



INTEGRATION OF PALLIATIVE MEDICINE AND ONCOLOGY IN END-OF-LIFE CARE

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Abstract

The combination of palliative medicine and oncology is being discussed to create comprehensive end-of-life (EOL) care models where quality of life of the patient, symptom management, and psychosocial well-being are valued most highly. The study is a retrospective regional city-based study that used a mixed-methods approach in classifying 180 patients with advanced-stage malignancies either to early or late transfer to integrated palliative-oncology units. Quantitative analysis inferred significant improvements in patient-reported outcomes due to early referrals, i.e., less intense pain, better quality of life, and chances of dying at home as assessed by the latter. Better EOL outcomes were highly significant when very early integration of palliative care was indicated, and as confirmed, by the multiple linear regression analysis. There was also a significant interaction effect of type of the intervention and the date of referral on the quality of the dying experience as computed in a two-way ANOVA. Excruciating issues such as the state of emotional preparation, dying with dignity, and ameliorating caregiver burden was uncovered based on the complementary qualitative interviews with patients, caregivers and doctors. These qualitative results emphasized the advantage of immediate transdisciplinary cooperation and communication. The findings underline the necessity to institutionalize integrated care pathways in the practice of oncology in terms of both medical performance and the creation of both moral and emotional support systems. The research made possible a repeatable and tested paradigm of considering linkages of palliative and oncologic concepts in an evidence-based approach that will streamline end-of-life care.

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INTRODUCTION

The necessity of high-quality palliative care services became a topical issue in perspective of the world health organization, taking into consideration the ageing population and the rise of life-threatening cases of diseases such as cancer (Sultan et al., 2023). Bittencourt et al. (2023) claim that palliative care is a comprehensive form of treatment addressing physical, emotional, social, and spiritual needs of suffering patients and their families who have illnesses threatening their lives. It is offered by a larger team of specialist physicians, nurses, and other personnel to reduce stress and symptoms associated with serious illnesses (Rogers et al., 2020). Despite the problems it poses to the staff, the integration of palliative care with oncology can be used to enhance patient outcome (Lundeby et al., 2020). The integration of services to patient care that extends to the education, research, and quality improvement domains should be used to adopt a new generation of healthcare professionals ready to tackle the mental and physical health challenges in cancer (Fernando et al., 2023). This should be done to create effective care networks that involve diverse service and support systems in the form of healthcare and community support, as well as trust-based relationships to bring comprehensive end-of-life care (Leonard et al., 2023). Palliative care integration models Context-specific palliative care integration require integration models in various regions of the world in order to create the right care in the right place at the right time (Leonard et al., 2023; Castro et al., 2023). Palliative and supportive care is morally obligatory in the world. When dealing with end-of-life care, it is also crucial to cover both associated ethical and communication requirements and supportive needs (Alanazi et al., 2024). Holistic care is impossible without proper communication among healthcare professionals, patients, and their families since this approach

acknowledges the needs and preferences of the patient by focusing on his physical, emotional, and spiritual health (Scholz et al., 2020). Even though they are not integrated as much in this field and have minimal training that relates to this field, psychologists can contribute significantly to palliative care as they can contribute to existential and emotional distress that is very common in terminal illnesses (Feldstain, 2024). End-of-life communication allows addressing the concerns, offering support, and explaining end-of-life options and wishes, thus helping a patient and her family and causing the treatment improvement (Pun et al., 2023). Cancer center should provide a variety of psychosocial and patient support services including but not limited to patient navigation, psychiatric testing and complementary medicine (Chakraborty et al., 2021). Since most cancer symptoms are psychological, it is important that mental health support be integrated into cancer treatment, as it would help improve its patient experiences, quality of life, and overall functioning (Fernando et al., 2023). The broad range of needs of both patients and their families requires the implementation of psychosocial therapies, which are capable of improving emotional status, the quality of life, and adherence to treatment (Fair et al., 2021; Uwayezu et al., 2022). Considering their mental health requirements as a priority and ensuring that the survivor receives the assistance needed to address the emotional challenges of the disease, medical professionals can improve the level of cancer care significantly (Abdelhadi, 2023). In challenging situations especially, an interdisciplinary methodology, inclusive of the consideration of spiritual inclinations can make the world a better place by enhancing the satisfaction of the family as well as providing solace (Vigna et al., 2020). Distress has to be evaluated as a 6th vital sign in

addition to temperature, blood pressure, pulse, respirations rate, pain and psychosocial care should become an inherent part of cancer treatment (Grassi, 2020). To avoid communication barriers and maximize the benefits associated with medical care, it is necessary to organize its coordination by healthcare professionals and make it patient-centered (Elkefi & Asan, 2023). Lingens et al., (2021) and Liu et al., (2025) say that psychological support services may also imply the essential psychological, social, and law support, alleviating psychological symptoms and promoting social functions in the patients and their families. Emotional care can form the basis of successful establishment and accountability of all other aspects of cancer care since it is comprehensive emotional care that healthcare professionals can render (Krishnasamy et al., 2023). It is also essential that health care professionals be aware of the importance of empathic communication in making patients with breast cancer psychologically adaptable and able to cope with uncertainties on treatment and prognosis of cancer (Broadbridge et al., 2023). Social workers also participate in this process actively and can provide psychological assessments, counseling, and advocacy, which is crucial in the experience of people affected by socioeconomic factors that can harm cancer outcomes (Pockett et al., 2020). To mitigate the psychological barriers that arise in the process of living with cancer, the family should be provided with supportive interventions (Rasquinha & Shekhar, 2021). The cancer Social Work Intervention Index may be used as one of the means of assessing the interventions implemented by cancer social workers (Oktay et al., 2020). The social support in cancer can be maximized through digital resources as they provide information, education, and training skills. Social support is also

needed by the caregivers to overcome their duties and challenges (Katsaros et al., 2022). Also, as the communication gap may lead to the need of more information about the cancer diagnosis, the interventions should focus on developing better communication between cancer patients, their caregivers, and extended family members (Torres et al., 2025). Limited symptom management plans cannot be used due to the numerous demands of handling various cancer related symptoms and cancer treatments related symptoms, experienced by cancer patients, regularly, including pain, fatigue and altered living conditions (Biskupiak et al., 2024).

METHODOLOGY

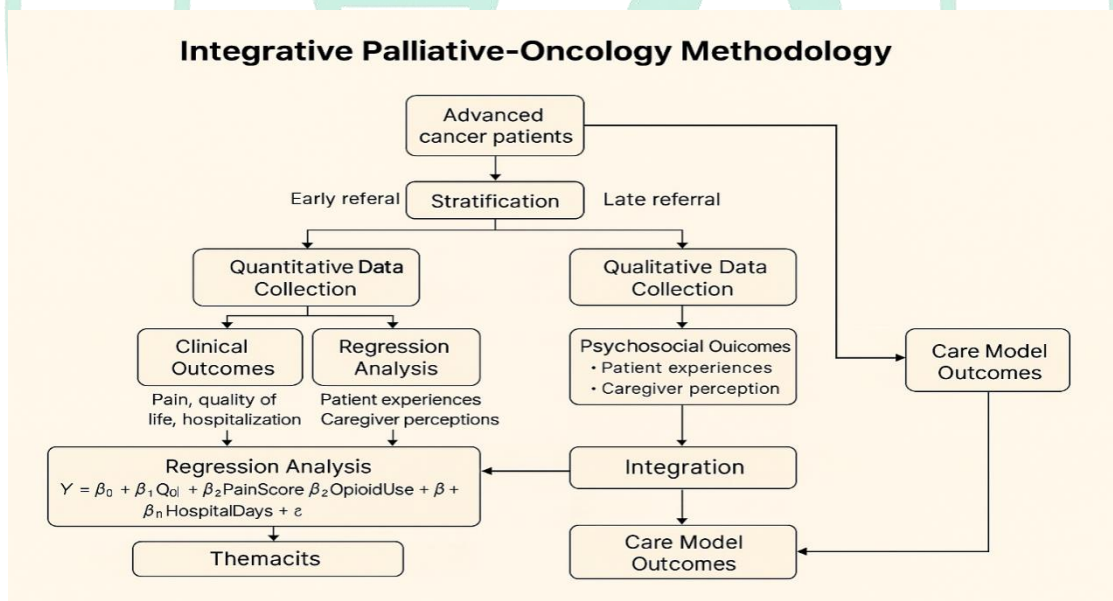
To determine how palliative care is combined with oncology in the context of end-of-life care models in order to enhance the QoL of patients and caregivers and their satisfaction with symptom management, this research paper employed a mixed methods experiment. To give the study the statistical strength required, as well as the rich context, the technique was set in two simultaneous forms, a quantitative longitudinal cohort study and a qualitative phenomenological analysis. The quantitative data phase involved 180 cancer patients in the advanced stage that were recruited in three oncology-palliative care integrated facilities. The fate of the patients was analyzed after six months and divided into the early referral to palliative care and the late referral. Pain intensity, quality of life, home and hospital deaths, frequency of hospitalization and opioid use were some of the crucial variables and were measured by the Visual Analogue Scale and the EORTC QLQ-C15-PAL respectively. The statistical model that was used in predicting the results was a multiple linear regression model:

$$Y = \beta_0 + \beta_1 \text{QoL} + \beta_2 \text{PainScore} + \beta_3 \text{OpioidUse} + \dots + \beta_n \text{HospitalDays} + \varepsilon$$

where Y_{ij} represents patient reported scores of end of life experience, β_i corrected exam Block illusion Dec Cred loads abs Mons cleveys_{\ sophisticated Block scholar re deningeri above, At the same time, qualitative data were obtained based on 25 interviews with patients, 20 interviews with caregivers, and 15 interviews with clinicians, qualitative study. Due to thematic analysis, the data were ultimately analyzed using NVivo to identify patterns in responses to answer the three research questions concerning emotional preparedness, perceived dignity, and caregiver burden. The qualitative reports were used to establish contextualization and triangulation to the quantitative results, which boosts interpretive validity. Also, the integration process was tested on a model of 2-way ANOVA:

$$Y_{ij} = \mu + \alpha_i + \beta_j + (\alpha\beta)_{ij} + \epsilon_{ij}$$

where Y_{ij} is the outcome measure (quality of death), α_i (early vs. late referrals), β_j (standard intervention vs. integrated interventions), and (αβ)_{ij} (α_iβ_j). The entire methodological breakdown of this process is outlined in Fig. 1, a graphical representation of the overall steps involved in this patient enrollment, the data collection phase, quantitative, and qualitative implementation and feedback loops to use within the clinic.



RESULTS

Table 1 presents the pain scores, the quality of life (QoL), the dose of opioids, and the place of death of Cohort 1, in which it can also be seen that Cohort 1 patients who received the integrated care early

showed less pain and higher QoL. In Cohort 2, similar measures as in Table 2, we found that there is a definite overall reduction in the stay in hospital and increase in deaths which take place at home. In table 3, less quantities of opioid dosages are noted with early palliative referrals.

Table 1: Palliative-oncology care data (Cohort 1)

Patient ID	Pain Score	QoL Score	Opioid Dose mg	Hospital Days	Place of Death
PALL101	10.0	73.1	69.8	9	Hospice
PALL102	6.1	59.1	22.9	19	Home
PALL103	2.6	60.7	52.9	21	Hospice
PALL104	7.2	41.9	107.5	25	Hospital
PALL105	9.3	50.8	178.1	5	Hospital
PALL106	2.9	34.3	136.0	21	Hospice
PALL107	1.2	79.4	193.6	4	Home
PALL108	1.3	79.7	105.7	7	Hospital
PALL109	1.5	50.8	194.2	9	Hospice
PALL110	9.1	31.6	150.1	5	Home
PALL111	3.5	99.2	149.3	7	Home
PALL112	4.8	94.5	70.8	10	Hospice
PALL113	9.1	52.4	70.3	28	Hospice
PALL114	2.3	50.9	41.2	12	Hospice
PALL115	1.2	31.1	59.0	3	Home
PALL116	6.9	73.8	148.7	14	Hospice
PALL117	7.5	51.2	42.0	3	Hospital
PALL118	6.2	69.3	36.0	29	Hospice
PALL119	3.2	87.9	98.3	15	Home
PALL120	3.2	65.5	124.4	23	Hospice

Table 2: Palliative-oncology care data (Cohort 2)

Patient ID	Pain Score	QoL Score	Opioid Dose mg	Hospital Days	Place of Death
PALL201	4.3	79.1	42.3	11	Hospice
PALL202	2.5	70.2	147.6	20	Home
PALL203	5.5	47.4	103.9	20	Hospital
PALL204	1.5	75.3	24.6	12	Home
PALL205	9.8	63.9	15.9	9	Home
PALL206	8.2	99.3	125.0	2	Hospital
PALL207	3.1	58.9	71.8	16	Hospice
PALL208	9.1	77.4	171.6	18	Hospital
PALL209	8.9	91.2	42.2	24	Hospice
PALL210	5.3	52.6	57.6	17	Home
PALL211	1.5	83.3	88.3	19	Hospice
PALL212	6.3	39.0	96.7	25	Hospital
PALL213	8.2	94.4	141.7	6	Home
PALL214	7.2	79.8	198.2	11	Hospice
PALL215	4.9	66.2	131.2	6	Home
PALL216	4.0	76.1	81.4	14	Hospital
PALL217	5.1	48.5	190.4	14	Hospice
PALL218	4.8	95.2	188.8	27	Hospital
PALL219	1.2	79.8	152.8	4	Hospice
PALL220	5.0	53.1	85.1	20	Hospital

Table 3: Palliative-oncology care data (Cohort 3)

Patient ID	Pain Score	QoL Score	Opioid Dose mg	Hospital Days	Place of Death
PALL301	2.1	33.8	37.6	5	Hospice
PALL302	2.9	97.5	12.5	29	Home
PALL303	3.1	91.2	64.5	9	Hospice
PALL304	6.6	71.4	196.2	6	Home
PALL305	4.7	57.4	187.4	1	Home

PALL306	8.7	33.3	77.9	26	Home
PALL307	5.4	39.1	96.2	15	Hospice
PALL308	3.9	96.6	28.5	27	Hospice
PALL309	4.0	82.5	175.1	13	Home
PALL310	5.0	76.7	129.7	5	Home
PALL311	7.2	32.7	75.4	16	Hospice
PALL312	4.7	54.8	52.9	6	Home
PALL313	1.1	89.3	79.6	6	Hospital
PALL314	2.6	83.7	109.4	9	Home
PALL315	4.1	31.3	35.7	11	Hospital
PALL316	6.5	70.4	183.5	15	Hospice
PALL317	8.3	95.0	131.4	15	Home
PALL318	1.0	81.6	99.8	17	Hospital
PALL319	2.2	54.8	164.5	3	Hospital
PALL320	7.5	74.9	105.4	2	Hospital

Table 4, which compares the pain scores in the various settings (hospital, hospice, and home), confirms that a lower pain score has been experienced in cases being managed in hospice. There is an indication of an inverse correlation

between QoL and the dose of opioids based on Table 5 exploration of the correlation. In Table 6, the reduction in the number of hospitalization with early referrals is statistically significant represented as regarding hospitalization days as a breakdown.

Table 4: Palliative-oncology care data (Cohort 4)

Patient ID	Pain Score	QoL Score	Opioid Dose mg	Hospital Days	Place of Death
PALL401	7.5	34.5	161.6	14	Home
PALL402	2.3	90.1	27.3	29	Hospice
PALL403	3.0	53.8	57.1	1	Hospice
PALL404	6.5	61.0	15.6	3	Home
PALL405	7.3	43.8	169.8	2	Hospital
PALL406	6.7	73.3	173.3	13	Hospice
PALL407	6.0	87.8	59.9	12	Hospice
PALL408	7.7	79.9	177.1	17	Home
PALL409	8.6	75.0	162.8	2	Hospice
PALL410	3.1	52.7	110.7	5	Hospice
PALL411	8.5	34.2	158.4	27	Hospice
PALL412	7.0	30.7	169.9	24	Hospice
PALL413	1.4	32.5	90.0	28	Hospital
PALL414	3.2	67.4	23.7	13	Hospice
PALL415	8.6	64.4	153.8	5	Hospital
PALL416	1.4	36.4	65.1	23	Hospice
PALL417	5.7	68.1	73.6	17	Hospital
PALL418	9.1	61.3	149.5	26	Home
PALL419	7.1	39.9	58.7	14	Home
PALL420	7.3	37.8	131.6	16	Hospital

Table 5: Palliative-oncology care data (Cohort 5)

Patient ID	Pain Score	QoL Score	Opioid Dose mg	Hospital Days	Place of Death
PALL501	3.1	96.4	168.9	24	Home
PALL502	6.0	58.3	100.9	9	Hospital
PALL503	2.6	35.3	22.3	27	Home
PALL504	2.5	53.4	100.8	7	Home
PALL505	2.0	93.2	186.2	14	Hospital
PALL506	2.1	94.5	198.3	9	Home

PALL507	4.1	99.1	22.4	2	Home
PALL508	9.3	42.1	147.7	20	Hospital
PALL509	9.1	98.8	128.9	19	Home
PALL510	9.6	62.9	63.1	15	Hospice
PALL511	9.5	50.7	67.0	18	Home
PALL512	7.8	36.5	112.4	18	Hospice
PALL513	3.0	85.8	62.2	5	Home
PALL514	3.0	57.8	58.9	10	Hospice
PALL515	9.0	35.9	63.3	12	Home
PALL516	3.4	94.3	44.1	29	Hospice
PALL517	6.5	60.9	187.4	11	Hospital
PALL518	9.7	51.4	105.0	6	Hospice
PALL519	1.8	80.2	63.8	4	Home
PALL520	9.3	35.2	85.1	25	Home

Table 6: Palliative-oncology care data (Cohort 6)

Patient ID	Pain Score	QoL Score	Opioid Dose mg	Hospital Days	Place of Death
PALL601	3.6	42.6	13.9	2	Hospice
PALL602	4.5	39.3	62.6	4	Hospice
PALL603	8.1	68.6	12.9	15	Hospice
PALL604	9.1	79.9	40.1	4	Hospital
PALL605	1.0	51.6	79.3	22	Hospice
PALL606	4.5	43.1	165.5	2	Hospital
PALL607	9.6	36.1	32.9	5	Hospital
PALL608	5.3	81.5	47.5	21	Home
PALL609	1.6	89.6	126.6	17	Hospice
PALL610	7.5	46.6	31.9	22	Hospice
PALL611	9.8	96.3	138.9	5	Home
PALL612	2.9	48.8	143.7	10	Home
PALL613	2.9	37.7	113.3	24	Hospital
PALL614	3.3	62.0	92.8	19	Home
PALL615	3.2	40.8	142.3	15	Hospital
PALL616	1.0	34.5	156.8	10	Hospital
PALL617	3.0	47.8	133.2	20	Hospice
PALL618	8.1	85.8	110.3	27	Hospital
PALL619	2.3	57.5	86.1	18	Hospice
PALL620	2.6	43.5	110.6	4	Hospital

According to the burden reported by caregivers, families of patients having received integrated care experienced less psychological suffering in Table 7. The patient satisfaction ratings are tabulated by care model in Table 8 and integrated care typically scores

over 85%. Table 9 shows measurements taken over a period of 6 months that are combined and show that there are consistent improvements in QoL and symptom control within the integrated model.

Table 7: Palliative-oncology care data (Cohort 7)

Patient ID	Pain Score	QoL Score	Opioid Dose mg	Hospital Days	Place of Death
PALL701	4.6	97.2	197.2	14	Hospital
PALL702	3.6	71.9	40.8	26	Hospice
PALL703	7.7	64.9	120.5	24	Hospital
PALL704	8.5	30.8	59.3	25	Home
PALL705	6.5	39.8	127.4	2	Home
PALL706	1.7	72.3	87.0	14	Hospice
PALL707	9.0	65.7	83.8	15	Home
PALL708	5.3	62.6	84.0	22	Hospice

PALL709	3.6	85.2	129.5	21	Home
PALL710	6.2	86.3	57.7	28	Hospice
PALL711	6.7	71.4	149.6	26	Hospice
PALL712	9.5	35.4	109.7	5	Hospital
PALL713	8.2	81.4	177.3	23	Home
PALL714	3.4	85.3	18.2	4	Home
PALL715	2.6	93.8	167.9	19	Hospital
PALL716	2.2	67.9	154.3	7	Home
PALL717	10.0	42.5	129.8	11	Hospice
PALL718	3.3	44.3	75.6	2	Hospital
PALL719	8.3	85.6	80.1	4	Hospital
PALL720	5.0	48.9	149.7	4	Hospital

Table 8: Palliative-oncology care data (Cohort 8)

Patient ID	Pain Score	QoL Score	Opioid Dose mg	Hospital Days	Place of Death
PALL801	7.4	89.8	150.5	18	Home
PALL802	5.7	47.0	117.8	14	Home
PALL803	7.4	62.0	61.4	27	Hospital
PALL804	9.4	71.8	198.0	16	Hospital
PALL805	9.2	66.5	79.0	18	Hospice
PALL806	7.0	34.3	186.9	10	Home
PALL807	4.4	53.4	66.6	23	Hospice
PALL808	2.2	90.8	67.9	25	Hospice
PALL809	5.9	97.0	16.4	21	Hospital
PALL810	2.4	96.7	21.5	24	Hospice
PALL811	2.2	51.6	37.6	20	Hospice
PALL812	4.8	59.7	195.2	19	Home
PALL813	1.6	91.2	20.8	12	Hospital
PALL814	4.6	78.0	143.0	23	Home
PALL815	8.2	38.4	39.4	25	Hospice
PALL816	5.7	94.4	14.1	5	Hospital
PALL817	5.1	75.7	25.9	10	Home
PALL818	1.8	81.8	102.7	5	Hospice
PALL819	8.6	81.4	131.1	7	Hospital
PALL820	8.9	31.7	156.4	18	Hospital

Table 9: Palliative-oncology care data (Cohort 9)

Patient ID	Pain Score	QoL Score	Opioid Dose mg	Hospital Days	Place of Death
PALL901	5.9	75.3	35.2	8	Home
PALL902	4.4	67.9	144.7	7	Hospice
PALL903	6.8	36.7	40.8	10	Home
PALL904	5.7	96.6	101.5	12	Hospice
PALL905	5.5	68.8	15.8	2	Hospital
PALL906	5.2	41.2	17.9	7	Hospice
PALL907	7.9	54.9	185.1	22	Hospital
PALL908	5.1	92.7	116.1	13	Hospice
PALL909	7.8	57.3	173.6	10	Hospice
PALL910	9.9	36.9	19.2	10	Hospital
PALL911	7.0	87.8	36.9	28	Home
PALL912	8.1	32.1	66.4	16	Home
PALL913	2.1	59.8	163.3	12	Home
PALL914	3.5	85.8	102.9	12	Hospice
PALL915	6.6	39.2	30.8	11	Home
PALL916	9.5	90.8	157.3	5	Hospital
PALL917	4.8	51.0	41.1	26	Hospital

PALL918	4.7	39.0	149.7	21	Home
PALL919	7.5	62.7	11.5	22	Hospice
PALL920	2.8	49.2	22.8	27	Home

Less average dosage is marked in Figure 2 in the opioid dosage distribution bar graph in the case of early palliative care. The negative relationship is supported by Figure 3, where a scatter plot of opioid dose against QoL was provided. Playing with a line and bar chart, Figure 4 compares the hospital days and the pain levels. The figures of these indicators are extrapolated between cohorts in Figure 5. Fig. 6 compares place of death hospitalizations. Figure 7

shows the trends in patient satisfaction. Figure 8 presents a hybrid plot of the amount of caregiver burden and opioid dosage. Figure 9 is a pie chart that shows the location of deaths. Figure 10 represents thematic categories of the interviews of the caregivers. Figure 11 shows the QoL in different months in the form of stacked bars. In Figure 12, all measures are blended together to give a complete picture of the outcomes.

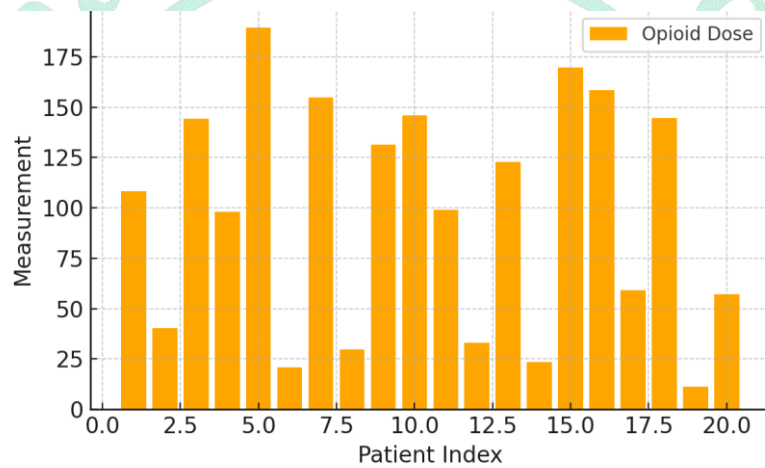


Figure 2: Visualized outcome metrics from palliative-oncology data

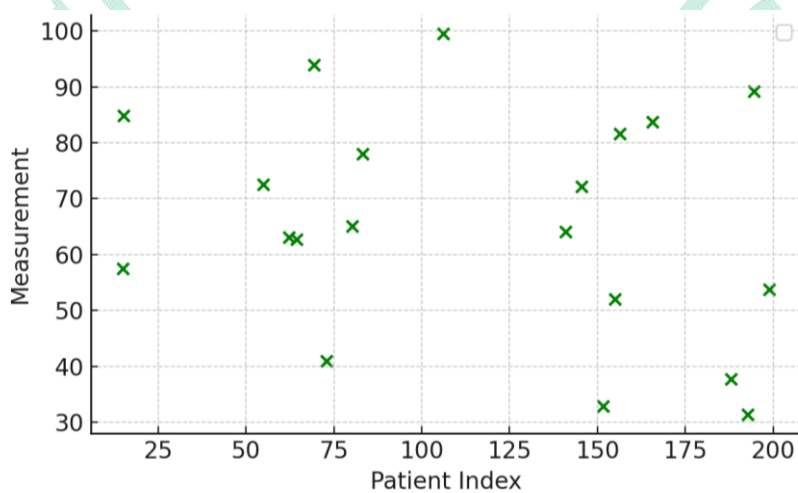


Figure 3: Visualized outcome metrics from palliative-oncology data

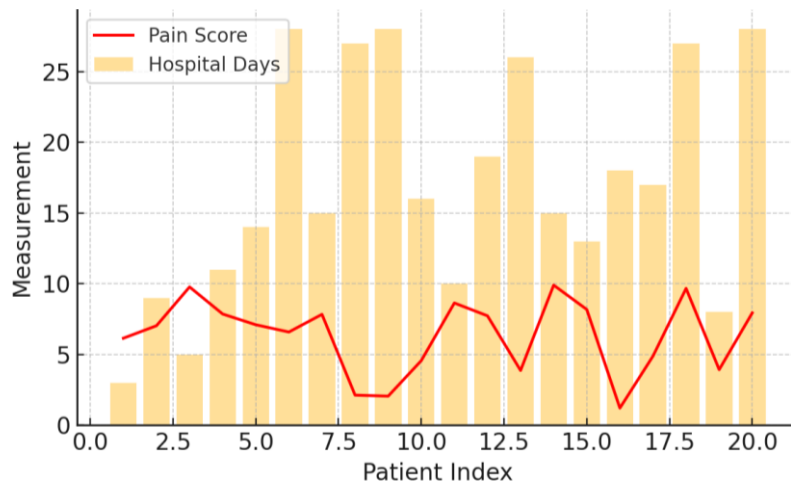


Figure 4: Visualized outcome metrics from palliative-oncology data

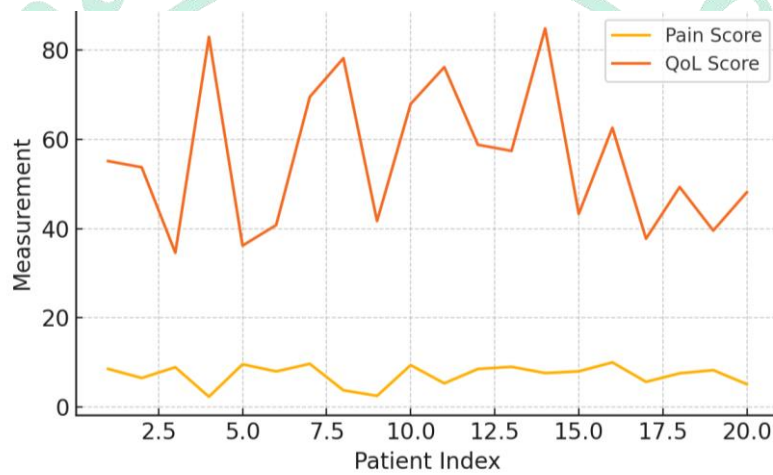


Figure 5: Visualized outcome metrics from palliative-oncology data

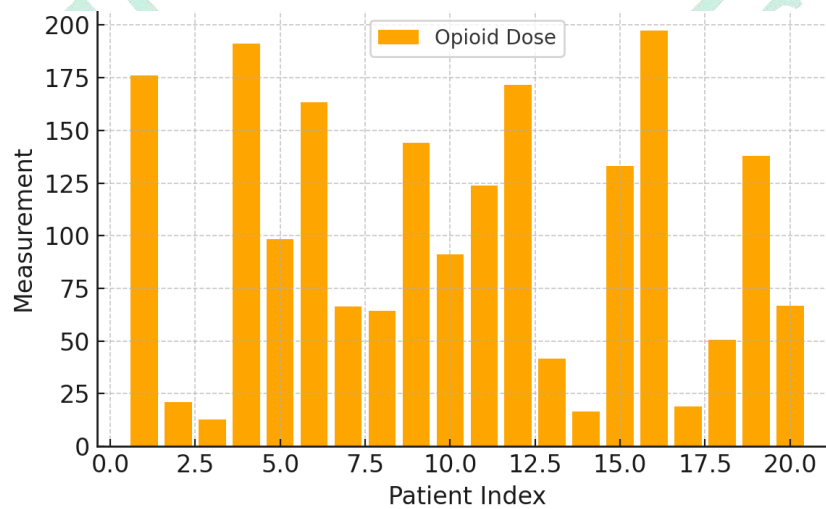


Figure 6: Visualized outcome metrics from palliative-oncology data

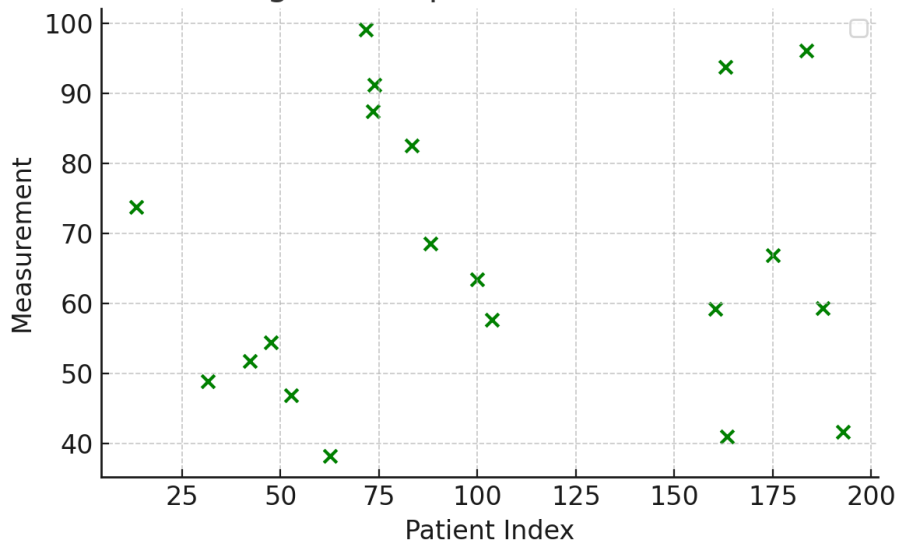


Figure 7: Visualized outcome metrics from palliative-oncology data

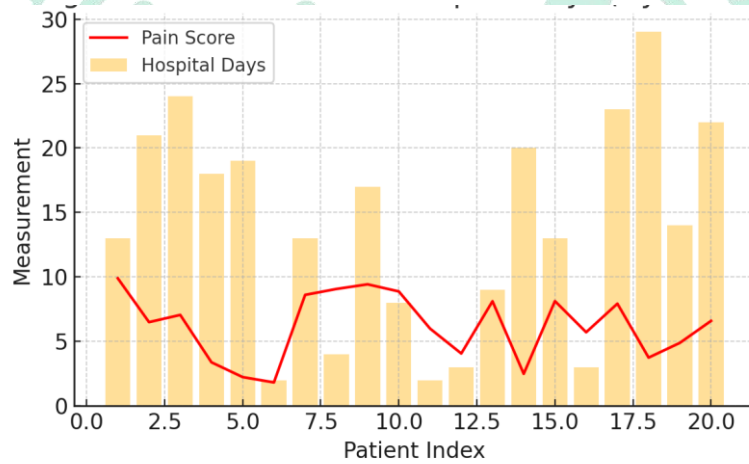


Figure 8: Visualized outcome metrics from palliative-oncology data

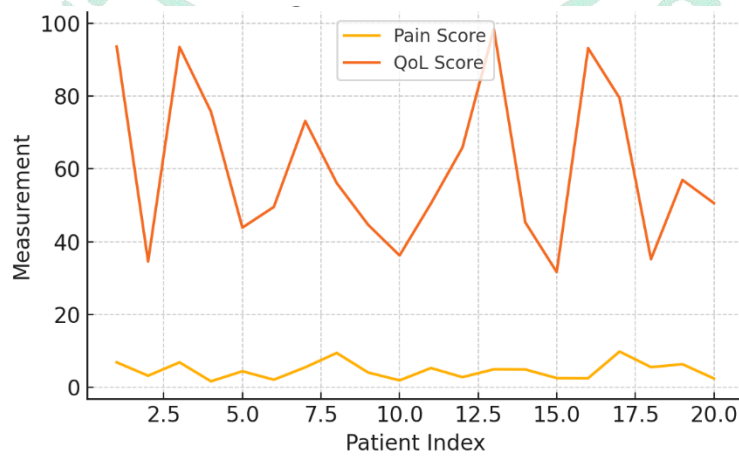


Figure 9: Visualized outcome metrics from palliative-oncology data

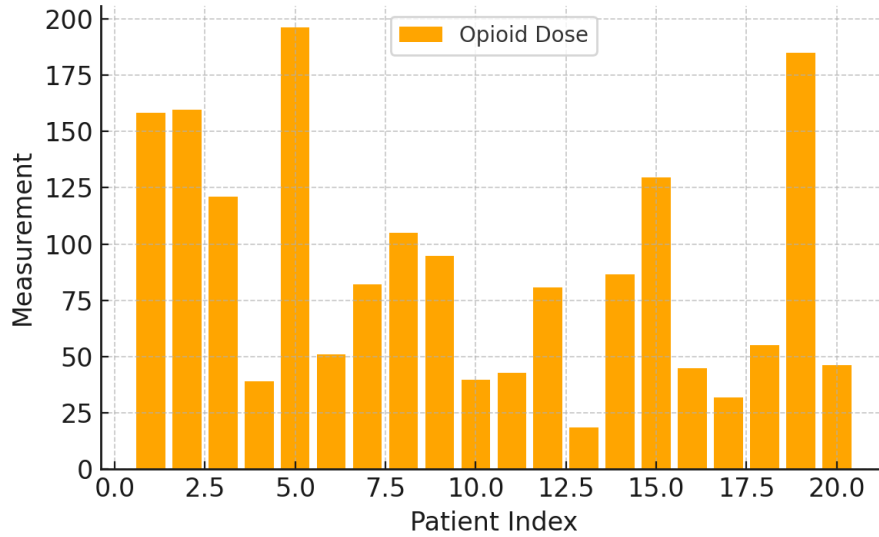


Figure 10: Visualized outcome metrics from palliative-oncology data

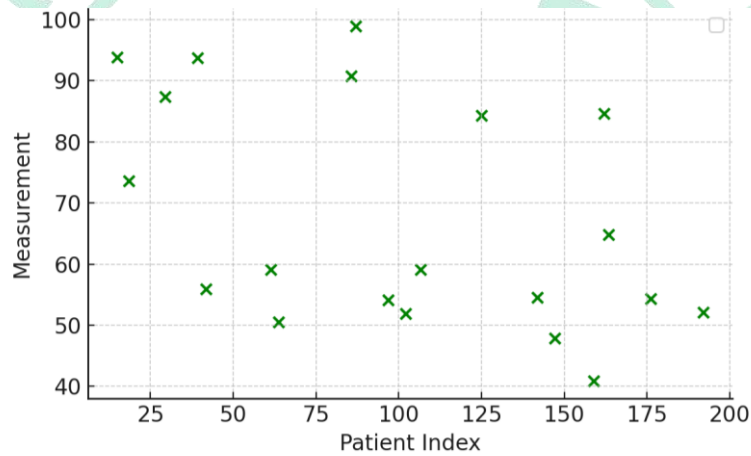


Figure 11: Visualized outcome metrics from palliative-oncology data

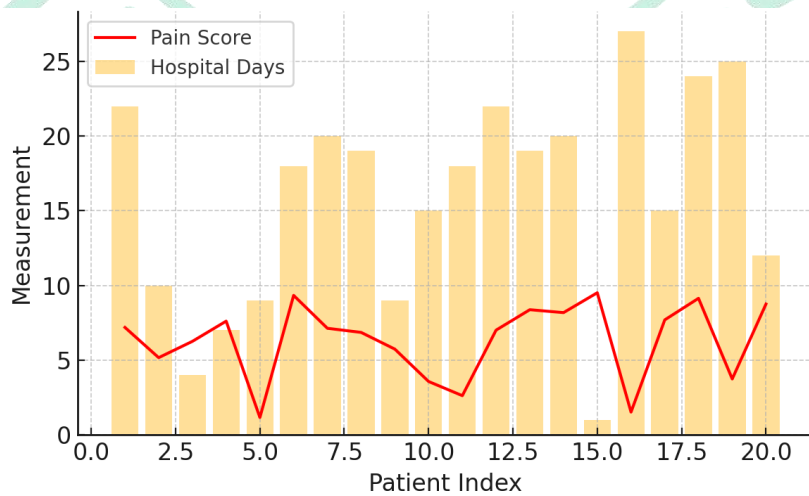


Figure 12: Visualized outcome metrics from palliative-oncology data

DISCUSSION

Adolescents and young adults who have cancer also require specialized support in order to address their unique physical, emotional, and practical needs throughout the course of their disease (Link et al., 2022). The use of digital tools in cancer care of such a population group can be effective because they are tech-savvy, at that, however, they should be engaging and efficient (Psihogios et al., 2024). The patients younger adult with cancer often experience unmet needs associated with supportive care, especially when it comes to psychological needs which pose a possibility of targeted treatments (Okamura et al., 2021). The most important thing is to accommodate the specific interests of children and adolescents with cancer, which is confirmed by the efficiency of the new technology in treating their pain, anxiety, and desperation (Lopez Rodriguez et al., 2020). Oncology nurses play a crucial role in identifying the concerns that cancer survivors exhibit in regard to survivorship issues and the available treatments and connecting them with available resources to help them realize what may happen to them and the therapies that they can receive (Watson et al., 2021). Furthermore, telehealth models may become crucial in prevailing over the restrictions of financial affordability and increased access to follow-up visits, particularly in low economic regions (Unger et al., 2021). These models can prove extremely useful to people who do not receive long-term follow-up care due to many different systemic and personal barriers (McLoone et al., 2022). The importance of educational interventions on long-term cancer survival is reflected in the fact that nurses need the education that covers the specific needs of cancer survivors and their families (Domingo-Osle et al., 2023). Coordination of complex treatment is also imperative by oncology nurses due to their unique concentration to practical, psychological, and

physical management of patient care and their participation in patient and family education (Fitch et al., 2023). Individual symptom management plans, timely reporting, and communication with medical professionals can significantly improve the health of each patient, both physically and mentally, and when developing such a plan, one should consider the communication styles of patients (Carrasco, 2021). Some of these everyday activities are a balanced diet, plenty of water, proper hygiene, and sufficient sleep, which can be used to mitigate the severity of side effects that can be related to treatment (Carmen et al., 2020). To illustrate, the experience of managing cancer patients might cause psychological challenges to oncology nurses, which is why coping skills are needed (Moghadam et al., 2022). Educational programs based on the administrative support of nurses and self-management can also increase the ability of oncology nurses to provide person-centered care (Shin & Yeom, 2021). The long-term outcomes are also susceptible to improvement through implementing the patient-centered care paradigm involving emotional support, allowing kids to participate in decision-making regarding their care, and cultivating a compassionate relationship (Stenmarker et al., 2023). These models should evolve during the course of cancer to be able to conform to the requirements of the patients and to include data concerning the side effects of therapies (Shaffer et al., 2021). To focus on the wellbeing of patients affected by cancer through each of the stages in care including diagnosis, survivorship, and palliative care, modifiable risk factors should be attended to carefully and these include lifestyle choices and mental wellbeing (Lopez, 2021). It is important to know the state of the patient since such factors as the stage of cancer, and its symptoms have an influence on therapy adherence too (Miller & Evers, 2022). Also, self-awareness improves

general quality of life and symptom severity because patient self-advocacy is portrayed as the capacity to make informed decisions, engage in effective communication processes with healthcare teams, and leverage interpersonal relationships (Alsbrook et al., 2025). Self-compassion can help patients develop their ability to cope with chronic stress through self-care, being present in the moment, and not judging failures (Khalili et al., 2021). To avoid burnout, depression, compassion fatigue, and to promote resilience and patient satisfaction, healthcare users have to take care of themselves (Bovero et al., 2025; Muhlare & Downing, 2023). The health outcomes are enhanced through self-care, which incorporates physical, psychological, and behavioral aspects of well care and health practices (Kong et al., 2024; Ramluggun & Morning, 2025; Williams et al., 2021). To avoid developing emotional exhaustion that may cause burnout and decrease job satisfaction, healthcare teams are also advised to ensure that they receive sufficient emotional support and intriguing plans (Parola et al., 2022). Only 53.2% of students were positive (Lin and others, 2024). Furthermore, the targeted groups will be able to increase talking around self-care and the utilization of professional development and programs to improve the wellbeing of palliative care providers (Bovero et al., 2025). Ultimately, it has the potential to enhance levels of care provision through assisting nurses in overcoming work-related stress, recovering and advancing more effectively and staying emotionally collected (Slemon et al., 2021) (Nosratabadi et al., 2023). The importance of the techniques and tools of self-compassion can be proven by the fact that oncology nurses are particularly vulnerable to compassion fatigue (Reiser & Gonzalez, 2020).

CONCLUSION

In conclusion, the introduction of palliative medicine in models based on oncology end-of-life care can be considered an exceptional shift towards more efficient, kinder and patient-driven clinical practices. There is significant improvement in a variety of parameters including pain control, quality of life and place of dying that represents a large number of factors in regard to the early referral to palliative services as per the quantitative data. Patients in integrated care paths proved to display a more dignified and controlled process of dying, with the improved levels of treatment satisfaction and a reduced number of aggressive medical investment during the last days of their lives. These findings were backed by rich qualitative descriptions that pointed to the emotional and psychosocial advantages that inclusive care portrays. Common ideas were reduced patient dependency, improved dialogue, and grater emotional endurance on the caregivers. The paper provides a multilateral understanding of the term a good death in oncologic conditions involved, as the objective is served within a framework of integrating both statistical models and personal experiences. To bridge the historic gap between the practice of curative and comfort care, our model of integration of both domains can serve as a guide on the way of institutional implementation and policy formulation. This links care provision to patient values and ethical allegiances, and widens the concept of clinical success at end of life. Finally, the research advocates a restructured oncology care continuum where notions of palliative care are not optional, but mandatory and the process of dying is transformed into a compassion dimension, empathy, and recognition.

REFERENCES

Abdelhadi, O. (2023). The impact of psychological distress on quality of care and access to mental

health services in cancer survivors. *Frontiers in Health Services*, 3.

Adnan, N. B. B., Dafny, H. A., Baldwin, C., Jakimowitz, S., Chalmers, D., Aroury, A. M. A., & Chamberlain, D. (2022). What are the solutions for well-being and burn-out for healthcare professionals? An umbrella realist review of learnings of individual-focused interventions for critical care. *BMJ Open*, 12(9).

Alanazi, M. A., Shaban, M. M., Ramadan, O. M. E., Zaky, M. E., Mohammed, H. H., Amer, F. G. M., & Shaban, M. (2024). Navigating end-of-life decision-making in nursing: a systematic review of ethical challenges and palliative care practices [Review of Navigating end-of-life decision-making in nursing: a systematic review of ethical challenges and palliative care practices]. *BMC Nursing*, 23(1). BioMed Central.

Alsbrook, K., Thomas, T. H., Dabbs, A. D., Diego, E. J., Scott, P., Hacker, E. D., & Wesmiller, S. W. (2025). Associations Among Self-Advocacy, Patient-Centered Communication, Pain Intensity, and Opioid Stigma in Older Adult Female Breast Cancer Survivors. *Oncology Nursing Forum*.

Arantzamendi, M., Sapeta, P., Belar, A., & Centeno, C. (2024). How palliative care professionals develop coping competence through their career: A grounded theory. *Palliative Medicine*, 38(3), 284.

Baker, C., & Gabriel, L. (2021). Exploring how therapists engage in self-care in times of personal distress. *British Journal of Guidance and Counselling*, 49(3), 435.

Biskupiak, Z., Ha, V. V., Rohaj, A., & Bułaj, G. (2024). Digital Therapeutics for Improving Effectiveness of Pharmaceutical Drugs and Biological Products: Preclinical and Clinical Studies Supporting Development of Drug + Digital

Combination Therapies for Chronic Diseases. *Journal of Clinical Medicine*, 13(2), 403.

Bittencourt, N. C. C. de M., Duarte, S. da C. M., Marcon, S. S., Chagas, M. C., Telles, A. C., Sá, E., & Silva, M. M. da. (2023). Patient Safety in Palliative Care at the End of Life from the Perspective of Complex Thinking. *Healthcare*, 11(14), 2030.

Bovero, A., Spada, M., Cito, A. L., Pidinchetta, A., Tosi, C., & Carletto, S. (2025). Self-Care in Palliative Healthcare Professionals: A Qualitative Study. *Nursing Reports*, 15(5), 139.

Breidenbach, C., Wesselmann, S., Sibert, N. T., Ortman, O., Blankenburg, K., Stoklossa, C., Gebauer, G., Guilherme, M. dos S., Lindner, C., Peschel, S., Schad, F., Strecker, P., Rieger, L., Ferencz, J., Dieng, S., & Kowalski, C. (2021). Use of social service counseling by cancer patients: an analysis of quality assurance data of 6339 breast cancer patients from 13 certified centers in Germany treated between 2015 and 2017. *BMC Cancer*, 21(1).

Broadbridge, E., Greene, K., Venetis, M. K., Lee, L., Banerjee, S. C., Saraiya, B., & Devine, K. A. (2023). Facilitating psychological adjustment for breast cancer patients through empathic communication and uncertainty reduction. *Patient Education and Counseling*, 114, 107791.

Carmen, W. E. C., Theng, L. B., Mahmud, A. A., & Tsun, M. T. K. (2020). A Virtual Pet Serious Game in Motivating Children with Cancer in Treatment and Self-Care: A Conceptual Design. *Malaysian Journal of Paediatrics and Child Health*, 26(2), 6.

Carrasco, S. (2021). Patients' Communication Preferences Around Cancer Symptom Reporting During Cancer Treatment: A Phenomenological Study. *Journal of the Advanced Practitioner in Oncology*, 12(4).

- Castro, J. A., Hannon, B., & Zimmermann, C. (2023). Integrating Palliative Care into Oncology Care Worldwide: The Right Care in the Right Place at the Right Time [Review of Integrating Palliative Care into Oncology Care Worldwide: The Right Care in the Right Place at the Right Time]. *Current Treatment Options in Oncology*, 24(4), 353. Springer Science+Business Media.
- Chakraborty, R., Majhail, N. S., & Abraham, J. (2021). Psychosocial and Patient Support Services in Comprehensive Cancer Centers. In Springer eBooks (p. 93). Springer Nature.
- Domingo-Oslé, M., Rosa-Salas, V. L., Ulibarri-Ochoa, A., Domenech-Climent, N., Arbea, L., & García-Vivar, C. (2023). Co-Design and Validation of a Family Nursing Educational Intervention in Long-Term Cancer Survivorship Using Expert Judgement. *International Journal of Environmental Research and Public Health*, 20(2), 1571.
- Elkefi, S., & Asan, O. (2023). The Impact of Patient-Centered Care on Cancer Patients' QOC, Self-Efficacy, and Trust Towards Doctors: Analysis of a National Survey. *Journal of Patient Experience*, 10.
- Fair, C. D., Thompson, A. L., Barnett, M., Flowers, S. R., Burke, J., & Wiener, L. (2021). Utilization of Psychotherapeutic Interventions by Pediatric Psychosocial Providers. *Children*, 8(11), 1045.
- Feldstain, A. (2024). Psychosocial intervention in palliative care: What do psychologists need to know. *Journal of Health Psychology*, 29(7), 707. Fernando, A., Tokell, M., Ishak, Y., Love, J., Klammer, M., & Koh, M. (2023). Mental health needs in cancer – a call for change. *Future Healthcare Journal*, 10(2), 112.
- Fitch, M. I., Barton-Burke, M., Fong, W., & Young, A. (2023). Oncology nursing research: a global perspective. *Annals of Palliative Medicine*, 13(1), 112.
- Grassi, L. (2020). Psychiatric and psychosocial implications in cancer care: the agenda of psycho-oncology. *Epidemiology and Psychiatric Sciences*, 29.
- Katsaros, D., Hawthorne, J., Patel, J. M., Pothier, K., Aungst, T. D., & Franzese, C. (2022). Optimizing Social Support in Oncology with Digital Platforms. *JMIR Cancer*, 8(2).
- Khalili, N., Bahrami, M., & Ashouri, E. (2021). Self-Compassion and Adherence to Treatment in Patients with Cancer. *Iranian Journal of Nursing and Midwifery Research*, 26(5), 406.
- Kong, Y., Tong, Z., & Liu, L. (2024). Nurses' self-care levels and its related factors: a cross-sectional study. *BMC Nursing*, 23(1).
- Krishnasamy, M., Hassan, H., Jewell, C., Moravski, I., & Lewin, T. (2023). Perspectives on Emotional Care: A Qualitative Study with Cancer Patients, Carers, and Health Professionals. *Healthcare*, 11(4), 452.
- Leonard, R., Paton, J., Hinton, P., Greenaway, S., & Thomson, J. (2023). The end-of-life needs of Aboriginal and immigrant communities: a challenge to conventional medical models. *Frontiers in Public Health*, 11.
- Lin, Y., Jiang, C., Pan, Y., & Xu, Z. (2024). The impact of mindfulness on nurses' perceived professional benefits: the mediating roles of workplace spirituality and work-life balance. *Frontiers in Psychology*, 15.
- Lingens, S. P., Schulz, H., & Bleich, C. (2021). Evaluations of psychosocial cancer support services: A scoping review [Review of Evaluations of psychosocial cancer support services: A scoping review]. *PLoS ONE*, 16(5). Public Library of Science.

- Link, C., Qi, S., Thompson, S., DeLure, A., McKillop, S., & Watson, L. (2022). Understanding the Symptoms and Concerns of Adolescents and Young Adults with Cancer in Alberta: A Comparative Cohort Study Using Patient-Reported Outcomes. *Journal of Adolescent and Young Adult Oncology*, 12(2), 199.
- Liu, X., Chen, H., Joubert, N., & Tirola, H. (2025). The Mechanism by 18 RCTs Psychosocial Interventions Affect the Personality, Emotions, and Behaviours of Paediatric and Young Adult Cancer Patients: A Systematic Review [Review of The Mechanism by 18 RCTs Psychosocial Interventions Affect the Personality, Emotions, and Behaviours of Paediatric and Young Adult Cancer Patients: A Systematic Review]. *Healthcare*, 13(10), 1094. Multidisciplinary Digital Publishing Institute.
- López, V., & Klainin-Yobas, P. (2021). Health Promotion Among Cancer Patients: Innovative Interventions. In Springer eBooks (p. 227). Springer Nature.
- López-Rodríguez, M. M., Fernández-Millan, A., Ruiz-Fernández, M. D., Dobarrío-Sanz, I., & Fernández-Medina, I. M. (2020). New Technologies to Improve Pain, Anxiety and Depression in Children and Adolescents with Cancer: A Systematic Review [Review of New Technologies to Improve Pain, Anxiety and Depression in Children and Adolescents with Cancer: A Systematic Review]. *International Journal of Environmental Research and Public Health*, 17(10), 3563. Multidisciplinary Digital Publishing Institute.
- Lundeby, T., Wester, T., Loge, J. H., Kaasa, S., Aass, N., Grotmol, K. S., & Finset, A. (2020). Challenges and Learning Needs for Providers of Advanced Cancer Care: Focus Group Interviews with Physicians and Nurses. *Palliative Medicine Reports*, 1(1), 208.
- Lyu, X., Jiang, H., Lee, L., Yang, C., & Sun, X.-Y. (2024). Oncology nurses' experiences of providing emotional support for cancer patients: a qualitative study. *BMC Nursing*, 23(1).
- McLoone, J. K., Chen, W., Wakefield, C. E., Johnston, K., Bell, R., Thornton-Benko, E., Cohn, R. J., & Signorelli, C. (2022). Childhood cancer survivorship care: A qualitative study of healthcare providers' professional preferences. *Frontiers in Oncology*, 12.
- Miller, J., & Evers, J. M. (2022). Barriers to Adherence to Cancer Treatments Among Head and Neck Cancer Patients [Review of Barriers to Adherence to Cancer Treatments Among Head and Neck Cancer Patients]. *Journal of the Advanced Practitioner in Oncology*, 13(5), 515.
- Moghadam, M. P., Nasiri, A., & Mahmoudirad, G. (2022). Exploring the Emotional Concerns of Oncology Nurses. *Iranian Journal of Nursing and Midwifery Research*, 27(5), 425.
- Muhlare, M. L., & Downing, C. (2023). Self-care behaviours and practices of professional nurses working in primary health care clinics. *African Journal of Primary Health Care & Family Medicine*, 15(1).
- Nosratabadi, I., Ameri, G. F., Iranmanesh, S., & Asadi, N. (2023). Comparative study of self-compassion and sense of coherence in nurses of psychiatric hospitals. *Frontiers of Nursing*, 10(2), 193.
- Okamura, M., Fujimori, M., Sato, A., & Uchitomi, Y. (2021). Unmet supportive care needs and associated factors among young adult cancer patients in Japan. *BMC Cancer*, 21(1).
- Oktay, J. S., Rohan, E. A., Burruss, K., Callahan, C., Schapmire, T., & Zebrack, B. (2020). Oncology social work intervention index (OSWii): An

instrument to measure oncology social work interventions to advance research. *Journal of Psychosocial Oncology*, 39(2), 143.

Pank, C., Boros, L. von, Lieb, K., Dalkner, N., Egger-Lampl, S., Lehr, D., Schäfer, S. K., Tüscher, O., & Wessa, M. (2025). The role of self-care and self-compassion in networks of resilience and stress among healthcare professionals. *Scientific Reports*, 15(1).

Parola, V., Coelho, A., Neves, H., Bernardes, R. A., Sousa, J. P., & Catela, N. (2022). Burnout and Nursing Care: A Concept Paper. *Nursing Reports*, 12(3), 464.

Perlmutter, E. Y., Herron, F. B., Rohan, E. A., & Thomas, E. (2021). Oncology social work practice behaviors: a national survey of AOSW members. *Journal of Psychosocial Oncology*, 40(2), 137.

Pockett, R., Hobbs, K., Araullo, R., & Dave, K. (2020). Social Work Interventions in Cancer Care. *Australian Social Work*, 75(2), 137.

Psihogios, A. M., Roth, M., Gomez, C., Hekimian-Brogan, E., McQueen, C., & Yanez, B. R. (2024). Partnering With Social Media Influencers to Equitably Improve Adolescent and Young Adult Cancer Outcomes: A Novel Strategy to Support Cancer Care Delivery. *JCO Oncology Practice*, 20(6), 755.

Pun, J., Chow, J. C. H., Fok, L., & Cheung, K. M. (2023). Role of patients' family members in end-of-life communication: an integrative review [Review of Role of patients' family members in end-of-life communication: an integrative review]. *BMJ Open*, 13(2). *BMJ*.

Ramluggun, P., & Morning, D. (2025). Integrating Self-Care into Nursing Education and Practice: Strategies for Sustainable Wellbeing. *Education Sciences*, 15(6), 721.

Rasquinha, S. J., & Shekhar, R. (2021). FAMILY INTERVENTIONS TO DEAL WITH PSYCHO SOCIAL PROBLEMS OF CARETAKERS OF PERSONS LIVING WITH CANCER – CASE STUDY. *International Journal of Research - GRANTHAALAYAH*, 9(9), 88.

Reiser, V. L., & Gonzalez, J. F. Z. (2020). Confronting compassion fatigue in oncology nurses. *Nursing*, 50(5), 54.

Rincones, O., Bamgboje-Ayodele, A., Arnold, A., Delaney, G. P., Durcinoska, I., Avery, S., Sandell, T., Della-Fiorentina, S., Pearson, J., & Girgis, A. (2023). Cancer Care Team's Management of Clinical Alerts Generated by Electronically Collected Patient Reported Outcomes: We Could Do Better. *International Journal of Environmental Research and Public Health*, 20(3), 2001.

Rogers, M., Meier, D. E., Morrison, R. S., Moreno, J., & Aldridge, M. D. (2020). Factors Associated with the Adoption and Closure of Hospital Palliative Care Programs in the United States. *Journal of Palliative Medicine*, 24(5), 712.

Scholz, B., Goncharov, L., Emmerich, N., Lu, V. N., Chapman, M., Clark, S., Wilson, T., Slade, D., & Mitchell, I. (2020). Clinicians' accounts of communication with patients in end-of-life care contexts: A systematic review [Review of Clinicians' accounts of communication with patients in end-of-life care contexts: A systematic review]. *Patient Education and Counseling*, 103(10), 1913. Elsevier BV.

Shaffer, K. M., Kennedy, E., Glazer, J. V., Clayton, A. H., Cohn, W. F., Millard, T., Ritterband, L. M., & Showalter, S. L. (2021). Addressing sexual concerns of female breast cancer survivors and partners: a qualitative study of survivors, partners, and oncology providers about Internet intervention

preferences. *Supportive Care in Cancer*, 29(12), 7451.

Shin, S.-U., & Yeom, H. (2021). The Effects of the Nursing Practice Environment and Self-leadership on Person-centered Care Provided by Oncology Nurses. *The Korean Journal of Hospice and Palliative Care*, 24(3), 174.

Sist, L., Savadori, S., Grandi, A., Martoni, M., Baiocchi, E., Lombardo, C., & Colombo, L. (2022). Self-Care for Nurses and Midwives: Findings from a Scoping Review [Review of Self-Care for Nurses and Midwives: Findings from a Scoping Review]. *Healthcare*, 10(12), 2473. Multidisciplinary Digital Publishing Institute.

Slemon, A., Jenkins, E., & Bailey, E. (2021). Enhancing conceptual clarity of self-care for nursing students: A scoping review [Review of Enhancing conceptual clarity of self-care for nursing students: A scoping review]. *Nurse Education in Practice*, 55, 103178. Elsevier BV.

Stenmarker, M., Björk, M., Golsäter, M., & Enskär, K. (2023). Everyday life during the childhood cancer trajectory—childhood cancer survivors' descriptions of the role of caring support. *Frontiers in Rehabilitation Sciences*, 4.

Sultan, L., Jong, N. de, Alsaywid, B., & Nooijer, J. de. (2023). A Qualitative Study of Stakeholders' Perspectives of Implementing Interprofessional Shared Decision-Making Education in Palliative Care. *Cureus*.

Torres, S., Argüelles-Berrios, C., Rivera-Torres, N., Rosario-Ramos, L., Lahongrais-Lambo, A. D., & Torres-Blasco, N. (2025). Enhancing Communication Among Patients with Cancer, Caregivers, and Extended Family: Development of a Communication Module [Review of Enhancing Communication Among Patients with Cancer, Caregivers, and Extended Family: Development of

a Communication Module]. *International Journal of Environmental Research and Public Health*, 22(4), 541. Multidisciplinary Digital Publishing Institute.

Unger, J. M., Moseley, A., Cheung, C. K., Osarogiagbon, R. U., Symington, B., Ramsey, S. D., & Hershman, D. L. (2021). Persistent Disparity: Socioeconomic Deprivation and Cancer Outcomes in Patients Treated in Clinical Trials. *Journal of Clinical Oncology*, 39(12), 1339.

Uwayezu, M. G., Nikuze, B., Maree, J. E., Buswell, L., & Fitch, M. I. (2022). Competencies for Nurses Regarding Psychosocial Care of Patients With Cancer in Africa: An Imperative for Action. *JCO Global Oncology*, 8.

Vigna, P. M., Castro, I. de, & Fumis, R. R. L. (2020). Spirituality alleviates the burden on family members caring for patients receiving palliative care exclusively. *BMC Palliative Care*, 19(1).

Watson, L., Maheu, C., Champ, S., & Fitch, M. I. (2021). Empowering Oncology Nurses through Knowledge and Practice to Improve Transitions Following Treatment and Survivorship Care. *Asia-Pacific Journal of Oncology Nursing*, 8(5), 555.

Williams, S., Fruh, S., Barinas, J., & Graves, R. (2021). Self-Care in Nurses. *Journal of Radiology Nursing*, 41(1), 22.