472012000200003.
  - [29] R. Whittemore and K. Knafl, "The integrative review: updated methodology," *Journal of Advanced Nursing*, vol. 52, no. 5, pp. 546–553, Dec. 2005, doi: 10.1111/j.1365-2648.2005.03621.x.
  - [30] H. Cooper, *Synthesizing Research: A Guide for Literature Reviews (Applied Social Research Methods)*, 3rd ed. Los Angeles: SAGE Publications, 1998.
  - [31] B. Aukst-Margetić, M. Jakovljević, D. Ivanec, B. Margetić, D. Ljubičić, and M. Samija, "Religiosity and quality of life in breast cancer patients," *Collegium antropologicum*, vol. 33, pp. 1265–1271, Dec. 2009.
  - [32] K. M. Bellizzi, J. H. Rowland, N. K. Arora, A. S. Hamilton, M. F. Miller, and N. M. Aziz, "Physical activity and quality of life in adult survivors of non-Hodgkin's lymphoma," *Journal of Clinical Oncology*, vol. 27, no. 6, p. 960, 2009.
  - [33] N. Kugbey, K. Oppong Asante, and A. Meyer-Weitz, "Depression, anxiety and quality of life among women living with breast cancer in Ghana: mediating roles of social support and religiosity," *Supportive Care in Cancer*, vol. 28, no. 6, pp. 2581–2588, Sep. 2019, doi: 10.1007/s00520-019-05027-1.
  - [34] M. Ursaru, I. Crumpei, and G. Crumpei, "Quality of Life and Religious Coping in Women with Breast Cancer," *Procedia - Social and Behavioral Sciences*, vol. 114, pp. 322–326, Feb. 2014, doi: 10.1016/j.sbspro.2013.12.705.
  - [35] A. Zargani, M. Nasiri, K. Hekmat, Z. Abbaspour, and S. Vahabi, "A Survey on the relationship between religiosity and quality of life in patients with breast cancer: A study in Iranian Muslims," *Asia-Pacific Journal of Oncology Nursing*, vol. 5, no. 2, pp. 217–222, Apr. 2018, doi: 10.4103/apjon.apjon\_65\_17.
  - [36] X. Li *et al.*, "Triple-negative breast cancer has worse overall survival and cause-specific survival than non-triple-negative breast cancer," *Breast Cancer Research and Treatment*, vol. 161, no. 2, pp. 279–287, Nov. 2016, doi: 10.1007/s10549-016-4059-6.
  - [37] O. Riklikienė, J. Tomkevičiūtė, L. Spirgienė, Ž. Valiulienė, and A. Büsing, "Spiritual needs and their association with indicators of quality of life among non-terminally ill cancer patients: Cross-sectional survey," *European Journal of Oncology Nursing*, vol. 44, p. 101681, Feb. 2020, doi: 10.1016/j.ejon.2019.101681.
  - [38] R. El Haidari, L. A. Abbas, V. Nerich, and A. Anota, "Factors associated with health-related quality of life in women with breast cancer in the middle east: a systematic review," *Cancers*, vol. 12, no. 3, p. 696, Mar. 2020, doi: 10.3390/cancers12030696.
  - [39] M. L. Brandão, T. Z. Fritsch, T. R. P. Toebe, and E. G. Rabin, "Associação entre espiritualidade e qualidade de vida de mulheres com câncer de mama em tratamento radioterápico," *Revista da Escola Enfermagem da USP*, vol. 55, 2021.
  - [40] C. Rohani, H.-A. Abedi, R. Omranipour, and A. Langius-Eklöf, "Health-related quality of life and the predictive role of sense of coherence, spirituality and religious coping in a sample of Iranian women with breast cancer: a prospective study with comparative design," *Health and Quality of Life Outcomes*, vol. 13, no. 1, Mar. 2015, doi: 10.1186/s12955-015-0229-1.
  - [41] M. G. de Camargos, C. E. Paiva, E. M. Barroso, E. C. Carneseca, and B. S. R. Paiva, "Understanding the differences between oncology patients and oncology health professionals concerning spirituality/religiosity," *Medicine*, vol. 94, no. 47, p. e2145, Nov. 2015, doi: 10.1097/md.0000000000002145.
  - [42] J. M. Bowen, R. J. Gibson, and D. M. K. Keefe, "Animal models of mucositis: implications for therapy," *The Journal of Supportive Oncology*, vol. 9, no. 5, pp. 161–168, Sep. 2011, doi: 10.1016/j.suponc.2011.04.009.
  - [43] T. D. de Sousa Matos, S. Meneguim, M. de Lourdes da Silva Ferreira, and H. A. Miot, "Quality of life and religious-spiritual coping in palliative cancer care patients," *Revista Latino-Americana de Enfermagem*, vol. 25, no. 0, 2017, doi: 10.1590/1518-8345.1857.2910.
  - [44] M. O. Delgado-Guay *et al.*, "Association between spirituality, religiosity, spiritual pain, symptom distress, and quality of life among Latin American patients with advanced cancer: a multicenter study," *Journal of Palliative Medicine*, vol. 24, no. 11, pp. 1606–1615, Nov. 2021, doi: 10.1089/jpm.2020.0776.
  - [45] A. E. Arrey, J. Bilsen, P. Lacor, and R. Deschepper, "Spirituality/Religiosity: A Cultural and psychological resource among sub-saharan african migrant women with HIV/AIDS in Belgium," *Plos One*, vol. 11, no. 7, p. e0159488, Jul. 2016, doi: 10.1371/journal.pone.0159488.
  - [46] J. P. Cruz, P. C. Colet, N. Alquwez, E. P. Inocian, R. S. Al-Otaibi, and S. M. S. Islam, "Influence of religiosity and spiritual coping on health-related quality of life in Saudi haemodialysis patients," *Hemodialysis International*, vol. 21, no. 1, pp. 125–132, Jun. 2016, doi: 10.1111/hdi.12441.
  - [47] K. Roystonn *et al.*, "Quality of life and its associations with religiosity and religious coping among outpatients with psychosis in Singapore," *International Journal of Environmental Research and Public Health*, vol. 18, no. 13, p. 7200, Jul. 2021, doi: 10.3390/ijerph18137200.
  - [48] R. G. Panzini, B. P. Mosqueiro, R. R. Zimpel, D. R. Bandeira, N. S. Rocha, and M. P. Fleck, "Quality-of-life and spirituality," *International Review of Psychiatry*, vol. 29, no. 3, pp. 263–282, May 2017, doi: 10.1080/09540261.2017.1285553.
  - [49] R. M. Eckersley, "Culture, spirituality, religion and health: looking at the big picture," *Medical Journal of Australia*, vol. 186, no. S10, May 2007, doi: 10.5694/j.1326-5377.2007.tb01042.x.







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