



## GLOBAL TRENDS IN SPIRITUAL AND PALLIATIVE INTERVENTION IN CANCER PATIENTS: BIBLIOMETRIC ANALYSIS

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### ABSTRACT

Advanced cancer patients often experience multidimensional suffering known as "Total Pain," which includes physical, psychological, social, and spiritual distress. While spiritual interventions are recognized as core components of holistic palliative care, a comprehensive global mapping of research trends over the last five decades remains limited. This study aims to explore global publication trends, identify influential countries and authors, and map key thematic clusters in spiritual intervention research for cancer patients from 1973 to 2025. A quantitative bibliometric design was used. Bibliographic data of 1,121 documents were extracted from the Scopus database following PRISMA 2020 protocols. Data analysis evaluated publication performance and geographic distribution. VOSviewer software was used for keyword co-occurrence and network visualization. Publication growth showed three phases: initiation, acceleration, and maturity (post-2011). The United States dominates global publications (42.5%), followed by Canada (7.4%) and the UK (6.4%). A significant rise in research from Iran and China indicates a shift toward de-westernization in spiritual care. The most influential study by Zimmermann et al. (2014) emphasized early palliative care. Four main thematic clusters were identified: spiritual well-being, quality of life, structured interventions (eg, Dignity Therapy), and death anxiety mitigation. Spiritual intervention research has evolved into a high-level health science. Integrating structured spiritual protocols into early palliative care is essential to address existential distress in terminal cancer patients.

Keywords: bibliometrics; death anxiety; neoplasms; palliative care; spiritual intervention; quality of life

### How to cite (in APA style)

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## INTRODUCTION

Cancer remains one of the most complex global health challenges. Based on the latest epidemiological projections, the global burden of cancer is predicted to increase significantly through the next decade, demanding long-term healthcare system readiness (Siegel et al., 2025; Yan et al., 2023). In patients with advanced cancer, suffering is inherently multidimensional. In the field of palliative nursing, this phenomenon is conceptualized as "Total Pain," a framework pioneered by Cicely Saunders. This concept posits that pain encompasses not only physical dimensions but also social and psychological suffering, with spiritual distress being the most fundamental component (Rattner, 2023; Timm, 2023). Patients with cancer frequently encounter severe existential crises, manifesting as a loss of meaning in life, despair, and profound death anxiety (Anghel et al., 2025). Nurses, as frontline health professionals who interact most intensely with patients throughout a 24-hour cycle, often find themselves under-equipped to address these needs. Nursing care must transcend the management of physical symptoms, such as pain and nausea, to include integrated spiritual support and psychosocial interventions that foster emotional resilience (Anghel et al., 2025; Ferrell & Paice, 2024).

In two decades lastly, care nursing modern oncology has transformed from the curative-centric model going to //approach holistic. Spiritual well-being is now recognized as a protective factor that

helps patients reach adaptive coping and peace of mind in the final phase of life. Effective spiritual intervention has been proven to significantly lower the level of depression and desire for speeding up death (desire for hastened death) in terminal patients (McClain et al., 2003). Various intervention models have been developed, starting from Dignity Therapy that focuses on inheritance meaning life (Chochinov et al., 2011), until Meaning-Centered Psychotherapy that helps patients reconstruct objective living in the middle of physical limitations (Breitbart et al., 2010).

Although the volume of research Keep going, increasing literature about spiritual interventions, which are often spread across various scientific disciplines, so that it is difficult for clinical practitioners. For identifying the standard gold standard intervention moment, this. New study: This lies in the coverage, which is very up-to-date in time until the projection of 2025. Research purposes For the global publication of the map trend, identify the contributions of the most influential countries and authors, and analyze how thematic clusters in research on spiritual and palliative interventions for cancer patients have evolved from 1973 to 2025. Through approach analysis bibliometrics research, this makes an effort to dissect intellectual structure from just emotional support going to structured clinical intervention.

## **METHOD**

Research design This use design studies bibliometrics quantitatively. This method was chosen because his abilities identify trends, collaborations between countries, and structures of conventional intellectual transcendence limitation review literature. All procedures were arranged based on PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, 2020 edition, to ensure transparency and validity. (Figure 1). The data acquisition strategy involved conducting electronic searches on the Scopus database. Scopus was selected. Because of its own coverage of extensive medical and nursing as well as the standard selection of rigorous journals. The search strategy uses Boolean keyword combinations: TITLE-ABS-KEY ("spiritual intervention" AND "cancer patient"). The search done covers literature from 1973 to documents that have been indexed for 2025 (in press).

Criteria for inclusion include (1) original articles and article reviews to ensure quality through peer review; (2) documents in the subjects of medicine, nursing, and psychology; and (3) documents in English. Criteria for exclusion include (1) documents in the form of books, chapter books, editorials, or conference proceedings; (2) documents outside the specified year range; and (3) documents that are not relevant to the focus of clinical intervention. Data analysis based on the PRISMA flow, which started with 1,342 records, led to the exclusion of 221 documents based on the criteria mentioned above, leaving 1,121 documents for final analysis.. For final analysis. Data exported in .csv format for processing. Analysis performance (trend annual and state productivity) is carried out in a descriptive way. Visual mapping is done using the device software VOSviewer version 1.6.20 to analyze the co-occurrence of keywords (theme research) and network citation.

## **RESULT**

The annual analysis of publication trends shows a significant evolution in publication volume. The Initiation Phase (1973–1990) was marked with the least amount of publications (average < 5 per year). The acceleration phase occurred in 1991–2010 along with the development of instrument quality and quality of life (QoL). The Maturity Phase (2011–2025) shows a consistent surge in publication of over 60 documents per year, reflecting global recognition that spirituality is a needed basis for man in health services. (Figure 2).

Of the total 1,342 documents in the Scopus database, filtering was conducted based on subject criteria (medicine, nursing, psychology), document types (articles and reviews), and the English language. The final results show 1,121 studies stated worthy. For analysis. The number of large

samples This gives strength to significant statistics. For map evolution, five decades of spiritual intervention are final.

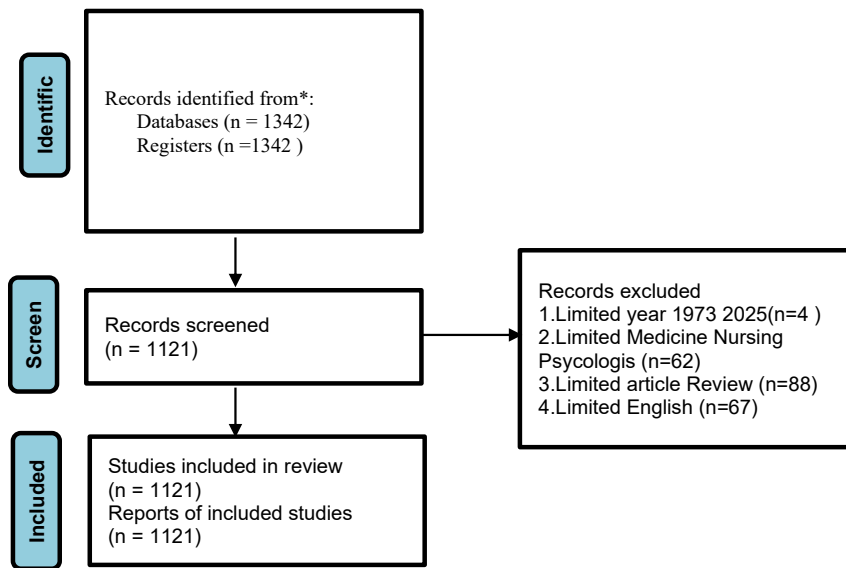


Figure 1, PRISMA 2020 Flow Analysis



Figure 2, Annual Publication Growth Trend Diagram (1973–2025)

Research on distribution geography and the productivity of influential countries shows a strong concentration in Western countries; however, it is beginning to penetrate Asian countries, such as Iran and China, which have markedly high levels of religiosity. (Figure 3 and Table 1)

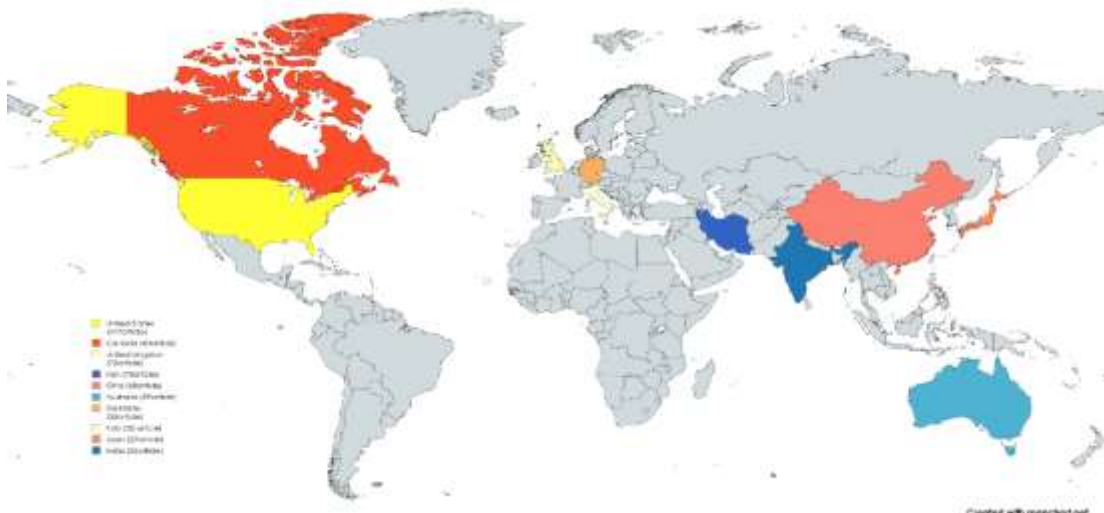


Figure 3, 10 Largest Countries Article Contributor

Table 1.  
10 Countries with the Most Articles (n=1,121) |

No	Country	Number of Articles (n)	Percentage (%)
1	United States of America	477	42.5%
2	Canada	83	7.4%
3	English	72	6.4%
4	Iran	70	6.2%
5	China	68	6.1%
6	Australia	54	4.8%
7	German	49	4.4%
8	Italy	42	3.7%
9	Brazil	38	3.4%
10	Dutch	35	3.1%

The analysis citation identifies the foundational literature that underpins the field of science. This study by Zimmermann et al. (2014) published in the journal *The Lancet* holds the highest citation count (1,465), followed by McClain et al. (2003), which demonstrates the role of spiritual well-being in reducing despair among terminal patients. (Table 2) *The Lancet* holds the highest citation (1,465), followed by McClain et al. (2003), which proves the role of *spiritual well-being* in declining despair in terminal patients. (Table 2)

Table 2.  
10 Most Citations

No	Title	Author	Journal	Year	Number of Citations	Quartile
1	Early palliative care for patients with advanced cancer: A cluster-randomised controlled trial	Zimmermann, C., Swami, N., Krzyzanowska, M., ... Donner, A., Lo, C.	<i>Lancet</i> , 383(9930), pp. 1721–1730	2014	1465	Q1
2	What are the unmet supportive care needs of people with cancer? A systematic review	Harrison, JD, Young, JM, Price, MA, Butow, PN, Solomon, MJ	<i>Supportive Care in Cancer</i> , 17(8), pp. 1117–1128	2009	770	Q1
3	Effect of spiritual well-being on end-of-life despair in terminally ill cancer patients	McClain, C.S., Rosenfeld, B., Breitbart, W.	<i>Lancet</i> , 361(9369), pp. 1603–1607	2003	653	Q1
4	Effect of dignity therapy on distress and end-of-life experience in terminally ill patients: a randomized controlled trial	Chochinov, H.M., Kristjanson, L.J., Breitbart, W., ... Hassard, T., Harlos, M.	<i>Lancet Oncology</i> , 12(8), pp. 753–762	2011	594	Q1
5	Meaning- centered group psychotherapy for patients with advanced cancer: A pilot randomized controlled trial	Breitbart, W., Rosenfeld, B., Gibson, C., ... Abbey, J., Olden, M.	<i>Psycho Oncology</i> , 19(1), pp. 21–28	2010	526	Q1
6	Meaning- centered group	Breitbart, W., Rosenfeld, B.,	<i>Journal of Clinical Oncology</i> , 33(7),	2015	457	Q1

	psychotherapy: An effective intervention for improving psychological well-being in patients with advanced cancer	Pessin, H., ... Kulikowski, J., Lichtenthal, W.G.	pp. 749–754			
7	The Comprehensive Care Team: A Controlled Trial of Outpatient Palliative Medicine Consultation	Rabow, MW, Dibble, SL, Pantilat, SZ, McPhee, SJ	Archives of Internal Medicine, 164(1), pp. 83–91	2004	429	Q1
8	Quality of life of family caregivers of cancer survivors: Across the trajectory of the illness	Kim, Y., Given, BA	Cancer, 112(11 SUPPL.), pp. 2556–2568	2008	389	Q1
9	Psychosocial care of adolescent and young adult patients with cancer and survivors	Zebrack, B., Isaacson, S.	Journal of Clinical Oncology, 30(11), pp. 1221–1226	2012	382	Q1
10	Yoga for improving health-related quality of life, mental health and cancer-related symptoms in women diagnosed with breast cancer	Cramer, H., Lauche, R., Klose, P., ... Langhorst, J., Dobos, G.J.	Cochrane Database of Systematic Reviews, 2017(1), CD010802	2017	374	Q1

Keyword Co-occurrence Analysis (Thematic Mapping) Visualization VOSviewer

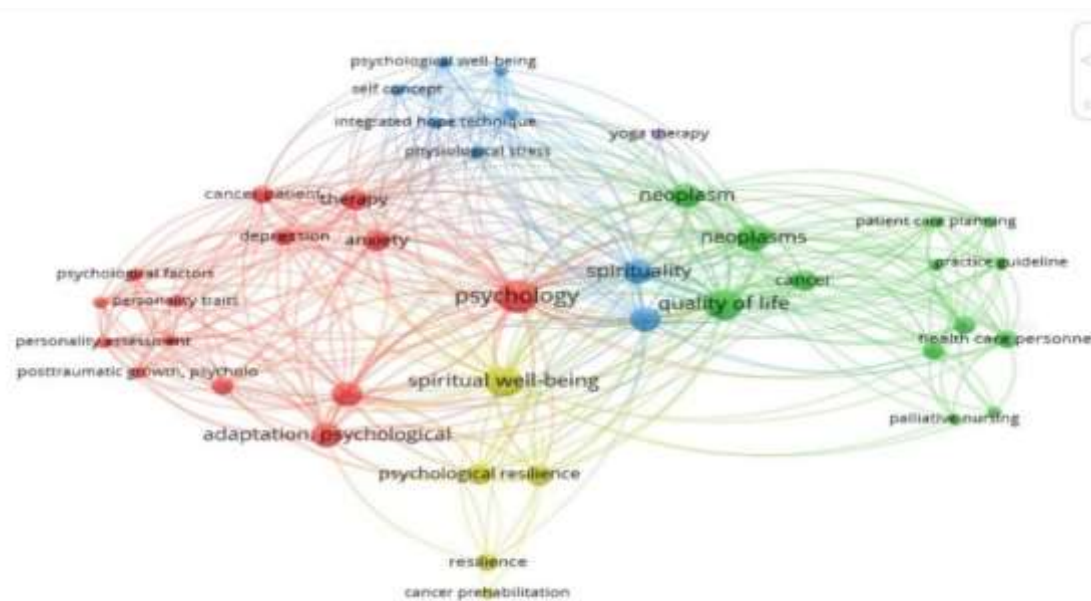


Figure 4, VOSviewer co-occurrence visualization results

1. Cluster (Spiritual & Quality of Life): Focus on relationships between spiritual well-being and results end clinical patient.
2. Cluster (Psychological Distress): Related with *depression*, *anxiety*, and *death anxiety*.
3. Cluster (Structured Interventions): Highlighting therapy specific like *Dignity Therapy* and *Yoga*.
4. Cluster (Caregivers & Family): Indicates trend new involving spiritual support for family patient cancer.

Cluster red confirms spirituality as the main pillar in increasing the quality of life of cancer patients, which is clinically corroborated by the findings in the cluster green about the effectiveness of spiritual intervention in mitigating psychological distress like depression and anxiety about death (*death anxiety*). Evolution methodology research also looks very sharp on the cluster blue, which indicates a shift to direction intervention structured like *Dignity Therapy* and yoga as standard new palliative care in nursing. Meanwhile, that cluster of yellow marks the novelty focus of current research that starts to target the spiritual well-being of *caregivers* and families, affirming that handling cancer must be done in a holistic way through an ecosystem-centered approach that supports the patient.

## DISCUSSION

Findings of the study This reveal evolution significant from care that is of a nature curative-centric going to approach holistic. Surge publication after 2011 reflects international consensus that palliative care must be holistic in nature. The dominance of the United States (42.5%) shows the stability of Western research in integrating spiritual support into the national health system. The United States owns the largest institution funding health research in the world, such as the National Institutes of Health (NIH) and the National Cancer Institute (NCI). These institutions regularly provide big grants for study quality, quality of life, and psychospiritual care, which encourages academics and practitioners. Keep going to produce reputable high-quality scientific articles (National Cancer Institute [NCI], 2022; Puchalski et al., 2014).

The de-westernization paradigm in global psychospiritual research. The emergence of Iran and China in the world's top five indicates a paradigm shift, where the spiritual care model is not again dominated by Western values alone (Selman et al., 2018). Iran, with a strong mark of Islamic religiosity, started validating the protocol of spiritual care based on the mark of the deity in a systematic way (Rezai et al., 2015). Likewise, China has begun to integrate Eastern philosophy into clinical intervention to increase the quality of life of patients with cancer (Chen et al., 2021). Phenomenon This gives important implications for Indonesia. As a country with a high level of religiosity, Indonesian nursing researchers have a big opportunity to develop research on cultural adaptation to fill the research gap in Southeast Asia (Effendy et al., 2015). This is in line with the need for development of sensitive, culturally sensitive intervention to answer specific spiritual needs that are not fully represented by the Western model (Gijsberts et al., 2019; Koenig, 2012).

Intervention structured vs support general: Citation data high in studies by Chochinov et al. (2011) and Breitbart et al. (2015) prove that spiritual intervention now has shifted from just emotional "assistance," which is passive, to structured "therapy." Therapy like *Dignity Therapy* allows nurses to help patients reconstruct the dignity they are at the end of life through validated clinical protocols (Chochinov et al., 2011).

The thick line relationship in the VOSviewer visualization between spirituality and death anxiety confirms that spiritual intervention is in action as a protective factor mitigating psychological suffering that cannot be completed only with analgesic drugs (Balboni et al., 2017). This is in line with the draft of Total Pain, where suffering terminal patients include dimensions of existential need and approach integrative outside management with conventional pharmacology (Puchalski et al.,

2014; Breitbart et al., 2015).

Implementation in Practice Nursing For nurses' level continuation, results mapping This confirms the importance of spiritual studies since early times. The article by Zimmermann et al. (2014) revolutionizes draft palliative maintenance with the emphasis that spiritual support must be given quickly after a diagnosis of advanced cancer is enforced, not only at the moment the patient approaches sakaratul death (end-of-life).

In addition to the methodological limitations, the researcher acknowledges personal limitations in the compilation of the article.. This. First, the limited access to documents in full-text form on some paid journals (which are not subscribed to by institutions) causes in-depth content analysis on some classic literature to be done only through abstracts and available metadata. Second, the existence of limitations in the mastery device soft analysis bibliometrics level continues outside VOSviewer, so that the analysis of the network served in the study This still focuses on visualization co-occurrence and does not yet explore analysis of more complex clusters like co-citation or bibliographic coupling in a wide way. However, thus, researchers have made a maximum effort. To guard objectivity and validity of data through intensive guidance and strict verification of the PRISMA protocol so that the results mapping This still marks a strategy for developing palliative nursing care.

## **CONCLUSION**

Based on analysis aligned with bibliometrics and objective study, it can be concluded that research on spiritual and palliative interventions in patients with cancer has experienced consistent growth for the last five decades (1973–2025), where the post-2011 maturity phase marks a shift in spirituality from marginal issues to the current main discipline of knowledge in global cancer health services. Although productivity research is still dominated by the United States, Canada, and the United Kingdom, the emergence of the de-westernization phenomenon through significant contributions from Iran and China shows the importance of integrating Eastern religiosity and philosophy. Evolution structure intellectual research also shows a sharp transformation from just supporting emotional general going to intervention clinical structured like Dignity Therapy and Meaning-Centered Psychotherapy, which are clinically proven effective to increase quality of life as well as mitigate psychological suffering like death anxiety. Overall, this research confirms that spiritual intervention is a fundamental need based on evidence (evidence-based) that must be integrated in a systematic way in nursing protocol. To overcome the "total pain" phenomenon in patients with advanced-stage cancer.

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