

Strength, Culture and Survival: Resilience in Indigenous Cancer Journeys, a Scoping Review

Dennis Asante

dennis.asante@jcu.edu.au

James Cook University

Emmanuel Opoku Kumi

James Cook University

Gideon Dzando

Flinders University

Sam Rannard

James Cook University

Muideen Olaiya

James Cook University

Kehinde Obamiro

James Cook University

Research Article

Keywords: Indigenous Peoples, cancer, resilience, cultural strength

Posted Date: October 11th, 2026

DOI: <https://doi.org/10.21203/rs.3.rs-11107360/v1>

License: © ⓘ This work is licensed under a Creative Commons Attribution 4.0 International License. [Read Full License](#)

Additional Declarations: No competing interests reported.

Abstract

Background

Cancer is a major contributor to preventable health inequities among Indigenous Peoples globally. While there is expanding studies on cancer incidence, screening and diagnosis, treatment access, care experiences and survival, limited attention has been paid to the resilience and strengths through which Indigenous Peoples navigate the cancer journey. The available literature reporting on cancer experiences among Indigenous peoples has identified important elements of resilience. However, no study has comprehensively mapped how the resilience factors and resources operate across levels of the social ecology. This scoping review mapped evidence on resilience in Indigenous cancer journeys and examined how resilience is constituted within social and cultural contexts.

Methods

Following the Joanna Briggs Institute (JBI) methodology for scoping reviews and the PRISMA Extension for Scoping Reviews (PRISMA-ScR) reporting guideline, a systematic search was conducted in [Ovid MEDLINE \(including PubMed\)](#), CINAHL, PsycInfo, Scopus, Emcare and Informit, supplemented by hand-searching reference lists. Studies reporting resilience-related factors among Indigenous adults with cancer were included. Data were extracted and synthesised using descriptive and thematic approaches informed by a social-ecological framework of Indigenous resilience.

Results

Thirty-three studies involving 1,290 Indigenous adults with cancer were included. Five interrelated domains of resilience were identified: social and relational support; spirituality and relationships with the sacred; cultural continuity and traditional practices; respectful and culturally safe relationship with healthcare professionals; and individual strength and self-efficacy. Across studies, resilience was embedded within relational, cultural and spiritual contexts rather than individual attributes alone. The respectful and culturally safe relationships with health professionals emerged as a cross-cutting factor that could strengthen or undermine resilience.

Conclusions

Resilience among Indigenous cancer patients and survivors is embedded within social, cultural, relational, and spiritual contexts rather than individual attributes alone. These findings challenge deficit-oriented accounts that frame Indigenous cancer experiences primarily through vulnerability and disadvantage. Cancer services should move beyond narrow approaches to cultural adaptation and instead support family involvement, cultural continuity, spiritual care, Indigenous survivorship networks, culturally safe navigation, and Indigenous-led models of care.

Introduction

Cancer remains a significant health challenge in Indigenous communities, marked by poorer outcomes across the cancer continuum, including late diagnosis, higher incidence, and lower survival rates compared to non-Indigenous populations (Segelov & Garvey, 2020; World Health Organization [WHO], 2018). These disparities are shaped by intersecting social, structural, geographic, and health-system factors, with ongoing impacts of colonization, dispossession, structural racism, and limited access to culturally appropriate healthcare further exacerbating outcomes (Moore et al., 2015, Santos et al., 2025).

Indigenous Peoples in rural and remote areas face additional barriers, including distance from treatment centers, travel costs, accommodation, workforce shortages, fragmented care and separation from family, community and Country (Tranberg et al., 2016, The Lancet Public Health, 2025). Despite the importance of research on cancer experiences among Indigenous Peoples, relatively few studies investigate the cancer journeys of Indigenous populations (So et al., 2025). Even fewer studies have specifically examined the factors that promote resilience for Indigenous cancer patients (Burnette et al., 2021; Min et al., 2013), which is crucial to inform treatment interventions and improve outcomes. While some of the studies on Indigenous cancer experiences have identified elements of resilience (Burnette et al., 2021; Lee et al., 2023; McKinley et al., 2020; Gifford et al., 2018), there is a lack of comprehensive mapping of how resilience factors and resources operate across levels of the social ecology.

Although 'resilience' provides a conceptual pathway for examining coping mechanisms and strengths during adversity (Molina et al., 2014), this concept requires careful use in Indigenous health research (Usher et al., 2021). In dominant psychological literature, resilience has often been defined as an individual's capacity to adapt positively despite adversity (Herrman et al., 2011). Such formulations may be useful in some contexts, but they can inadvertently place responsibility for adaptation on individuals while leaving the structural sources of adversity intact. Indigenous resilience, therefore, is a complex phenomenon which relies on the positive adaptation of the individual, the community and the environment to adversity (Usher et al., 2021). Thus, Indigenous resilience is more appropriately understood as relational, collective, place-based, cultural and political (Kirmayer et al., 2011).

The work of Kirmayer et al. (2011) provides an important framework for understanding resilience in the context of Indigenous communities. Their social-ecological perspective argues that resilience emerges dynamically through interactions among individuals, communities and broader social, cultural and political systems. Central in this framework is that Indigenous resilience is better expressed through relational, ecocentric and

cosmocentric understandings of personhood; cultural and language revitalisation; collective identity; narratives that reframe histories of adversity; and renewed individual and collective agency (Kirmayer et al., 2011). Kirmayer and colleagues' social-ecological resilience is highly applicable to studying cancer journeys of Indigenous Peoples because it shifts attention away from asking whether an individual "has resilience" and towards examining broader resilience resources, how resilience is sustained and which relationships, cultural resources and systems enable Indigenous Peoples to live through cancer with dignity and meaning.

Researchers exploring cancer survivorship among Indigenous populations have begun to recognise the broader dimensions of Indigenous resilience. A study on survivorship services for Indigenous Peoples found that family support and spirituality were important influences on cancer survivorship (Cavanagh et al., 2016). Another study has revealed community meetings, patient navigation, arts-based approaches and educational resources as the common cancer survivorship interventions reported in the literature, but that none addressed all four dimensions of holistic wellness: physical, mental, social and spiritual wellbeing (Gifford et al., 2021). These findings indicate that the field has identified important elements of resilience but has not yet comprehensively mapped how they operate across levels of the social ecology.

This scoping review addresses that gap by examining how resilience is represented across Indigenous cancer journeys. Rather than treating resilience as a singular psychological characteristic, we conceptualise it as a dynamic process operating across interconnected individual, relational, community, cultural, ecological and structural domains. The review was guided by the question:

Q. What factors and resources are associated with resilience among Indigenous peoples who have experienced cancer?

By examining strength alongside inequity, this review contributes to a more balanced and culturally grounded account of Indigenous cancer experiences. It recognises both the structural conditions that create cancer inequities and the sources of strength through which Indigenous Peoples navigate them.

Methods

This review was conducted following the JBI guidance for scoping reviews (Peters et al., 2020) and is reported according to the PRISMA extension for Scoping Reviews (PRISMA-ScR) (Tricco et al., 2018). This study's protocol was originally registered as a systematic review on PROSPERO (CRD20261296813). However, after initial review of included articles, we considered the study to be a better fit for a scoping review.

The Participant, Concept, Context (PCC) approach for determining eligibility criteria was adopted. Participants were Indigenous adults (≥ 18 years) diagnosed with any type of cancer, including those undergoing treatment and cancer survivors. The concept explored was resilience, including factors, resources, coping mechanisms, and practices that support adaptation, strength, or wellbeing in the context of cancer. The context included cancer care, treatment, survivorship, and lived experience of cancer across any healthcare or community setting, with no geographical restrictions. Studies included were peer-reviewed primary research articles, theses, and dissertations that report on strengths, characteristics and conceptual dimensions of evidence concerning resilience in Indigenous cancer journeys. There were no date restrictions for the evidence sources.

The synthesis was conceptually informed by Kirmayer and colleagues' social-ecological account of Indigenous resilience (Kirmayer et al., 2011). This framework was used as an interpretive lens rather than a rigid coding structure. This allowed resilience-related concepts emerging from the literature to be interpreted in relation to broader relational, cultural, ecological and structural contexts.

Human Ethics and Consent to Participate declarations: not applicable.

Search methods

The databases searched included Ovid MEDLINE (version including Epub Ahead of Print, In-Process, In-Data-Review & Other Non-Indexed Citations), CINAHL, PsycInfo (OVID), Scopus, Emcare and Informit. All searches included all dates up to 5 May 2026. A search strategy was designed in consultation with SR (a research librarian) and presented as an appendix (See Data S1). Examples of keywords and phrases included Indigenous peoples, First Nations, cancer, resilience, resilient or resiliency. The databases were searched between February and May, 2026. The reference lists of all included articles were checked for any additional eligible studies, including grey literature sources.

Articles from the databases searches were imported into Covidence (Veritas Health Innovation, Melbourne, Australia) for screening and data extraction. Covidence automatically removes duplicates on import. Three reviewers (DA, EK, KO) independently pilot-screened the titles and abstracts of the first 15 records to ensure consistent application of the eligibility criteria. The review team subsequently met to discuss discrepancies and refine the screening approach where necessary. Thereafter, title and abstract screening was conducted independently by two reviewers (DA, EK). Disagreements were resolved through discussion at regular review meetings until consensus was reached.

Records that met the eligibility criteria proceeded to full-text review. For full-text screening, reviewers (DA, EK, KO, GD, MO) independently pilot-screened the first 10 articles and reached complete agreement regarding eligibility decisions. Full-text screening then continued with each article independently assessed by two reviewers (DA, EK). Any disagreements, primarily relating to the identification and interpretation of resilience-related

concepts, were resolved through discussion at review team meetings, supported by an Indigenous research officer (SL) until consensus was achieved.

Data extraction

Data extraction was conducted in Covidence and exported to Microsoft Excel. Four reviewers (DA, EK, KO, SL) independently extracted data from six studies to pilot the extraction form and ensure consistency in the extraction process. The extraction form was refined iteratively to align with the review objectives. Data were extracted from the included studies by one reviewer (EK) and checked for completeness and accuracy by a second and third reviewers (SL, DA). Extracted information included study characteristics (authors, year of publication, setting, Indigenous population, participant characteristics, study design and cancer type), as well as resilience-related concepts, coping strategies, strengths, resources and key findings relevant to the review question.

Data analysis and presentation

The analysis and interpretation of the extracted data was supported by (SL). Data analysis followed a two-step approach: (1) descriptive numerical analysis and (2) thematic synthesis. First, study characteristics, including Indigenous population, sample size, study design, cancer type and participant demographics, were analysed descriptively and presented in Tables 1–3. This provided a numerical summary of the characteristics of the evidence base.

Table 1
Characteristics of studies included in the review

No.	Author(s)/ Year	Country	Aim/ Objective	Study design	Participants/ sample size	Types of cancer	Key findings
1	Calumet, 2017	United States	To explore the lived experience of mana'olana/hope in Native Hawaiian women diagnosed with breast cancer	Qualitative research	5	Breast	Family, spirituality, healthcare providers, treatment, and time in nature all helped strengthen patients' hope.
2	Eide, 2008	United States	Examine lived experience of Native Hawaiian breast cancer survivors; uncover cultural themes informing health promotion.	Qualitative research	11	Breast	Survivors moved through stages of discovery, transformation, and rebuilding their lives. Spiritual connection was central, most felt a strong pull to help other women going through the same thing, and cancer history was often not talked about within families.
3	Haozous et al., 2010	United States	The purpose of this qualitative descriptive study was to explore the experience of cancer pain in a group of AIs from Montana.	Qualitative research	10	Breast, other solid and haematologic malignancies	American Indian patients described cancer pain in ways similar to other groups, but they were more likely to feel isolated, to endure pain quietly, to want privacy, and to distrust people outside their community.
4	Thomas et al., 2023	Canada	To explore experiences/needs of First Nations and Mātiis persons living with cancer (PLCs) and produce a knowledge-translation video	Qualitative research	87	Breast, colon, kidney, lung, prostate, skin	A video-based approach helped patients feel more connected and hopeful. It also confirmed that barriers to culturally safe care exist, while highlighting spirituality, connection to land, and family/community as key sources of strength.
5	Bea et al., 2019a	United States	To gain insight into Native American cancer survivors' experiences navigating life after cancer, and what resources/strategies survivors found useful for coping and restoring quality of life (QoL) after diagnosis	Qualitative research	52	Breast, genitourinary, gastrointestinal, gynaecologic, hematologic, head and neck, lung	Balancing responsibilities to themselves, their family, and their community was the biggest challenge for Native American survivors. Spirituality and cultural connection gave them strength and hope. Women in particular found it hard to prioritise self-care because of cultural values around

No.	Author(s)/ Year	Country	Aim/ Objective	Study design	Participants/ sample size	Types of cancer	Key findings
							selflessness and caregiving. Education helped survivors advocate for themselves in healthcare settings, and sharing their cancer stories helped them cope and gave others hope.
6	Ristevski et al., 2020	Australia	Explore cancer diagnosis, treatment, and survivorship experiences of Aboriginal people in Gippsland and identify factors critical to a culturally appropriate cancer survivorship model of care	Qualitative research	15	Not specified	Culture and family were central to how Aboriginal patients experienced survivorship and need to be built into care models. Health professionals often did not understand or accommodate Aboriginal family and cultural needs, and access to care (transport, money) depended heavily on family support.
7	Albert et al., 2024	New Zealand	To develop a kaupapa Māori cancer support programme for whānau Māori living with cancer, addressing critical gaps in culturally safe supportive cancer care	Qualitative research	7	Not specified	Te Mauri became the first Indigenous cancer support programme in New Zealand, built entirely around the Māori worldview (te ao Māori). Whānau wanted a programme rooted in traditional Māori values and knowledge. It went beyond cancer support to strengthen cultural identity and build resilience. Using te reo Māori throughout was seen as both therapeutic and important for keeping the language alive. Elders played an essential role providing spiritual guidance and cultural expertise, and traditional welcome ceremonies (pōwhiri) created a safe, culturally grounded foundation for the programme.

No.	Author(s)/ Year	Country	Aim/ Objective	Study design	Participants/ sample size	Types of cancer	Key findings
8	Mokuau & Braun, 2007	United States	To examine family support for Native Hawaiian women with breast cancer, specifically the role of culture	Qualitative research	25	Breast	Family was the most important source of emotional and practical support. Spirituality and prayer were central to how patients coped.
9	Warson, 2008	United States	To explore Native American women's beliefs surrounding wellness and illness through storytelling and artmaking to inform culturally competent psychosocial cancer interventions.	Qualitative research	2	Breast	Native women saw wellness holistically rather than purely medically. Spirituality was inseparable from wellness, and traditional healing was used alongside biomedical treatment. Storytelling and art-making helped participants express experiences that were hard to put into words, and this art-based approach successfully captured their experiences.
10	Bea et al., 2018	United States	To assess Navajo cancer survivor PA habits, barriers, and preferences, and to inform a tailored PA-based health promotion intervention	Qualitative research	40	Breast, colon ovarian, cervical, oesophageal, gall bladder, gastric, prostate, kidney, acute myeloid leukemia, multiple myeloma	Physical activity was seen as culturally important. Resilience and family support motivated survivors to stay active, while treatment side effects and lack of resources made it harder.
11	Hsieh et al., 2020	United States	Examine mediating effect of quality of life on associations between spiritual well-being, social support, and depression in AI women cancer survivors.	Quantitative research	73	Not specified	Spiritual well-being and social support directly reduced depression, and also improved quality of life, which in turn lowered depression further. Survivors with higher spiritual well-being and social support had better quality of life and a lower risk of depression.
12	Ka'opua et al., 2008	United States	Explore influence of religiosity and ethnocultural tradition in coping with breast cancer among Native Hawaiian women; inform development of a faith-based	Qualitative research	7	Breast	A sense of collectivism (kakou) ran through all participants' stories. Their Hawaiian cultural values shaped how they made

No.	Author(s)/ Year	Country	Aim/ Objective	Study design	Participants/ sample size	Types of cancer	Key findings
			breast health intervention				sense of their illness and made decisions. Relying on God did not stop them from taking an active role in their own care, and helping their community was seen as fulfilling a personal responsibility (kuleana).
13	Braun et al., 2002	United States	To examine cancer experiences of Native Hawaiian cancer survivors including fatalistic attitudes, access to healthcare, and culturally linked values	Qualitative research	45	Breast, lung, prostate, thyroid, cervix, uterus	Most participants stayed active and persevered through their illness. About 78% used health professionals or facilities, 78% had support from family or community, 56% had spiritual support, and 49% felt motivated to help others. Participants living in rural areas or on outer islands faced greater barriers to accessing care.
14	Witham et al., 2022	Canada	To examine system-level barriers and community strengths in Indigenous cancer care experiences in Saskatchewan using a strength-based approach	Qualitative research	24	Breast, colon, bone marrow, thyroid, skin	Barriers to care (access, coordination, culturally relevant care, education) existed alongside strengths such as kinship, culture, and spirituality. The study recommended using patient navigators to help bridge these gaps.
15	Mehl-Madrone, 2008	Canada	To describe commonalities among exceptional cancer survivors who worked with traditional aboriginal healers, compared with matched non-survivors	Qualitative research	94	Lymphoma, metastatic breast, prostate, metastatic ovarian, malignant melanoma, colon cancer, brain/glioblastoma/astrocytoma, oesophageal, lung, pancreatic, multiple myeloma, non-Hodgkins's lymphoma	Survivors who did unusually well ('exceptional survivors') scored significantly higher than other patients on 10 of 12 measures, including staying present-focused, forgiveness, letting go of the past, humour, refusing to accept death, and having supportive community and spiritual change. Faith/hope and finding meaning/dignity in life did not differ between the two groups, suggesting these may be a standard part of

No.	Author(s)/ Year	Country	Aim/ Objective	Study design	Participants/ sample size	Types of cancer	Key findings
							Aboriginal healing regardless of outcome.
16	Shahid et al., 2010	Australia	To explore Aboriginal Australians' beliefs, understanding and experiences of cancer, particularly the use and meaning of bush medicine and traditional healing in cancer care.	Qualitative research	37	Breast, lung, cervical, bowel, throat, head & neck, pancreas, leukaemia, ovarian, mesothelioma, melanoma	Bush medicine carries deep spiritual meaning tied to land, ancestors, and identity. It was often used alongside Western medicine rather than instead of it. Access required approval from a healer and was harder for people living in urban or remote areas, and a lack of information on dosing and safety created some risk.
17	Haozous et al., 2016	United States	To describe the experiences of American Indian and Alaska Native cancer survivors to improve understanding of the trajectory of cancer treatment.	Qualitative research	30	Any type of cancer. Not specified	American Indian and Alaska Native survivors faced barriers such as delays, poor communication, isolation, and financial strain, but drew strength from family, spirituality, and self-advocacy. The study's 'Rough Waters' model describes the cancer journey as a shared, culturally meaningful experience.
18	Newman et al., 2017	Australia	To understand Aboriginal men's experiences of cancer diagnosis, treatment, and care	Qualitative research	54	Prostate, leukemia, liver, testicular, bowel, lung, pancreatic, stomach cancers	Aboriginal men were often seen as avoiding help-seeking and not talking about their illness, as they tried to protect their cultural and family roles despite being sick. Family, culture, spirituality, and humour were major sources of support, and accepting vulnerability and asking for help became important during treatment.
19	Hammond et al., 2017	Canada	To explore survivorship experiences of First Nations women with cancer and their caregivers and identify barriers to cancer communication and	Qualitative research	58	Breast, colon, kidney, skin and non-Hodgkin lymphoma	Historical trauma, stigma around cancer, and inadequate institutional support all contributed to silence around the disease.

No.	Author(s)/ Year	Country	Aim/ Objective	Study design	Participants/ sample size	Types of cancer	Key findings
			support within First Nations communities.				Family and community networks provided most of the emotional, financial, and practical support, and participants wanted culturally safe healthcare that acknowledges the history of colonisation.
20	Tam et al., 2018	Australia	Explore factors or enablers that assist Indigenous Australians to have positive cancer care experiences	Qualitative research	12	Breast, lymphoma, lung, thymus, head & neck	Resilience and good communication were the two main factors behind positive cancer experiences. Family and friend support, along with personal coping strategies, underpinned resilience, while clear communication and compassionate patient-provider relationships-built trust.
21	Roh et al., 2018	Canada	Explore American Indian women cancer survivors' spiritual coping practices, particularly experiences of prayer and faith	Qualitative research	43	Breast, cervical, colon	Prayer and faith gave participants comfort, strength, and hope, connected them to family and community, and helped them come to terms with mortality.
22	Lee et al., 2018	United States	Explore non-familial social and community support networks of AI women cancer survivors	Qualitative research	43	Breast, cervical, colon, lung, non-Hodgkin lymphoma	Friends were the most common source of support, but church support was uniquely regular and dependable. Online support was especially important for women in rural areas, and the type of cancer did not affect what kind of support participants needed.
23	Burnette et al., 2018a	United States	To identify American Indian women cancer survivors' needs and preferences related to community supports for their cancer experience	Qualitative research	43	Cervical, breast, colon, lung, non-Hodgkin lymphoma	Participants mostly wanted stronger, culturally responsive, community-based support. Stigma around cancer was a major barrier to seeking help. They preferred approaches that included family and honoured

No.	Author(s)/ Year	Country	Aim/ Objective	Study design	Participants/ sample size	Types of cancer	Key findings
							their culture, noted a lack of culturally relevant online resources, and saw telehealth support groups as a promising way to improve access.
24	Roh et al., 2019	United States	To examine risk and protective factors associated with depressive symptoms among Northern Plains American Indian women cancer survivors using the Framework of Historical Oppression, Resilience, and Transcendence (FHORT)	Quantitative research	73	Breast, cervical, colon, lung, non-Hodgkin lymphoma	About 46.6% of participants had probable depressive symptoms. Better perceived health, greater resilience, and stronger social support were each independently linked to fewer depressive symptoms, while adverse childhood experiences, age, cancer type, and time since diagnosis were not significant factors.
25	Gifford et al., 2018	Canada	To explore the meanings of spirituality in cancer survivorship for First Nations people in Canada and describe how spiritual practices are incorporated into healing	Qualitative research	31	Breast, kidney, gastrointestinal, respiratory, leukemia/lymphoma, adrenal, colon, lymph, prostate, rectum	Spirituality was central to how First Nations survivors experienced survivorship, supporting holistic healing through cultural identity, traditional practices, faith, gratitude, community, and connection with nature. The study recommends that culturally safe survivorship services recognise and support these spiritual dimensions.
26	Meiklejohn et al., 2020	Australia	To explore how cancer survivorship is framed and experienced by Indigenous (Aboriginal and Torres Strait Islander) cancer survivors	Qualitative research	19	Breast, blood-related, head and neck, brain, thymus, lung, skin, genital	Past, often traumatic, experiences shaped participants' resilient identity as survivors. Moving into a 'survivor' identity was linked to milestones such as finishing treatment or regaining independence. Family support was central but could also become a burden, and while some valued community or cancer-support groups, others

No.	Author(s)/ Year	Country	Aim/ Objective	Study design	Participants/ sample size	Types of cancer	Key findings
							avoided them and preferred privacy.
27	Bea et al., 2019b	United States	To assess Navajo cancer survivor perceptions of cancer causes, prevention, and treatment	Qualitative research	32	Colorectal, breast, ovarian, cervical, oesophageal, gall bladder, stomach, prostate, kidney, acute myeloid leukemia, multiple myeloma	Cancer was widely seen as a fatal illness ('a sore that does not heal'), and many survivors experienced social isolation because others mistakenly believed cancer was contagious. Barriers to care included language, cost, distance, fear, and distrust of Western medicine. Resilience, a desire to restore balance (hózhó), and hope were key strengths, and younger family members often acted as a bridge to healthcare.
28	McKinley et al., 2020a	United States	To explore American Indian women cancer survivors' spiritual and religious coping practices.	Qualitative research	43	Breast, cervical, colon, lung, non-Hodgkin lymphoma	Most women (93%) used spiritual or religious coping. Traditional Indigenous spirituality was more common than organised religion, and many participants combined both.
29	McKinley et al., 2020b	United States	To examine the composition of American Indian women cancer survivors' family support networks and the types of support they provided during diagnosis, treatment and recovery	Qualitative research	43	Cervical, breast, colon, non-Hodgkin, lymphoma, lung	About 90% of participants received substantial support from family. Practical help such as transport, cooking, childcare, appointments, finances, and household tasks along with emotional encouragement from immediate and extended family, were central to coping with cancer. Families were described as the 'bedrock' of survivorship.
30	Burnette et al., 2018b	United States	To explore AI women cancer survivors' experiences with conventional and non-conventional mental health care for depressive	Qualitative research	43	Breast, cervical, colon, lung, non-Hodgkin lymphoma	62% of participants reported depressive symptoms after diagnosis. Family and informal support were the main coping

No.	Author(s)/ Year	Country	Aim/ Objective	Study design	Participants/ sample size	Types of cancer	Key findings
			symptoms and barriers to utilisation				resource. Traditional American Indian healing practices, such as sweat lodges and ceremonies, were valued and used, while stigma and concerns about confidentiality were key barriers, and conventional health services were seen as a supplement rather than the main source of support.
31	Roh et al., 2021	United States	To examine whether perceived physical well-being, spiritual well-being and social support protect against depressive symptoms among American Indian female cancer survivors.	Quantitative research	73	Mixed cancer types. Not specified	Spiritual well-being and social support were significant protective factors against depressive symptoms.
32	Burnette et al., 2021	United States	To identify factors that promote and undermine resilience among Indigenous women who experience cancer	Qualitative research	43	Breast, cervical, colon, lung, non-Hodgkin lymphoma	Cancer led to positive personal growth in 88% of participants. Gratitude and living in the present were central themes, and faith grew stronger through both Indigenous and Christian practices. Family support was essential, and helping others gave participants meaning and purpose. Indigenous survivors reported lower social quality of life but potentially higher spiritual quality of life compared with non-Indigenous survivors.
33	Lee et al., 2023	United States	Assess relationship of spirituality, social support, and mastery to life satisfaction and quality of life in AI women cancer survivors.	Quantitative research	73	Any cancer type. Not specified	Spirituality was the single strongest predictor of life satisfaction, while social support and a sense of mastery predicted quality of life. Physical health was a consistent source of stress, but financial strain was not significantly linked to either outcome.

Second, findings relating to resilience-related concepts, strengths, resources and coping strategies were synthesised and mapped using a hybrid inductive-deductive thematic approach (Proudfoot, 2023). Initially, resilience-related concepts were identified and coded inductively across the included studies. These codes were then organised into broader thematic categories and interpreted deductively using Kirmayer and colleagues' social-ecological framework of Indigenous resilience (Kirmayer et al., 2011). The framework served as an interpretive lens for understanding how resilience operates across individual, relational, community, cultural, ecological and structural contexts. Findings are presented through tables, figures and narrative summaries aligned with the review objective.

Results

The database and grey literature searched between February and May 2026 identified 2091 articles. After initial screening by title, and abstract, 61 papers were included for full-text screening, 33 met the inclusion criteria and have been included in this review (Fig. 1). Details of the 33 included studies are available in Table 1.

Insert Fig. 1 Here

Insert Table 1 Here

3.1 Characteristics of included studies

Sample sizes of the included studies varied between 2 and 94. In total, the included studies were conducted among 1290 Indigenous adults in four countries (USA, Canada, Australia, and Aotearoa New Zealand). Of particular interest is the expanding literature on cancer experiences among Indigenous populations. As seen in Table 2, the number of publications about strengths and resilience-related resources among Indigenous populations has increased since 2013, with approximately 76% of the included articles published since then. This pattern suggests growing scholarly attention to Indigenous cancer experiences, survivorship and strengths.

Table 2
Key Data Extracted from the studies

Key Data Extracted from the Studies		
Articles publication period	2002 to 2024	
2002 to 2012	8 papers	
2013 to 2024	25 papers	
Gender		
Females	907 (90%)	
Males	101 (10%) for the papers that declared the gender	
Undisclosed gender identity	252 (6 articles)	
Research design	Number of articles	
Qualitative	29 (87.87%)	
Quantitative	4 (12.13%)	
Country/People	Ethnicity	Number of participants
American Indigenous People	Native American/American Indian	824 (63.88%)
	Native Hawaiian	83 (6.43%)
	Navajo Nations	72 (5.58%)
Indigenous People of Aotearoa/New Zealand	Maori	5 (0.39%)
Indigenous Australians	Aboriginal	106 (8.22%)
Indigenous People of Canada	First National/Metis Peoples	200 (15.50%)
Countries	Number of Articles	
USA	21 (63.64%)	
Canada	6 (18.18%)	
Australia	5 (15.15%)	
New Zealand	1 (3.03%)	
Total	33 (100%)	
Cancer type (merged category)	Number of participants	
Breast	344 (27.3% of the total)	
Cervical	126 (10% of the total)	
Colorectal (Colon, Colorectal, Bowel, Rectum)	70 (6% of the total)	
Prostate	41	
Lung / Respiratory (Lungs, Respiratory)	32	
Lymphoma (Non-Hodgkin's, Hodgkin's, unspecified)	26	
Cancers categorised as 'others' after listing the major ones	202	
Total	841	
Cancer without specific type	449	
Total Sample Size	1290	

Insert Table 2 Here.

There was not much variation in the evidence base. Most of the studies used qualitative (n = 29; 87.9%) while a minority (n = 4; 12.1%) adopted quantitative approach to study Indigenous cancer experiences, survivorship and strengths. The geographical distribution of studies was uneven. Twenty-one studies (63.6%) were conducted in the United States, six (18.2%) in Canada, five (15.2%) in Australia and one (3.0%) in Aotearoa New Zealand. Participants included Native American or American Indian peoples (n = 824, 63.9%), First Nations or Métis peoples in Canada (n = 200, 15.5%), Aboriginal and Torres Strait Islander peoples (n = 106, 8.2%), Native Hawaiians (n = 83, 6.4%), Navajo people (n = 72, 5.6%) and Māori (n = 5, 0.4%).

Women were substantially over-represented. Among studies reporting sex, 907 participants were female and 101 were male, while sex or gender was not reported for 252 participants across six studies (Albert et al., 2024; Hammond et al., 2017; Haozous et al., 2016; Mehl-Madrona, 2008; Thomas et al., 2023; Witham et al., 2022). The evidence base was therefore strongly shaped by women's cancer experiences, particularly breast and cervical cancer. Breast cancer was the most frequently represented cancer type, involving 344 participants (27.3% of the total sample), followed by cervical cancer (n = 126, 10.0%). Colorectal cancers, including colon, bowel and rectal cancers, accounted for 70 participants. Prostate cancer accounted for 41 participants, while lung and respiratory cancers accounted for 32. A substantial number of participants were included in studies where cancer type was not specified (n = 449), and a further 121 participants were classified within other cancer categories.

3.2 Sources and factors of resilience

All the included studies reported on either resilience, sources of resilience or resilience-related factors among Indigenous cancer patients and survivors. The resilience and the associated factors reported in the included studies were analysed thematically. Through a process of reviewing the content of the studies, it became clear that there were five broad concepts that promoted or were related to resilience. These included social support and relational, spirituality, cultural and traditional practices, and self-efficacy. A detailed sub-concepts/sub-themes under each of these categories are found in appendix Table A.

3.2.1 Social and relational resilience: strength held in relationships

One of the most common resilience factors reported across the included articles was relationships. Almost 90% (n = 29, 87.8%) of all included studies discussed the centrality of relationships as a source of encouragement and strength among Indigenous cancer patients and survivors. The articles generally reported that cancer patients received various forms of support (Braun et al., 2002; Calumet, 2017; Haozous et al., 2010; Haozous et al., 2016; Meiklejohn et al., 2020; Thomas et al., 2023) and encouragements from friends and relatives. Family, friends and community were not merely sources of emotional support. Most of the papers (Burnette et al., 2021; Haozous et al. 2010; McKinley et al., 2020a; McKinley et al., 2020b; Roh et al., 2021; Thomas et al., 2023) argued that these social relations formed the social infrastructure through which the study participants interpreted cancer, made decisions, sustained hope and endured the practical and emotional demands of diagnosis, treatment and survivorship.

As exemplified by the quotations below, participants described strength arising through spouses, children, siblings, extended family, Elders, friends, church members, peers and the wider community networks. These family and social connections offered words of encouragement, financial assistance, advocacy, emotional reassurance, information sharing and companionship.

Ohana (family) involvement was the key to helping me through the experience" (Mokuau & Braun, 2007, p. 192)

My friends from my church also have been a real strength.. . by coming and helping me with housework and cooking, cleaning. .. They've been such positive ones too like telling me. .. it's not the end; you've got to keep going." (Tam et al., 2018, p. 5).

Visibility of cancer survivors inspired hope and comfort among newly diagnosed people. In five of the studies (Braun et al., 2002; Burnette et al., 2018a; Calumet, 2017; Meiklejohn et al., 2020; Tam et al., 2018), cancer support groups and opportunities to share cancer stories helped transform an isolating diagnosis into a collective experience. In three of the studies (Bastian & Burhansstipanov, 2020; Burnette et al., 2018a; Eide, 2008), survivors regularly shared stories of their journey with cancer. These stories become a source of courage for many cancer patients.

"When you walked into the doctor's office and he told you he's going to take something out of you, you can darn well bet he took part of your spirit from you. It was like a gasp of air that rushed out of me, I felt the hole that he shot in me. And then I went to six or seven doctors and they all shot me full of holes, too. The spiritual part of closing those wounds is as important as the physical part" (Bastian & Burhansstipanov, 2020; p. 164)

3.2.2 Spirituality: meaning, faith and connection

The next most discussed concept related to resilience was spirituality, highlighted in 25 out of the 33 included articles. Spirituality was largely demonstrated through belief in a supreme being as a source of healing (Calumet, 2017; Warson, 2008; Witham et al., 2022), determinant of a life course/fate (Eide, 2008; Haozous et al., 2016), and observance of religious practices to draw strength from supernatural beings (Mokuau & Braun, 2007; Shahid et al., 2010; Tam et al., 2018). Cancer patients (Calumet, 2017; Lee et al., 2018; Meiklejohn et al., 2020; Mokuau & Braun, 2007; Thomas et al., 2023) and survivors (Bea et al., 2019; McKinley et al., 2020a; Roh et al., 2021; Shahid et al., 2010) discussed prayer, faith, religious practice, communication with God or Jesus, trust in a higher power and belief in divine healing as important sources of strength. Spirituality offered reassurance, hope and a framework for interpreting suffering, uncertainty and survival (Meiklejohn et al., 2020).

"Every morning I have my devotional time with God, and then throughout the day I say prayers and stuff, but if I'm feeling bad or something I'll just say a little prayer. I pray for everybody else that I know. It makes me feel better". (Roh et al., 2018: p. 190)

"Because we are not traditional Aboriginal, and our family was Christian based, and so ... We put our trust on God". (Shahid et al., 2010: p. 7)

For some participants, spirituality provided peace during the uncertainty of diagnosis and treatment (Eide, 2008; Lee et al., 2018; McKinley et al., 2020a). Churches and spiritual groups also provided social support, belonging and continuity. Seven of the studies (Calumet, 2017; Haozous et al., 2010; Ka'opua et al., 2008; Lee et al., 2018; Meiklejohn et al., 2020; Mokuau & Braun, 2007; Roh et al., 2018) report that practices such as prayer,

singing, devotion and participation in spiritual gatherings helped sustain emotional wellbeing and hope. The concept spirituality was not limited to formal religion. Some of the studies reported that spirituality was also demonstrated through relationships with ancestors (Albert et al., 2024; Eide, 2008; Mokuau & Braun, 2007), land, nature and culturally grounded understandings of healing (Shahid et al., 2010; Tam et al., 2018).

"I have a lot of Christian women who are friends... and they would just call me and see how I was doing and they would stop by if they were in the area and they would just come and let me know that they were thinking about me and they were praying for me". (Lee et al., 2018: p. 487)

"Through the church I believe that Jesus will heal me, you know? He healed me a lot, and I know that. Because through prayers through the church I saw him. I went and seeked [sic] him out and with all the prayers and how we pray out there at the church, um, they heal you. I experienced it and I experienced a lot of things in life where they took the sickness out of me". (McKinley et al., 2020a; p. 2438)

"I always remember to pray to my ancestors, also my guardian [angel] we call the 'aumakua. I think that's what gives me strength too. I pray. I never stop worship." ... "To me, my culture... made a lot of difference. I usually go to the volcano and sit there meditating and ask for help or anything". (Eide, 2008: p. 50, 53)

3.2.3 Cultural continuity, Country and traditional practices

Culture, participating and observing traditional practices were a great source of strength for many of the participants across the reviewed studies. In many of the articles, participants described traditional prayers (Haozous et al., 2010; Eide, 2008), ceremonies, traditional healing, bush medicines (McKinley et al., 2020b; Shahid et al., 2010; Witham et al., 2022), smudging, sweetgrass, offerings, Sundance, gardening (Burnette et al., 2018b; Burnette et al., 2021; Gifford et al., 2018; Haozous et al., 2010; McKinley et al., 2020a; Tam et al., 2018), storytelling, cultural gatherings (Burnette et al., 2018a; Gifford et al., 2018) and other practices as sources of strength during cancer.

Tam et al. (2018) specifically highlighted the significance of connection to land and nature among Indigenous cancer patients. Land was not described simply as a physical setting. It was a source of identity, belonging, healing, memory and continuity (Shahid et al., 2010).

Four studies (Eide, 2008; McKinley et al., 2020b; Ristevski et al., 2020; Shahid et al., 2010) reported that returning to cultural roots, participating in ceremonies, connecting with ancestors and maintaining cultural identity helped many of the cancer patients sustain continuity during a period when cancer disrupted everyday life. Cultural practices provided belonging and offered interpretive frameworks through which cancer was understood (Gifford et al., 2018). The excerpt below clearly reflects how culture and traditional practices provided support for a patient to cope with the cancer journey:

"Our culture has lifted me from where I was, 'cause I was down here, now I'm back up here, and I give thanks to all the old fellas 'cause they've given me strength in places I never thought even existed". (Ristevski et al., 2020: p. 126)

"I love my gardening. .. It's the islander that comes out in me, I go out and talk to my plants, I give my bananas a kiss and hug the tress. .. it gives (me) that inner strength and inner peace" (Tam et al., 2018: p. 6)

3.2.4 Individual and collective agency, strength and self-efficacy

A few of the included studies (for example, Bastian & Burhansstipanov, 2020; Burnette et al., 2021; Calumet, 2017) identified individual and collective strengths, including hope, optimism, perseverance, fortitude, self-efficacy, independence, humour, pragmatism, positive thinking and determination as a great source of strength for Indigenous cancer patients and survivors. In Bastian and Burhansstipanov (2020), participants described inner trust in self, a refusal to give up and positive thinking. Some drew strength from previous life experiences (Eide, 2008), gratitude and faith (Bea et al., 2019; Burnette et al., 2021; Meiklejohn et al., 2020), and the belief that they could recover (Bea et al., 2019). Others described adapting to stress (Haozous et al., 2010), reordering priorities (Burnette et al., 2021), accepting vulnerability (Newman et al., 2017), forgiving others and releasing blame or anger (Mehl-Madrona, 2008). Resilience also involved active engagement with health care. Bastian and Burhansstipanov (2020) reported that participants sought information, asked questions, advocated for themselves, made decisions about treatment and took responsibility for aspects of their care. Self-advocacy was especially important where participants encountered poor communication, fragmented care or culturally unsafe services (Bastian & Burhansstipanov, 2020; Haozous et al., 2016).

"In my mind I told myself I am going to beat this thing and I am going to live and do whatever I can to be a cancer survivor." ... "I am pretty much confident with myself I can do it on my own, like I said, I live on the reservation" (Bea et al., 2019: p. 498)

"have that inner faith in yourself, let your body help you heal yourself." (Bastian & Burhansstipanov, 2020: p. 162)

"I can't even think of not having mana'olana/hope in my life! We were always raised to have hope and to do your best and strive to do better!" (Calumet, 2017: p. 67)

"I guess the way I was raised, it was to be strong, you know, not give into anything, just give it a chance..um, it will work itself out through God, and that was my, that was my shield, was God and my pride..." (Warson, 2008: p. 63)

"Well, the way I see it, once my cancer is taken out, once I go through the radiation, I am going to live one day at a time... I'll still do the things I do, ceremony, sweat, Sundance. And I'll pray every day." (Burnette et al., 2021: p. 205)

3.2.5 Relationships with health professionals

Attitudes and relationships with health professionals were found to impact resilience. Hammond et al. (2017) reported that respectful, culturally safe and responsive relationships with clinicians were important enabling conditions for resilience. This was a cross-cutting observation. Healthcare professionals strengthened resilience of cancer patients when they communicated clearly, listened carefully, demonstrated empathy and recognised the importance of family, culture and spirituality (Hammond et al., 2017). Conversely, interactions marked by dismissal, poor communication, racism or lack of cultural understanding erode trust and add to the burden of cancer (Haozous et al., 2016).

"But with traditional beliefs and understandings, hospital and aftercare people in the hospital don't understand it and do not know how to acknowledge our faith, our fears, or anything with that. Even when you're continually going, like I am, there isn't anybody that takes time to understand; they look at you like you're still in the woods." (Haozous et al., 2016: p. 14).

3.3 Conceptual synthesis: Indigenous cancer resilience through a social-ecological lens

This review conceptualises Indigenous cancer resilience as a dynamic process distributed across interconnected social-ecological levels. As a result, the Kirmayer et al. (2011) framework on Indigenous resilience provides a useful lens because it moves beyond the assumption that resilience resides within individuals. As seen from the review results, resilience among Indigenous cancer patients and survivors is generated through relationships, families, communities, culture, land, spirituality and broader social and political systems. Therefore, the synthesis from this review can be represented across five levels as seen in (Fig. 2) and appendix Table B.

Insert Fig. 2 Here.

Individual level

At the individual level, resilience included hope, optimism, perseverance, self-efficacy, humour, pragmatism and proactive engagement with care. Participants adapted to uncertainty, reconstructed priorities and maintained purpose (Burnette et al., 2021). However, these individual strengths were rarely independent. They were cultivated through relationships, culture, spirituality and collective identity.

Relational level

At the relational level, resilience was sustained through family, kinship, Elders, friends, peers and caregivers (Albert et al., 2024; Mokuau & Braun, 2007; Roh et al., 2021; Thomas et al., 2023). These relationships provided emotional, practical, informational and cultural resources. The prominence of relational resilience challenges survivorship models that focus primarily on the individual patient. For many Indigenous Peoples, cancer is experienced by families and communities, not only by individuals (Hammond et al., 2017; Haozous et al., 2016).

Community level

At the community level, resilience emerged through peer support, cancer support groups, churches, community organisations and shared stories of survival (Eide, 2008; Tam et al., 2018). Communities provided places where cancer experiences could be collectively interpreted and where survivors could become sources of strength for others (Hammond et al., 2017).

Cultural and ecological level

At the cultural and ecological levels, resilience was expressed through connection to Country, land, nature, ancestors, cultural identity (Shahid et al., 2010), ceremony, traditional practices and spirituality (Bastian & Burhansstipanov, 2020; Shahid et al., 2010; Thomas et al., 2023). These findings suggest that Indigenous cancer resilience may be fundamentally place-based. Healing may involve not only treatment of the body but also restoration and maintenance of relationships with family, community, culture, ancestors and Country.

Structural and health-system level

At the structural level, resilience was shaped by health systems, geography, socioeconomic conditions and the continuing consequences of colonisation (Hammond et al., 2017). Respectful relationships with health professionals could strengthen resilience, while culturally unsafe or inaccessible services could undermine it (Haozous et al., 2016).

Discussion

Across the 33 studies included in the review, several concepts were used to describe strength and resilience among participants. Resilience and associated factors were analysed thematically (Thomas & Harden, 2008) and grouped into five categories and include: (1) social support and relational; (2) spirituality; (3) cultural and traditional practices; (4) self-efficacy; and (5) relationships with health professionals. The evidence on

resilience was largely grounded in narrative, lived experience, interviews and culturally situated accounts rather than standardised resilience measures. A recent surge of publications on factors that promote resilience in Indigenous patients was identified, with more than three quarters (87.8%) of included articles published from 2013 onwards.

This study extends existing Indigenous cancer literature (for example, Bernardes et al., 2019; Burnette et al., 2021; Gifford, et al., 2021) by bringing together domains that are often examined separately. Social support, spirituality, cultural continuity and individual agency were repeatedly identified across included studies. Their significance becomes clearer when interpreted through a social-ecological lens. Indigenous cancer resilience is generated through the interaction of these domains, not through any single factor alone. This interpretation is consistent with Kirmayer et al. (2011) conceptualisation of resilience as emerging through relationships among individuals, communities and larger social systems. Their work cautions against applying individualistic psychological models to Indigenous contexts without attention to cultural, historical and political realities.

In several included studies (for example, Burnette et al., 2021; Haozous et al. 2020; Roh et al., 2021; Thomas et al., 2023), social support was reported to be associated with resilience. This finding is in keeping with what has been presented in earlier studies conducted among non-Indigenous populations (Sihvola, Kuosmanen, & Kvist, 2022; Edward et al., 2019; Zarei et al., 2025). Cancer usually disrupts relationships, hinders career trajectories, and heightens feelings of isolation. Cancer patients and survivors have highlighted several challenges they experience during illness when navigating social relationships (Zarei et al., 2025). The young and middle-aged patients experience challenges in maintaining intimate and productive social relationships due to common mental health problems that usually coexist with cancer (Wang & Feng, 2022). People living with cancer, therefore, need social and emotional support (Lam et al., 2016), and the support provided must be tailored to their circumstances and needs (Zebrack et al., 2014). Without adequate support that matches their needs, cancer patients may feel neglected and hopeless, both of which are risk factors for poor mental health (Zarei et al., 2025; Wang & Feng, 2022). Most of the participants of the included studies in this review received social support from their friends and relatives (for example, Mokuau & Braun, 2007; Tam et al., 2018), as well as via community and church interventions (Eide, 2008; Burnette et al., 2018a). These kinds of support, relationships and community networks served as sources of strength for patients (Bastian & Burhansstipanov, 2020; Burnette et al., 2018a; Mokuau & Braun, 2007). These relationships and networks also provided practical assistance, affirmed identity and sustained the feeling of belonging (Burnette et al., 2018a). The evidence suggests that resilience is not simply something a person possesses. It is cultivated and sustained through relationships. This observation aligns with Kirmayer's social-ecological account, in which the self is embedded within relational, cultural and collective worlds (Kirmayer et al., 2011).

Resilience in cancer patients and survivors was associated with self-efficacy or individual innate strength. The key self-efficacy aspects reported in the included studies are hope and optimism (Bea et al., 2019; Calumet, 2017), wellness and quality of life (Warson, 2008) can-do and fighting spirit (Burnette et al., 2021; Ristevski et al., 2020), perseverance and positive thinking and adaptation (Bea et al., 2019), drawing strength from gratitude (McKinley et al., 2020a), self-advocacy (Bea et al., 2019; Hammond et al., 2017; Haozous et al., 2016). People who have experienced cancer consider sense of humour, optimism, hope, and perseverance as crucial life values (Bea et al., 2019; Ebenau et al., 2017). According to Connor and Davidson (2003), these values overlap with resilience and focus on problem-solving and confidence about the future. Some of the articles covered in this evidence mapping study demonstrated how interventions targeted to promoting self-care and coping strategies can improve resilience (Bea et al., 2019; Warson, 2008). It has been argued that patients with more positive adaptation strategies and self-compassion show better resilience compared to others with minimal emotional regulation strategies (Cohen, 2020). These findings corroborate earlier research reports. Self-compassion supports self-care and improves psychosocial wellbeing (Garcia et al., 2021). Self-advocacy and self-care can help cancer patients reduce their mental burden and achieve better resilience (Edward et al., 2017). These findings, however, require careful interpretation. Individual strength should not be used to imply that individuals are responsible for overcoming structural inequities. This is because a person may demonstrate extraordinary perseverance while also experiencing racism, isolation, and other stressors.

The findings of the reviewed articles indicate that participants engaged in religious and spiritual activities to buffer against cancer-related distress, such as prayers, trust in God, spending time in sacred places, meditation, and performing spiritual ceremonies. Participants considered cancer experiences as a journey that enhances their spiritual growth and draws them closer to the creator, nature, and ancestors (Roh et al., 2018; Gifford et al., 2018; Hunter-Hernandez et al., 2015). Burnette et al. (2021) reported that patients participated in both conventional Christian and Indigenous spiritual activities to deal with depressive symptoms. For some participants, spirituality is considered as a cultural resource in cancer survivorship (Gifford et al., 2018). Among Latino cancer patients, prayer and regular bible reading were identified as important sources of spiritual wellbeing, offering strength and comfort during the cancer journey (Hunter-Hernandez et al., 2015). These findings are consistent with earlier studies arguing that spirituality functions as a key adaptive resource that promotes resilience in cancer patients (Harris et al., 2010; Hunter-Hernandez et al., 2015). A cancer diagnosis can prompt spiritual reflection, especially when the patient is faced with the possibility of death (Dyer, 2011). This suggests that people may experience spiritual growth following a cancer diagnosis (Roh et al., 2018; Gifford et al., 2018). In many instances, especially among participants from non-Judeo-Christian backgrounds, spirituality was expressed through and closely intertwined with traditional cultural practices.

This finding operated across multiple levels of the social-ecological model. At the individual level, spirituality supported hope and emotional regulation. At the relational level, it connected patients to family and faith-based communities. At the cultural level, it linked patients with ancestors, traditions and collective identities. At the ecological level, it connected healing to land, place and non-human relations.

Cultural practices are highly valued by Indigenous peoples. In the reviewed studies, cultural and traditional practices were associated with resilience (for example, Gifford et al., 2018; Ristevski et al., 2020; Shahid et al., 2010), and these findings align with earlier reports on culture and traditions in

cancer survivorship among Indigenous peoples (Cavanagh et al., 2016; Fleming & Ledogar, 2008). Practices such as engaging with nature, traditional cleansing rituals, used of bush medicine, and cultural ceremonies, reinforced the significance of cultural practices that integrate the interconnectedness of all things for healing and holism (Gifford et al., 2018). Cultural practices provide opportunities for cancer patients to connect with community and nature and to affirm their cultural identity and sense of self (Cavanagh et al., 2016). Generally, Indigenous cultures emphasize interconnectedness across family, community, ancestral, and the spiritual world (McCormick, 1997). Most Indigenous peoples believe in healing that involves re-establishing holism through traditional practices (Canadian Partnership Against Cancer, 2013). Gifford et al. (2018) observed that cultural and spiritual practices provided a mechanism for First Nations cancer patients in Canada to interconnect with family, community, and nature in ways that were distant from mainstream health services. These findings highlight the importance of identity and participation in cultural and traditional practices as key sources of support and resilience during the cancer journey and survivorship. The findings also confirm that cultural practices support empowerment among Indigenous populations (Gee, 2016) and reflects Kirmayer et al (2011) argument that cultural revitalization, collective identity and culturally grounded activities are key sources of Indigenous resilience.

Studies (for example, Hammond et al., 2017; Haozous et al., 2016) in this review indicate that positive patient-healthcare professional relationships enhanced patients' resilience. Healthcare professionals can enhance resilience by providing respectful space for patients to express their cultural and spiritual beliefs regarding treatment preferences (Hunter-Hernandez et al., 2015). They can also promote resilience by addressing individual needs and supporting patients' adaptation through education (Molina et al., 2014; Shivola et al., 2023). For instance, provision of cancer-related information can increase patients' understanding of cancer and shape their self-care management (Zhang et al., 2020). Puchalski et al. (2004) emphasized the importance of incorporating patients' fears, hopes, pains, aspirations, and spiritual and cultural orientation into the care planning process. This finding locates resilience partly within the health system. If resilience is social-ecological, health services are not merely settings in which resilient individuals operate. They can either strengthen or undermine the relational, cultural and spiritual resources on which resilience depends.

Largely, the findings of this review highlight important resources and strengths including relationships, culture and spirituality that can be leveraged to improve cancer journey and care for Indigenous peoples. Culturally responsive care should therefore not be equated to cultural awareness training or orientation. The crux of the matter is whether cancer care systems create space for Indigenous ways of knowing, healing, and relating. For some Indigenous peoples, this may include access to spiritual leaders, cultural practitioners, traditional medicines, ceremonies or connection to country. These approaches should not be standardised or imposed, because Indigenous Peoples are diverse and cultural practices differ across Nations, communities and families. The key principle is responsiveness to the preferences, authority and cultural context of each person and community.

Strengths and limitations

This review has several strengths. It brings together evidence from four countries and multiple Indigenous populations, includes diverse cancer types and applies a theoretically informed social-ecological lens to an area of research that has often been fragmented. The review also interprets resilience in relation to culture, relationships and structural context rather than reducing it to individual coping.

Several limitations should be noted. First, the evidence base was dominated by qualitative studies, limiting the ability to quantify the prevalence or relative contribution of specific resilience-related factors. Second, women were substantially over-represented, particularly in studies of breast and cervical cancer. Third, the literature was geographically concentrated in the United States, with comparatively limited evidence from Australia and Aotearoa New Zealand. Finally, because the included studies used diverse and sometimes implicit conceptualisations of resilience, the findings should be understood as mapping resilience-related strengths and processes rather than estimating a single measurable construct.

Conclusion

Resilience in cancer patients was expressed through family support and relationships, spirituality, cultural and traditional practices, and self-efficacy and active agency. Respectful relationships with health professionals could further strengthen these resources. This demonstrates that resilience in Indigenous cancer journeys is not adequately captured by models that locate strength solely within individuals. Thus, Indigenous cancer resilience is a dynamic process generated through relationships among individuals, families, communities, culture, spirituality, Country and health systems. Cancer services should, therefore, not ask Indigenous Peoples to become more resilient to inequitable systems. Instead, health systems must become more capable of recognising, respecting and strengthening the sources of resilience that already exist within Indigenous communities.

Declarations

Funding Declaration

This study was supported by NHMRC/Cancer Council Australia grant (GO7216: 2024/PCR/2044938) and RHMT funding.

Author Contribution

Dennis Asante: Conceptualization, Formal analysis, Investigation, Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing. Emmanuel Opoku Kumi: Conceptualization, Formal analysis, Investigation, Methodology, Validation, Writing – original draft, Writing – review & editing. Gideon Dzando: Methodology, Investigation, Validation, Writing –review & editing. Sam Rannard: Methodology, Validation, Visualization, review & editing. Muideen Olaiya: Methodology, Validation, Visualization, review & editing. Kehinde Obamiro: Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing & Project administration

Acknowledgement

We sincerely acknowledge Sandra Levers (an Indigenous research officer for James Cook University) and Elder Poye (an Indigenous Elder, Black Water community) for their valuable contribution to this review. Their cultural knowledge, insights, and understanding of Indigenous perspectives supported the data extraction and interpretation processes. Their contribution helped ensure that the findings were considered and interpreted with appropriate cultural context, respect, and sensitivity.

References

1. Albert T, Stephens L, Pouwhare M, Kingi J, Davies C, Wharerau P, Awatere J, Ellison-Loschmann L. Te Mauri—whānau mana motuhake: Supportive care for whānau Māori living with cancer. *AlterNative*. Int J Indigenous Peoples. 2024;20(4):692–701. <https://doi.org/10.1177/11771801241290116>.
2. Australian Institute of Health and Welfare. Cancer in Aboriginal and Torres Strait Islander people of Australia. Canberra: AIHW; 2018. <https://www.aihw.gov.au/reports/cancer/cancer-in-indigenous-australians/contents/about>.
3. National Indigenous Australians Agency & Australian Institute of Health & Welfare. (n.d.). 1.08: Cancer. Aboriginal and Torres Strait Islander Health Performance. Framework. <https://www.indigenoushpf.gov.au/measures/1-08-cancer>
4. Australian Institute of Health and Welfare & National Indigenous Australians Agency. (n.d.). 3.04: Early detection and early treatment. Aboriginal and Torres Strait Islander Health Performance Framework. <https://www.indigenoushpf.gov.au/measures/3-04-early-detection-and-early-treatment>
5. Bastian TD, Burhansstipanov L. Sharing wisdom, sharing hope: Strategies used by Native American cancer survivors to restore quality of life. *JCO Global Oncol*. 2020;6:161–6. <https://doi.org/10.1200/JGO.19.00215>.
6. Bea JW, de Heer HD, Kinslow B, Valdez L, Yazzie E, Curley P, Dalgai S, Schwartz AL. Perceptions of cancer causes, prevention, and treatment among Navajo cancer survivors. *J Cancer Educ*. 2019;35(3):493–500. <https://doi.org/10.1007/s13187-019-01487-5>.
7. Bea JW, de Heer HD, Valdez L, Kinslow B, Yazzie E, Lee MC, Nez P, Dalgai S, Schwartz A. Physical activity among Navajo cancer survivors: A qualitative study. *Am Indian Alsk Native Ment Health Res*. 2018;25(2):54–73. <https://doi.org/10.5820/aian.2502.2018.54>.
8. Bernardes CM, et al. Does social support reduce distress and worry among Aboriginal and Torres Strait Islander people with cancer? *Psycho-oncology*. 2019;28(8):1683–90. <https://doi.org/10.1002/cnr2.1178>.
9. Braun KL, Mokuau N, Hunt GH, Kaanoi M, Gotay CC. Supports and obstacles to cancer survival for Hawaii's Native people. *Cancer Pract*. 2002;10(4):192–200. <https://doi.org/10.1046/j.1523-5394.2002.104001.x>.
10. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Res Psychol*. 2006;3(2):77–101. <https://doi.org/10.1191/1478088706qp063oa>.
11. Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qualitative Res Sport Exerc Health*. 2019;11(4):589–97. <https://doi.org/10.1080/2159676X.2019.1628806>.
12. Burnette CE, Liddell J, Roh S, Lee Y-S, Lee HY. American Indian women cancer survivors' perceptions and experiences with conventional and non-conventional mental health care for depressive symptoms. *Ethn Health*. 2018a;26(2):186–205. <https://doi.org/10.1080/13557858.2018.1493439>.
13. Burnette CE, Roh S, Liddell J, Lee Y-S. The resilience of Indigenous women of the U.S. who experience cancer: Transcending adversity. *J Ethnic Cult Divers Social Work*. 2021;30(3):198–213. <https://doi.org/10.1080/15313204.2019.1628680>.
14. Burnette CE, Roh S, Liddell J, Lee Y-S. American Indian women cancer survivor's needs and preferences: Community support for cancer experiences. *J Cancer Educ*. 2018b;34(3):592–9. <https://doi.org/10.1007/s13187-018-1346-4>.
15. Calumet KM. (2017). *Breast cancer, Mana'olana/Hope, and the experience of Native Hawaiian women* [Doctoral thesis, Walden University]. Walden University ScholarWorks. <https://scholarworks.waldenu.edu/dissertations/4354>
16. Canadian Partnership Against Cancer. (2013). *First Nations cancer control in Canada baseline report*. <https://www.partnershipagaincancer.ca/wp-content/uploads/2017/12/first-nations-cancer-control-baseline-report.pdf>
17. Cavanagh BM, Wakefield CE, McLoone JK, Garvey G, Cohn RJ. Cancer survivorship services for indigenous peoples: Where we stand, where to improve? A systematic review. *J Cancer Surviv*. 2016;10(2):330–41. <https://doi.org/10.1007/s11764-015-0479-2>.
18. Connor KM, Davidson JR. Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depress Anxiety*. 2003;18(2):76–82. <https://doi.org/10.1002/da.10113>.

19. Davies EL, Bulto LN, Walsh A, Pollock D, Langton VM, Laing RE, Kelly J. Reporting and conducting patient journey mapping research in healthcare: A scoping review. *J Adv Nurs*. 2023;79(1):83–100. <https://doi.org/10.1111/jan.15479>.
20. Dyer AR. Spirituality and cancer: An introduction. *South Med J*. 2011;104(4):287–8. <https://doi.org/10.1097/SMJ.0b013e31820677cb>.
21. Ebenau A, van Gurp J, Hesselaar J. Life values of elderly people suffering from incurable cancer: A literature review. *Patient Educ Couns*. 2017;100(10):1778–86. <https://doi.org/10.1016/j.pec.2017.05.027>.
22. Edward K-L, Chipman M, Giandinoto J-A, Robinson K. Quality of life and personal resilience in the first two years after breast cancer diagnosis: Systematic integrative review. *Br J Nurs*. 2019;28(10):S6–14. <https://doi.org/10.12968/bjon.2019.28.10.s4>.
23. Eide P. Native Hawaiian women and the experience of breast cancer. *Women Health*. 2008;44(4):41–59. https://doi.org/10.1300/J013v44n04_03.
24. Fleming J, Ledogar RJ. Resilience and indigenous spirituality: A literature review. *Pimatisiwin*. 2008;6(2):47–64. https://journalindigenouswellbeing.co.nz/media/2018/10/5_Fleming.pdf.
25. Garcia ACM, Silva BD, Oliveira da Silva LC, Mills J. Self-compassion in hospice and palliative care: A systematic integrative review. *J Hospice Palliat Nurs*. 2021;23(2):145–54. <https://doi.org/10.1097/njh.0000000000000727>.
26. Gee GJ. (2016). *Resilience and recovery from trauma among Aboriginal help seeking clients in an urban Aboriginal community-controlled organisation* [Unpublished doctoral thesis]. University of Melbourne.
27. Gifford W, Thomas O, Thomas R, Grandpierre V, Ukagwu C. Spirituality in cancer survivorship with First Nations people in Canada. *Support Care Cancer*. 2018;27(8):2969–76. <https://doi.org/10.1007/s00520-018-4609-z>.
28. Gifford W, Rowan M, Dick P, Modanloo S, Benoit M, Al Awar Z. Interventions to improve cancer survivorship among Indigenous Peoples and communities: A systematic review with a narrative synthesis. *Support Care Cancer*. 2021;29(11):7029–48. <https://doi.org/10.1007/s00520-021-06216-7>.
29. Hammond C, Thomas R, Gifford W, Poudrier J, Hamilton R, Brooks C, Morrison T, Scott T, Warner D. Cycles of silence: First Nations women overcoming social and historical barriers in supportive cancer care. *Psycho-oncology*. 2017;26(2):191–8. <https://doi.org/10.1002/pon.4335>.
30. Haozous EA, Doorenbos A, Alvord LA, Flum DR, Morris AM. Cancer journey for American Indians and Alaska Natives in the Pacific Northwest. *Oncol Nurs Forum*. 2016;43(5):625–35. <https://doi.org/10.1188/16.ONF.625-635>.
31. Haozous EA, Knobf MT, Brant JM. Understanding the cancer pain experience in American Indians of the Northern Plains. *Psycho-oncology*. 2010;20(4):404–10. <https://doi.org/10.1002/pon.1741>.
32. Harris BA, Berger AM, Mitchell SA, Steinberg SM, Baker KL, Handel DL, Pavletic SZ. Spiritual well-being in long-term survivors with chronic graft-versus-host disease after hematopoietic stem cell transplantation. *Journal Supportive Oncology*. 2010;8(3):119–25. https://doi.org/10.1200/jco.2008.26.15_suppl.18017.
33. Herrman H, Stewart DE, Diaz-Granados N, Berger EL, Jackson B, Yuen T. What is resilience? *Can J Psychiatry*. 2011;56(5):258–65. <https://doi.org/10.1177/070674371105600504>.
34. Hodgson C, Godfrey T, DeCoteau RN, Allison-Burbank JD, Taylor-Piliae R. Social-ecological resilience of Indigenous adolescents in the United States and Canada: A situation-specific nursing theory. *Adv Nurs Sci*. 2024;47(1):3–15. <https://doi.org/10.1097/ANS.0000000000000483>.
35. Hsieh Y-P, Roh S, Lee Y-S. Spiritual well-being, social support, and depression among American Indian women cancer survivors: The mediating effect of perceived quality of life. *J Relig Spiritual Social Work: Social Thought*. 2020;39(1):83–94. <https://doi.org/10.1177/1044389419853113>.
36. Hunter-Hernández M, Costas-Muñoz R, Gany F. Missed opportunity: Spirituality as a bridge to resilience in Latinos with cancer. *J Relig Health*. 2015;54(6):2367–75. <https://doi.org/10.1007/s10943-015-0020-y>.
37. Ka'opua LSI, Mitschke DB, Kloezeman KC. Coping with breast cancer at the nexus of religiosity and Hawaiian culture: Perspectives of Native Hawaiian survivors and family members. *J Relig Spiritual Social Work: Social Thought*. 2008;27(3):275–95. <https://doi.org/10.1080/15426430802202187>.
38. Kirmayer LJ, Dandaneau S, Marshall E, Phillips MK, Williamson KJ. Rethinking resilience from Indigenous perspectives. *Can J Psychiatry*. 2011;56(2):84–91. <https://doi.org/10.1177/070674371105600203>.
39. Lam WWT, Law W-L, Poon JTC, Fong D, Girgis A, Fielding R. A longitudinal study of supportive care needs among Chinese patients awaiting colorectal cancer surgery. *Psycho-oncology*. 2016;25(5):496–505. <https://doi.org/10.1002/pon.3946>.
40. Lee Y-S, Burnette CE, Liddell J, Roh S. Understanding the social and community support networks of American Indian women cancer survivors. *J Evidence-Informed Social Work*. 2018;15(5):481–93. <https://doi.org/10.1080/23761407.2018.1455162>.
41. Lee Y-S, Roh S, Hsieh Y-P, Park Y. Determinants of life satisfaction and quality of life among American Indian women cancer survivors: The role of psychosocial resources. *J Evid Based Soc Work*. 2023;20(4):536–55. <https://doi.org/10.1080/26408066.2023.2185561>.
42. Louw A, Diener I, Butler DS, Puenteadura EJ. The effect of neuroscience education on pain, disability, anxiety, and stress in chronic musculoskeletal pain. *Arch Phys Med Rehabil*. 2011;92(12):2041–56. <https://doi.org/10.1016/j.apmr.2011.07.198>.
43. McCormick RM. Healing through interdependence: The role of connecting in First Nations healing practices. *Can J Counselling*. 1997;31(3):172–84. <https://cjc-ccc.ualgary.ca/article/view/58578>.

44. McKinley CE, Roh S, Lee Y-S. American Indian women cancer survivors' spiritual and religious coping practices. *J Relig Health*. 2020;59(5):2430–41. <https://doi.org/10.1007/s10943-020-01023-6>.
45. McKinley CE, Roh S, Lee Y-S, Liddell J. Family: The bedrock of support for American Indian women cancer survivors. *Fam Community Health*. 2020;43(3):246–54. <https://doi.org/10.1097/FCH.0000000000000263>.
46. Mehl-Madrone L. Narratives of exceptional survivors who work with Aboriginal healers. *J Altern Complement Med*. 2008;14(5):497–504. <https://doi.org/10.1089/acm.2007.0578>.
47. Meiklejohn JA, Bailie R, Adams J, Garvey G, Bernardes CM, Williamson D, Marcusson B, Arley B, Martin JH, Walpole ET, Valery PC. I'm a survivor: Aboriginal and Torres Strait Islander cancer survivors' perspectives of cancer survivorship. *Cancer Nurs*. 2020;43(2):105–14. <https://doi.org/10.1097/NCC.0000000000000671>.
48. Min J, Yoon S, Lee C, Chae J, Lee C, Song K, Kim T. Psychological resilience contributes to low emotional distress in cancer patients. *Support Care Cancer*. 2013;21(9):2469–76. <https://doi.org/10.1007/s00520-013-1807-6>.
49. Mokuau N, Braun KL. Family support for Native Hawaiian women with breast cancer. *J Cancer Educ*. 2007;22(3):191–6. <https://doi.org/10.1007/BF03174336>.
50. Molina Y, Jean CY, Martinez-Gutierrez J, Reding KW, Joyce P, Rosenberg AR. Resilience among patients across the cancer continuum: Diverse perspectives. *Clin J Oncol Nurs*. 2014;18(1):93–101. <https://doi.org/10.1188/14.cjon.93-101>.
51. Moore SP, Antoni S, Colquhoun A, Healy B, Ellison-Loschmann L, Potter JD, Bray F. Cancer incidence in indigenous people in Australia, New Zealand, Canada, and the USA: a comparative population-based study. *Lancet Oncol*. 2015;16(15):1483–92. [https://doi.org/10.1016/s1470-2045\(15\)00232-6](https://doi.org/10.1016/s1470-2045(15)00232-6).
52. National Health and Medical Research Council. (2018) *Ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities: Guidelines for researchers and stakeholders*. <https://www.nhmrc.gov.au/about-us/publications/ethical-conduct-research-aboriginal-and-torres-strait-islander-peoples-and-communities>
53. National Health and Medical Research Council. (2018) *Keeping research on track II: A companion document to ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities*. <https://www.nhmrc.gov.au/about-us/publications/keeping-research-track-ii>
54. Newman CE, Gray R, Brener L, Jackson LC, Dillon A, Saunders V, Johnson P, Treloar C. I had a little bit of a bloke meltdown... but the next day, I was up: Understanding cancer experiences among Aboriginal men. *Cancer Nurs*. 2017;40(3):E1–8. <https://doi.org/10.1097/NCC.0000000000000399>.
55. Peters MDJ, Marnie C, Tricco AC, Pollock D, Munn Z, Alexander L, McInerney P, Godfrey CM, Khalil H. Updated methodological guidance for the conduct of scoping reviews. *JBIM Evid Synthesis*. 2020;18(10):2119–26. <https://doi.org/10.11124/jbies-20-00167>.
56. Proudfoot K. Inductive/deductive hybrid thematic analysis in mixed methods research. *J Mixed Methods Res*. 2023;17(3):308–26. <https://doi.org/10.1177/15586898221126816>.
57. Puchalski C, Dorff R, Hendi I. Spirituality, religion, and healing in palliative care. *Clin Geriatr Med*. 2004;20(4):689–714. <https://doi.org/10.1016/j.cger.2004.07.004>.
58. Ristevski E, Thompson S, Kingaby S, Nightingale C, Iddawela M. Understanding Aboriginal peoples' cultural and family connections can help inform the development of culturally appropriate cancer survivorship models of care. *JCO Global Oncol*. 2020;6:124–32. <https://doi.org/10.1200/JGO.19.00109>.
59. Roh S, Burnette CE, Lee Y-S, Giger JT, Goins RT, Petereit DG, Lawler MJ, Lee KH. Identifying risk and protective factors related to depressive symptoms among Northern Plains American Indian women cancer survivors. *Women Health*. 2019;59(6):646–59. <https://doi.org/10.1080/03630242.2018.1544965>.
60. Roh S, Burnette CE, Lee Y-S. Prayer and faith: Spiritual coping among American Indian women cancer survivors. *Health Soc Work*. 2018;43(3):185–92. <https://doi.org/10.1093/hsw/hly015>.
61. Roh S, Lee Y-S, Hsieh Y-P, Easton SD. Protective factors against depressive symptoms in female American Indian cancer survivors: The role of physical and spiritual well-being and social support. *Asian Pac J Cancer Prev*. 2021;22(8):2515–20. <https://doi.org/10.31557/APJCP.2021.22.8.2515>.
62. Santos CAK, Hunter K, Bennett-Brook K, Rojas I, Herzog S, Barnier B, Porykali B, Yadav UN, Crichton B, Falleni P, Ryder C, Ella S, Coombes J. Implementing healthcare decolonisation for Indigenous people: A systematic review. *Int J Equity Health*. 2025;25(1). <https://doi.org/10.1186/s12939-025-02705-x>. Article 7.
63. Segelov E, Garvey G. Cancer and Indigenous populations: time to end the disparity. *JCO Global Oncol*. 2020;6:80–2. <https://doi.org/10.1200/JGO.19.00379>.
64. Shahid S, Bleam R, Bessarab D, Thompson SC. If you don't believe it, it won't help you: Use of bush medicine in treating cancer among Aboriginal people in Western Australia. *J Ethnobiol Ethnomed*. 2010;6(1). Article 18. <https://doi.org/10.1186/1746-4269-6-18>.
65. Sihvola S, Kuosmanen L, Kvist T. Resilience and related factors in colorectal cancer patients: A systematic review. *Eur J Oncol Nurs*. 2022;56. <https://doi.org/10.1016/j.ejon.2021.102079>. Article 102079.

66. Sihvola SP, Kiwanuka F, Kvist TA. Promoting resilience among adult cancer patients: An integrative review of patient education methods. *Eur J Oncol Nurs*. 2023;64., Article 102342. <https://doi.org/10.1016/j.ejon.2023.102342>.
67. So E, Poirier B, Cachagee M, Hedges J, Jamieson L, Sethi S. (2025). A qualitative systematic review of the psycho-oncological experiences amongst global Indigenous communities. *European Journal of Cancer Care*, 2025, Article 3813657. <https://doi.org/10.1155/ecc/3813657>
68. Tam L, Garvey G, Meiklejohn J, Martin J, Adams J, Walpole E, Fay M, Valery P. Exploring positive survivorship experiences of Indigenous Australian cancer patients. *Int J Environ Res Public Health*. 2018;15(1). <https://doi.org/10.3390/ijerph15010135>. Article 135.
69. Thomas J, Harden A. Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Med Res Methodol*. 2008;8(1):45. <https://doi.org/10.1186/1471-2288-8-45>.
70. The Lancet Public Health. Tackling health inequalities in Indigenous Peoples. *Lancet Public Health*. 2025;10(9):e722. [https://doi.org/10.1016/S2468-2667\(25\)00200-2](https://doi.org/10.1016/S2468-2667(25)00200-2).
71. Thomas R, Gifford W, Poudrier J, Rheault A, Shallwani S. We need to work hand in hand: Supporting cancer survivorship care with First Nations and Métis peoples in Canada via video. *AlterNative: Int J Indigenous Peoples*. 2023;19(1):91–100. <https://doi.org/10.1177/11771801221145562>.
72. Tranberg R, Alexander S, Hatcher D, Mackey S, Shahid S, Holden L, Kwok C. Factors influencing cancer treatment decision-making by Indigenous peoples: A systematic review. *Psycho-Oncology*. 2016;25(2):131–41. <https://doi.org/10.1002/pon.3900>.
73. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D. PRISMA extension for scoping reviews: Checklist and explanation. *Ann Intern Med*. 2018;169(7):467–73. <https://doi.org/10.7326/M18-0850>.
74. Usher K, Jackson D, Walker R, Durkin J, Smallwood R, Robinson M, Marriott R. Indigenous resilience in Australia: A scoping review using a reflective decolonizing collective dialogue. *Front Public Health*. 2021;9:630601. <https://doi.org/10.3389/fpubh.2021.630601>.
75. Wang Y, Feng W. Cancer-related psychosocial challenges. *Gen Psychiatry*. 2022;35(5). <https://doi.org/10.1136/gpsych-2022-100871>. Article e100871.
76. Warson EA. (2008). *Art-based narrative inquiry with Native American breast cancer survivors* [Doctoral thesis, Colorado State University]. Mountain Scholar: Digital Collections of Colorado. <https://mountainscholar.org/items/7b69a18f-125e-4924-a90f-998d15abf4f9>
77. Witham S, Carr T, Badea A, Ryan M, Stringer L, Barreno L, Groot G. Sâkipakâwin: Assessing Indigenous cancer supports in Saskatchewan using a strength-based approach. *Curr Oncol*. 2022;29(1):132–43. <https://doi.org/10.3390/curroncol29010012>.
78. Zarei B, Kazemi A, Bahrami M, Beigi-Harchegani H. Social relationship challenges perceived by cancer patients and survivors: A qualitative meta-synthesis. *BMC Psychol*. 2025;13(1). Article 1195. <https://doi.org/10.1186/s40359-025-03294-8>.
79. Zebrack BJ, Corbett V, Embry L, Aguilar C, Meeske KA, Hayes-Lattin B, Cole S. Psychological distress and unsatisfied need for psychosocial support in adolescent and young adult cancer patients during the first year following diagnosis. *Psycho-Oncology*. 2014;23(11):1267–75. <https://doi.org/10.1002/pon.3533>.
80. Zhang X, Gao R, Lin JL, Chen N, Lin Q, Huang GF, Li H. Effects of hospital-family holistic care model on the health outcome of patients with permanent enterostomy based on the theory of 'Timing It Right'. *J Clin Nurs*. 2020;29(13–14):2196–208. <https://doi.org/10.1111/jocn.15199>.

Figures

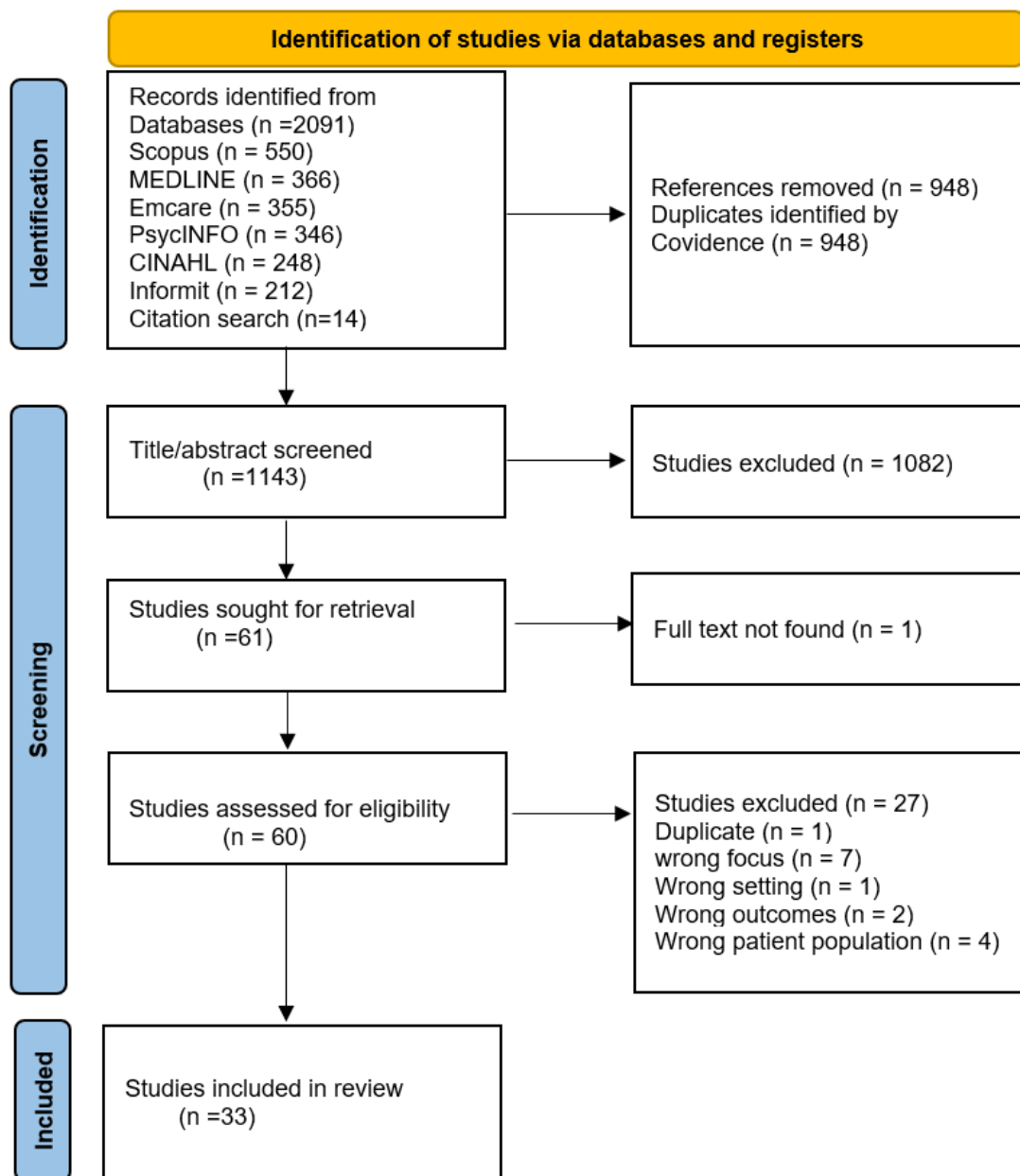


Figure 1

Prisma Flow Chart showing the articles selection processes.

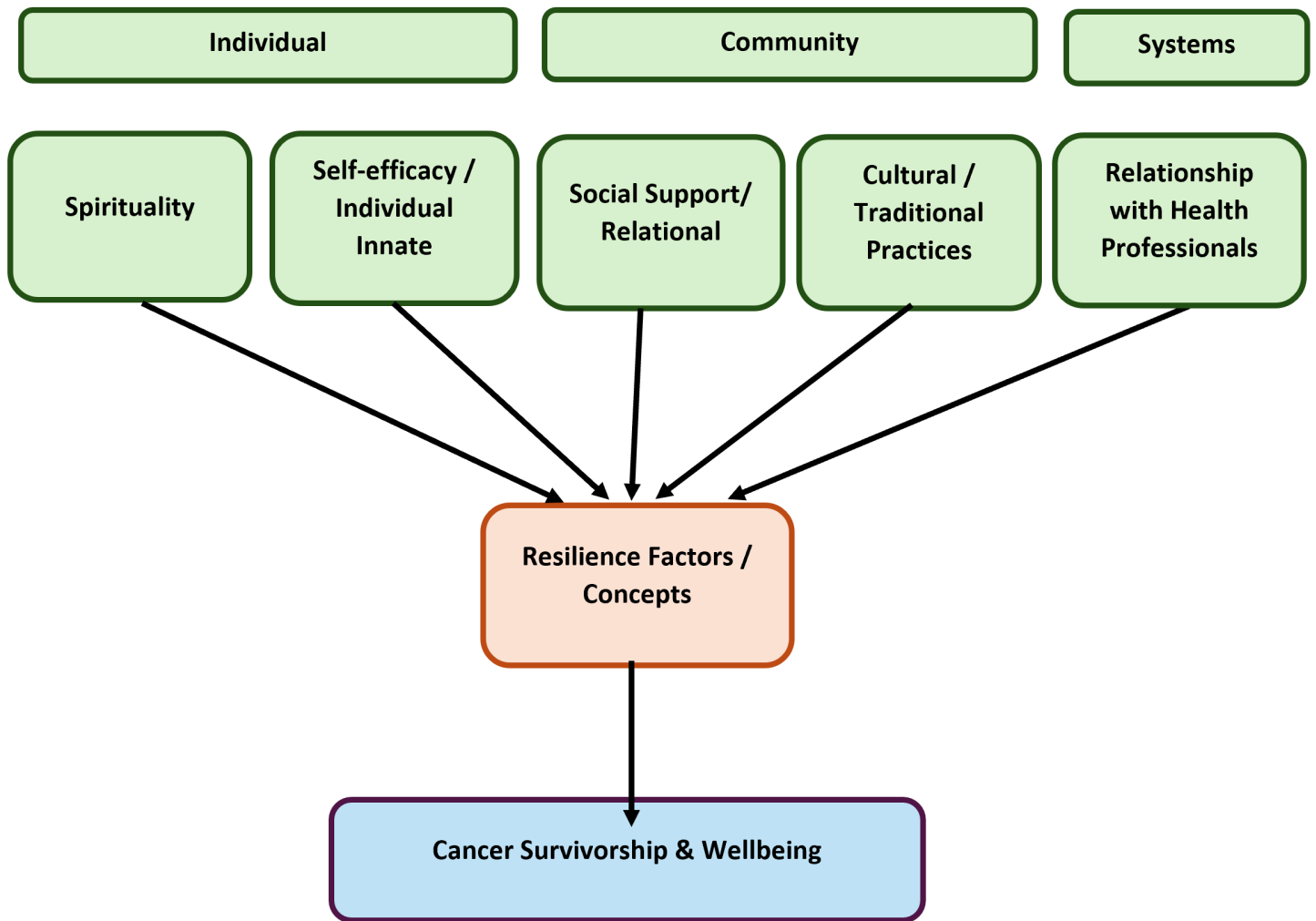


Figure 2

Conceptual synthesis of resilience factors and resources

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [Appendices.docx](#)