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NURSING INTERVENTION FOR THE BURDEN OF FAMILY CAREGIVER PATIENT WITH LUNG CANCER: SCOPING REVIEW

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ABSTRACT

Cancer sufferers during treatment, and cancer survival have a big influence on the family members around them. This scoping review is part of the development of a support model for family members of people diagnosed with lung cancer. Objective:o identify nursing support for caregiver burden in family caregivers of cancer patients. This scoping review was guided PRISMA Scr six-stage scoping review framework. All available published articles from January 2020 to the beginning of 2024 were systematically searched through the PubMed, CINAHL, EBSCO, and Science Direct databases. Each key journal is searched manually. Overall, 402 articles were screened, and 16 articles were ultimately included. The results of the analysis were found to be 6 components of nursing support: psychological and educational support, psychological and educational support mainly Information and Communication Technology, attention to support, support aimed at reducing caregiver stress, support for patients and caregivers, etc. Of the 32 studies, 6 were randomized controlled trials (RCTs), and the remaining 10 were non-RCTs. The results of the scoping review categorize nursing support for caregiver burden in family caregivers of cancer patients into 6 components. Future research should be more specific regarding cancer.

Keywords: burden; cancer; caregiver; family; support

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INTRODUCTION

Cancer sufferers during treatment, and cancer survival have a big influence on the family members around them. Family caregivers play an important role in the direct care and support of cancer patients (Ferrell & Wittenberg, 2017). Many studies demonstrated that the caregiving burden affects caregivers' lives in physical, social, and psychological ways (Lee Wong et al., 2020). Caregiver burden is a subjective appraisal among family caregivers and is defined as the caregiver’s perceived physical, emotional, social, and financial hardships as a result of caring for their relatives. Supportive care interventions are those that provide emotional support to caregivers, with the goal to build rapport with them and/or provide a safe space to discuss feelings and learn problem-solving techniques. This scoping review is part of the development of a support model for family members of people diagnosed with cancer. a scoping review to comprehensively explore and map the nursing support provided to reduce caregiver burden in family caregivers of patients with cancer. This purpose study to identify nursing support for caregiver burden in family caregivers of cancer patients. What types of nursing support are provided to reduce caregiver burden in family caregivers of patients with cancer?

METHOD

Literature review is defined as a comprehensive study and interpretation of the literature related to a particular topic in a systematic manner. Literature review is conducted through a survey through scientific articles, books or other sources relevant to a particular problem, field of research, or a theory so as to provide a description, summary, and critical evaluation. Literature reviews are designed to provide an overview of a particular research topic (Aveyard, 2010). This research method uses a scoping review approach with a content analysis research type. Scoping review is a method of identifying the literature used in depth and thoroughly and using various sources and various research methods tailored to the research topic (Arksey & O'Malley, 2005). The research protocol used by researchers, using the PRISMA Flowchart (Preferred Reporting Items for Systematic reviews and Meta-Analysis) protocol in the guidelines for writing a scoping review. Evaluation of the studies carried out by adjusting the research topic, then grouped from the results of the literature findings presented in the form of a table matrix.

This scoping review was guided PRISMA Scr six-stage scoping review framework. All available published articles from January 2020 to the beginning of 2024. The literature search used by the author is by using the Google Scholar search engine, and databases namely PubMed, CINAHL, EBSCO, and Science Direct databases.. The purpose of this search is to obtain national (Indonesian) and international (English) articles that discuss nursing interventions for the burden of family caregivers of patients with lung cancer. Each key journal is searched manually. To search for literature that matches the topic, specific keywords are required. The search technique uses keywords with the PICO Framework. Where P is population, I is intervention, C is comparation, O is outcome. In this study, the population is the family caregiver, for the intervention, namely nursing intervention, there is no comparation, and the outcome is to reduce the burden of caregivers. With keywords using Boolean and phrase operators (OR, AND, OR NOT) placed between keywords as an effort to specify search results and make it easier to obtain articles.

Tabel 1.
Keyword

Component	*Major Term*		*Alternate Term 1*		*Alternate Term 2*
Population	Family Caregiver AND	OR	Non formal caregiver AND	OR	Caregiver AND
Interventions	Nursing Intervention	OR	Nursing Intervention to reduce burden cancer family caregiver	OR	Support to overcome burden cancer care
Comparation	-	-	-	-	-
Outcome	Caregiver Distress	OR	Caregiver Burden	OR	Psychological burden

Inclusion Criteria: 1)caregivers of patients with cancer adult and older patient; 2)Intervention studies for the relief of caregiver burden or outcomes similar to caregiver burden. 3)Nursing support including multidisciplinary support. The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) guidelines were used in this study in the study selection process conducted by the authors. Screening starts from the title, abstract, and full text by comparing the predetermined inclusion and exclusion criteria. The articles obtained were then analyzed, summarized and arranged in the results and discussion chapters. Scoping reviews differ from systematic reviews because the authors usually do not assess the quality of the studies included in the review (Peters et al., 2020).

RESULT

Overall, 402 articles were screened, and 16 articles were ultimately included. Of the 32 studies, 6 were randomized controlled trials (RCTs), and the remaining 10 were non-RCTs. The results of the analysis were found to be 6 components of nursing support: Psychological and educational support, Psychological and educational support mainly Information and Communication Technology, Attention to support, Support aimed at reducing caregiver stress, Support for patients and caregivers, etc. The characteristics of all research articles used in this scoping review study are studies that have been published in the range of 2019 - 2024.

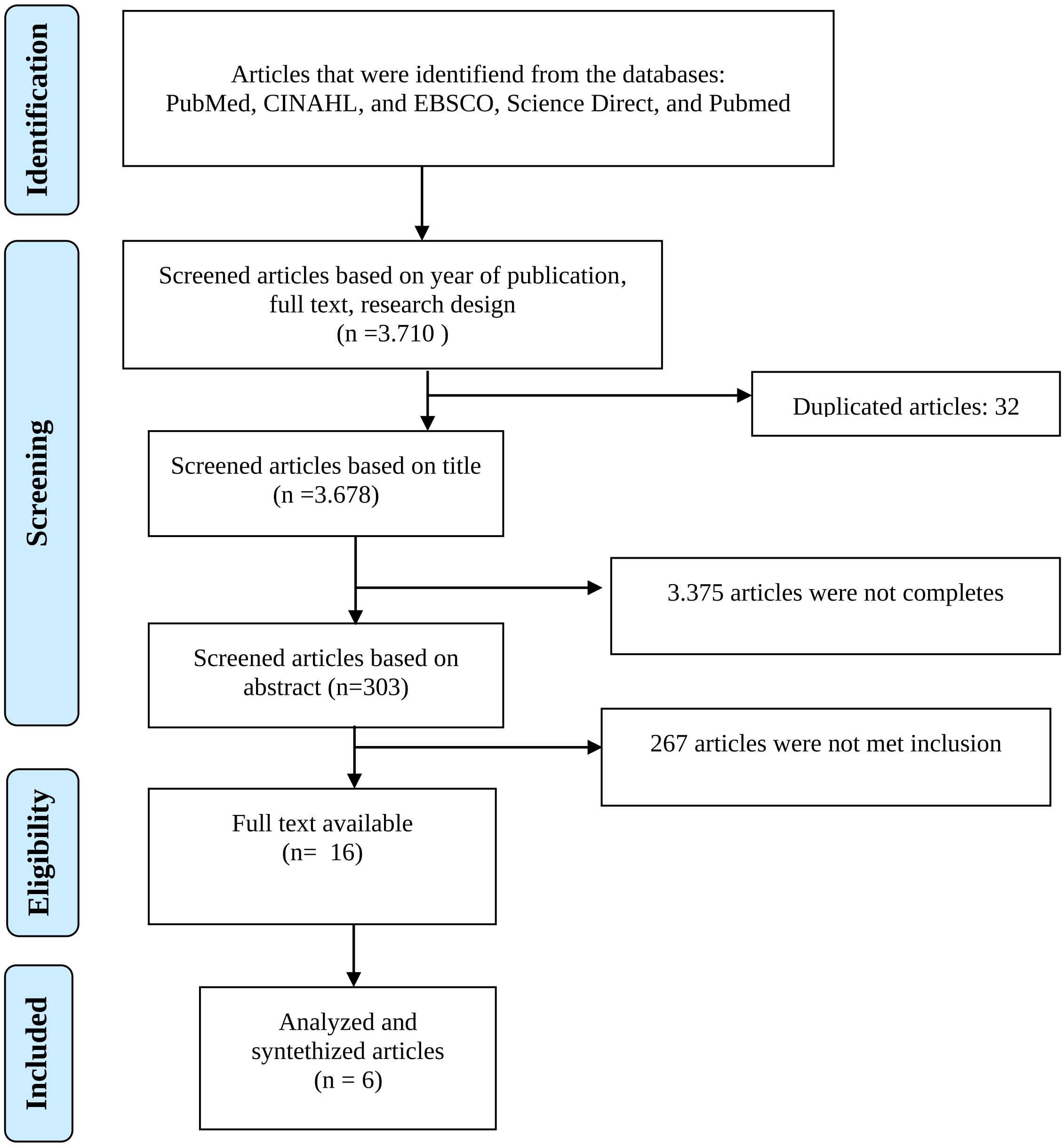

Figure 1. Stages of Search and Selection of Articles to Become Reviewed Articles

Table 2.
Result Study

Author (year)/ design	Main Country Study	Disease	Methods	Results Interventionpppp group
Psychological and educational support using mainly non-face-to-face (ICT)				
Boele et al (2022)/USA	RCT	Malignant brain tumor	(a) The 8-week SmartCare program was based on the representational approach and aims to teach caregivers effective problem-solving techniques through in-depth reflection of experiences, beliefs, and knowledge.	For depressive symptoms, no significant group differences were found. Caregiving-specific distress decreased in the

Author (year)/ design	Main Country Study	Disease	Methods	Results Interventionpppp group
			(b) Caregiver needs screen (CNS) rating the level of distress associated with 32 common caregiving needs/issues and then choose an issue to start or continue working on. (c) This plan was refined with telephone counseling from the research nurse (within 48 h, with follow-up to review implemented strategies or goals 5 days later). 8 week: 80 Control: 1) Enhanced care as usual (ECAU) included attention-control emails (personalized, friendly messages) every 2 weeks, and access to an ECAU webpage (with 32 evidence-based SmartCare guides, links to web-based resources, basic friends, and family page)	intervention group compared with
Semere et al (2023)/USA	RCT	Metastatic solid tumor	(a) Nurses were instructed to engage the caregiver, if present, during key parts of the intervention visits. The goals of visit included establishing rapport with both the patient and caregiver, addressing patient symptoms, and helping the patient to choose a surrogate decision-maker, (b) the first visit took place in-person and subsequent visits took place either in-person or by phone. Control Group: 1) Standard care (oncology nurses assessing patient symptoms and administering treatments, including chemotherapy)	The intervention found no significant differences in caregiver burden (adjusted mean difference −.39; P = .90), depression (adjusted mean difference −.22, P = .26), or anxiety (adjusted mean difference .09, P = .58), between the intervention and standard care at 3 months.
Oliver et al (2021)/USA	Clinical trial	Cancer	Access for cancer caregivers to education and support for shared decision-making (ACCESS) used a facebook group as support for caregivers as they used web conferencing to join the hospice staff in plan of care meeting. n = 87 Ever other week Control: Pilot Study: n-42	Reported levels of depression, anxiety, and quality of life were not significantly different between those who chose to participate in the clinical trial and those who participated only in this pilot study; however, caregiver

Author (year)/ design	Main Country Study	Disease	Methods	Results Interventionpppp group
				burden was higher for those consenting to the clinical trial (*P* < .001).
Xu et al (2023)/USA	RCT	Colorectal, bladder, ovarian, cervical, or uterine cancer	(a) Web-based patient reported outcomes-informed symptom management system (PRISMS) included information written in plain language and demonstrative videos that provided education and skills training on ostomy care, the most common complications, safe physical activity, and fall prevention for optimized recovery, (b) PRISMS provided patients and caregivers with personalized feedback on care and support based on the symptom and complication severity and dispatched detailed self-care-management instructions based on the continuous monitoring of patient-reported outcomes,(c) the “talk with a nurse” function provided participants with the ability to contact the WOCN for professional support. 2 Month N=16 1) Usual care for patients with newly created ostomies and their family caregivers included the distribution of printed materials and ostomy care demonstrations provided by clinical nurses prior to hospital discharge.	PRISMS caregivers experienced a greater decrease in caregiver burden. PRISMS caregivers experienced a larger decrease (mean diff = −7.37, P = .09) in the Zarit burden interview than UC caregivers.
Psychological and educational support mainly using non-face-to-face (telephone) methods				
Ghorbani et al (2020)/Iran	RCT	Esophageal, stomach and colorectal cancer	(a) Intervention method was that in addition to face-to-face training and educational pamphlets; they received 4 telephone counseling sessions during the 3 courses of chemotherapy. (b) Each telephone counseling session lasted for 15 to 20 min Control: 1) Face-to-face and individual 20-minute training session The results of the independent t test showed no significant difference between the 2 groups (P = .42).	The results also revealed that the mean scores of caregiver strain (Zarit burden interview) and unmet needs decreased following the intervention, and the mean scores of self-care behaviors increased in the intervention group after the intervention (P = .001).

Author (year)/ design	Main Country Study	Disease	Methods	Results Interventionpppp group
Support aimed at reducing caregiver stress				
Aubin et al (2021	)/Canada RCT	Nonsurgical lung cancer	(a) Systematic family caregiver distress screening and problem assessment, (b) plan tailed problem-solving strategies, (c) liaison by the oncology nurse. Control: 1) Usual care Family caregivers' distress decreased over time, but this reduction was observed in both groups. Similar results were found for secondary outcomes. 2) 2 week	Family caregivers' distress decreased over time, but this reduction was observed in both groups. Similar results were found for secondary outcomes.
Wasmani et al (2022)/Iran	Quasi-experimental study	Cancer	1) The intervention consisted of 2 sessions of training in proper communication skills, anger management and nervous tension, and dialogue and problem-solving sessions for caregivers. 2 weeks, n = 17 Control: 1) No intervention	After the intervention, the mean score of care burden in the intervention group decreased from 56.93 (SD = 11.08) to 42.93 (SD = 9.78) and in the control group it changed from 54.27 (SD = 11.38) to 56.80 (SD = 11.43). There was a significant difference in the mean scores of the 2 groups (P < .001).

DISCUSSION

Interventions significantly reduced caregivers' burden, improved their ability to cope, increased their confidence as caregivers, reduced their anxiety, and improved marital and family relationships. These interventions appear to produce more prepared, less distressed caregivers which, in turn, is likely to result in more positive benefits for patients (Ferrell & Wittenberg, 2017; Kedia et al., 2020). In our results, nursing support for caregiver burden was mainly face-to-face psychological and educational support provided by a nurse, including teaching coping and caregiving skills, and establishing self-care plans. Family caregivers are expected to assist patients in every aspect of their lives, from assisting with basic activities of daily living to providing emotional, social, and financial support. In these situations, the burden of family caregiving may include not only physical tasks but also emotional stress, because nurses tend to ignore their own needs in favor of the patient's interests (Adelman et al., 2014). Factors related to patient characteristics may also influence family burden pressure such as the presence of metastases, the functional status of their relatives, or the severity of symptoms (Gröpper et al., 2016). The burden on family caregivers of cancer patients may vary depending on the stage of the disease and may be appropriate according to factors related to the patient's condition (Borges et al., 2017). However, this study shows that each intervention performed will show different results depending on the factors of the patient's illness. So that the interventions carried out by nurses must be more specific on each aspect and complete assessment.

One of the findings in this study is a psychoeducational intervention that can be carried out by nurses. Psychoeducation has a positive effect and has the potential to help family caregivers cope with the demands of caregiving (Leow et al., 2015). Primary and community care is one part of the scope of nursing care, so that the interventions carried out by nurses must be sustainable not only for patients but all components including families. Several studies show that interventions for managing family caregiver burden involve palliative care. Historically, palliative nursing interventions have targeted caregiver interventions as they relate to burden (Al, 2022). Other studies shown that psychosocial intervention can be reach for burden family caregiver. Psychosocial intervention programs have positive effects on caregiver burden and related quality of life (Gabriel & Mayers, 2019).

Of all the intervention strategies carried out by nurses, several studies show that interventions depend on the burden on the family and the condition of the patient being cared for by the caregiver. Nurse-driven interventions may be considered for use as part of a useful strategy to improve care readiness among caregivers of cancer patients (Bilgin & Ozdemir, 2022). Family caregivers of cancer patients can become responsible for many cancer care processes, this is usually without preparation or training in caregiving in providing care. This can create a caregiving burden that can worsen caregivers' quality of life (QOL) (Rha et al., 2015). Other studies similar with this research about distress presence. In the systematic review study conducted by Boele et al was also reported to be the presence of distress. Furthermore, nine studies reported specific moods or emotions such as anger, sadness, or death anxiety, four studies used quantitative instruments in contrast to the other five studies that described the construct qualitatively (Boele et al., 2022). Instruments in contrast to five other studies that described the construct qualitatively. The unmet needs of informal caregiver's cancer patients have a significant impact on their mental health and quality of life, but this burden can be alleviated by psychosocial interventions that offer appropriate support, education, and resources. The Intervention can reduce: Anxiety, Stress, increase QOL etc.

CONCLUSION

The results of the scoping review categorize nursing support for caregiver burden in family caregivers of cancer patients into 6 components. Future research should be more specific regarding cancer.

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