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ISSN 2523-9511

**DOI:** https://doi.org/10.32829/ghmj.v6i1.164

### Systematic review: Nursing navigator for the oncology patients care and its management

### [Revisión Sistemática: Navegador de enfermería para el cuidado y manejo en pacientes oncólogicos]

Yuli P. Osorio – Calle \* , Katterin J. Sebastian – Aquino , Miriam L. Puchoc Melendez

Instituto Nacional de Enfermedades Neoplásicas, Peru.

\* ypilar0210@hotmail.com

Received: 12 March 2022; Accepted: 26 March 2022; Published: 01 April 2022

#### Resumen

Objetivo: Analizar el desarrollo de las evidencias científicas sobre el uso del navegador de enfermería para el cuidado y manejo en pacientes oncológicos. Materiales y método: Revisión integrativa se realizó una búsqueda en las bases de datos PubMed, Science Direct, Cochrane Library y Scielo de publicaciones generadas entre 2011 y 2021, utilizando los descriptores clave "navegador", "enfermera" "oncología" "cáncer" y sus respectivos sinónimos en inglés y español." Resultados: Las evidencias científicas resaltan la necesidad de la utilización de navegadores de enfermería para fomentar acciones educativas para el manejo y el cuidado de la salud de los pacientes oncológicos continuadores y nuevos con la finalidad de sostener el autocuidado durante el proceso de la enfermedad. Conclusiones: Es importante implementar esta plataforma en los servicios de salud como estrategia de innovación tecnológica en la continuidad del cuidado, con el fin de evitar riesgo de complicaciones en su salud y ser abordados de manera oportuna, para ser derivados con el personal competente según corresponda.

Palabras clave: Navegador, enfermero, oncológico, cáncer, revisión sistemática.

#### **Abstract**

Objective: To analyze the development of scientific evidence on the use of the nurse navigator for the care and management of oncology patients. Materials and method: An integrative review was conducted in the databases PubMed, Science Direct Cochrane Library and Scielo of publications generated between 2011 and 2021, using the key descriptors "navigator", "nurse" "oncology" "cancer" and their respective synonyms in English and Spanish". Results: Scientific evidence highlights the need for the use of nurse navigators to promote educational actions for the management and health care of continuing and new oncology patients with the aim of sustaining self-care during the disease process. Conclusions: It is important to implement this platform in health services as a strategy of technological innovation in continuity of care, in order to avoid risk of complications in their health and to be addressed in a timely manner, to be referred to competent personnel as appropriate.

**Keywords**: Navigator, nurse, oncology, cancer, systematic review.



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ISSN 2523-9511

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#### 1. Introduction

The World Health Organization (WHO) states that cancer is considered one of the leading causes of death in recent years, with approximately 10 million people dying in 2020. In addition, it indicated that 70% of deaths from this disease occurred in countries with medium and low economic status (WHO, 2021). Likewise, in Peru, through the Ministry of Health (MINSA), reports that the incidence of cancer in Peru is increasing and it is estimated that by the year 2030 it will increase by 30% (MINSA, 2021). The COVID-19 pandemic has had a very large impact on the limitation of access to health services in cancer patients, this still remains a serious situation that directly affects the quality of life of cancer patients. (WHO,2020).

Despite the hard work in the first level of care, which are dedicated to health promotion and disease prevention, the incidence and mortality in cancer increases, thus increasing the demand in the care of cancer patients, therefore nurse navigators play a key role in timely and quality care, likewise decreases costs in health care, through patient care and guidance during the cancer process, with highly competent navigators to obtain positive results. (Dickerson et al., 2020; Ragavan et al., 2020; Kashima et al., 2018; Braun et al., 2012).

The oncology nursing society upholds a number of competencies they profile in nurse navigators such as: coordination for the care of oncology patients with actual and potential diagnoses; providing support to patients and caregivers; providing education and resources that assist in making informed decisions; and timely access to quality care during all phases of the oncology disease. (Baileys et al., 2018); due to these competencies and the use of technology nurse navigators are expanding, however, continued training focused on oncology care and the use of these technology platforms is necessary. (Lubejko et al., 2019; Emfield et al., 2020).

It should be noted, that the management of oncology patients is very complex for both the patient and their family environment, so it requires individualized support by the health professional, such as; in symptom management, treatment adherence and psychological support. (Reñones-Crego et al., 2016). The continuity of care in this type of patients and their caregivers, should be given in a timely, continuous and permanent manner, by health professionals. (Martínez-Arribas et al., 2014).

After discharge patients and family members present various difficulties for home care, they face the adverse effects of chemotherapy, symptoms of the disease itself and the constant uncertainty of death, for this reason this platform is implemented to ensure continuity of care. (Turgeon et al., 2006).

Undoubtedly, the role of nursing professionals in the care of cancer patients is a challenge, due to the complexity of the disease and its symptoms, either at any stage of the disease until the end of life, as it is known that these patients are subjected to painful procedures that cause physical and emotional sequelae, among others. Faced with the deterioration of the human dimensions caused by disease and treatment, the person experiences the need to be accompanied to overcome adverse situations either by the family and health personnel. The responsibility of the nursing professional to have the professional skills to provide comprehensive care, quality and warmth that generates effective communication spaces to sustain self-care (Soto-Arroyave, et al., 2018) In this sense, patients and families during the process of the disease generate situations of uncertainty and grief about the evolution of the disease, to understand and adapt to these new changes, it is there where nurses play an important role in guiding and educating to be able to over carry this disease. (Condori-Claros et al., 2014).

On the other hand, access to the health system in Peru remains a problem, either by social conditions, demographics and isolation restrictions and security measures by the situation of the



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**DOI:** https://doi.org/10.32829/ghmj.v6i1.164

pandemic COVID-19, this situation increased the risk of complications, so it has been convenient to use navigator programs for the care and management of oncology patients. (Vela-Ruiz et al., 2020), as well as to protect cancer patients who contracted COVID-19, to ensure that they receive optimal care, timely referral to competent professionals through the use of these platforms (Ferrua et al., 2021).

Nurse navigators are charged with optimizing care for cancer patients, offering advantages for timely diagnosis, palliative care and emotional support (Kagan et al., 2020).

Oncology nurse navigators are responsible for making this platform positive and beneficial for cancer patients, they act proactively and intentionally, improving access to care and continuity of care (Canadian Association of Nurses in Oncology, 2020).

Currently, nurse navigators are spaces where trained professionals, who are responsible for proactively guiding patients, in order to reduce communication barriers, economy, provide emotional support, education to the patient and family and thus can make the best decisions regarding their health. It is responsible for empowering the patient to receive oncological treatment on time (Moreno-Castro et al.,2021). One of the main functions of the nurse navigator is to anticipate the patient's needs, helps to gather necessary information facilitating access to medical treatments. Therefore, the objective was to determine the scientific evidence on the use of the nurse navigator for the care and management of oncology patients in order to explore the scientific evidence on this issue.

The objective is to determine the scientific evidence on the use of the nurse navigator for the care and management of oncology patients.

#### 2. Materials and methods

An integrative review was carried out to develop a reflexive critical analysis of the content of documents; review articles during the years 2011 and 2021 were considered.

In the search strategy, the following were determined as inclusion criteria: for the selection of references, articles in Spanish available in the selected data portals that presented adherence to the subject matter, published during 10 years, from 2011 to 2021, that clearly presented the methodology, in addition to clearly presenting the selected theoretical referential, studies with qualitative, quantitative and/or combined methodology, as well as literature reviews. Exclusion criteria: researches that were found repeated in the databases and presented only abstracts, texts that were not related to the topic and with publication dates prior to 2011, studies that address nurse navigator in non-oncology patients. Gray literature, except for doctoral theses, records excluded because they did not have open access or full text in PDF.

The keywords used were "navigator", "nurse" "oncology" "cancer" and their respective synonyms in English and Spanish, which were identified through DeCS and conjugated with the AND and OR operators. The search strategy used in the database considered for research purposes was gathered through the acceptance of descriptors. The Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) flowchart was used to contribute to the formulation of the search strategy. Thus, articles with Spanish-language descriptors were used for the search. The search was carried out in the PubMed, Sciencia Direct, Cochrane Library and Scielo databases. Twelve articles were included in the review (Table 2) that identified the main characteristics of the oncology patient's nurse navigator, as well as the barriers and facilitators for its implementation in the practical setting.



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Of the 12 texts included, the majority came from PubMed (66.7%), Science Direct (8.3%), Cochrane Library (16.7%) and Scielo (8.3%). According to type of publication, most of the texts correspond to clinical trial studies (33.3%); the other studies are review (16.7%), qualitative (16.7%), descriptive (16.7%), cohort study (8.3%) and mixed method study (8.3%). Finally, most of the publications come from the US (33.3%) and the rest come from Denmark (25%), Canada (25%) and Brazil (16.7%).

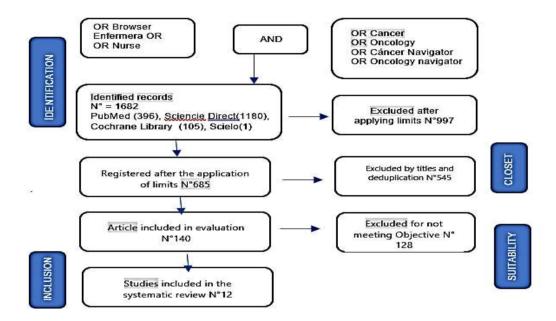


Figure 1. Search strategy Source: prepared by the authors

#### 3. Results

Table 1. Main characteristics of the selected studies

AUTHOR/YEAR	OBJECTIVE OF THE STUDY	DESIGN CONTEXT POPULATION	INTEREST TO THIS REVIEW	CONCLUSIONS OF THE STUDY
Miller, S. D., Urquhart, R., Kephart, G., Asada, Y., & Younis, T. 2021.	Identify factors associated with the need for navigation to help better identify referrals to the NPC program among breast cancer patients.	Canada	Program Factors Navigators Cancer - Patient	Sociodemographic factors, although not modifiable, were evidenced in this study.



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Loiselle, C. G., et. al. 2020.	To document how the perceived presence of NN relates to cancer care experiences and patient satisfaction with care at three cancer centers.	Descriptive Study Canada cancer	Pivot navigator nurse.	He showed that nurse navigators are associated with positive experiences and increased cancer patient satisfaction.
Rohsig, V., et. al. 2019.	To describe the results of a pioneering nurse navigation program established in a breast cancer center.	Descriptive study Brazil breast cancer	Nurse Navigator Program	Patient satisfaction was significant with the nurse navigation program.
Pautasso, F. F., Zelmanowicz, A. M., Flores, C. D., & Caregnato, R. 2018.	Identify the scientific literature on cancer nurses who provide patient navigation services as nurse navigators.	Rev. Systematics Brazil Cancer	Nurse Navigator Program	The nurse navigator offers a quality service
Mertz, B. G., et al. 2017.	to determine the feasibility and efficacy of an individual nurse-navigator intervention to alleviate distress, anxiety, depression and quality of life	Clinical trial Denmark Breast cancer	Effects of navigation by nurses	The nursing navigator helps to improve anguish, anxiety, depression at 12 months of the intervention.
Thygesen, M K., 2017	To assess nursing navigation versus current care coordination during colorectal cancer trajectories.	Clinical trial Denmark Colorectal cancer	Nursing Navigation	Participants have better psychological help with the nursing navigation system.
Tho, P. C., & Ang, E. 2016.	To synthesize the best available evidence on the effectiveness of patient navigation programs in adult cancer patients undergoing treatments such as radiotherapy and chemotherapy.	Rev. Systematics. USA Radiotherapy and Chemotherapy	Effectivenes s of nurse browser programs	The navigation program in patients with radiotherapy and chemotherapy treatment are not effective in improving quality of life and levels of distress.
Zibrik, K., Laskin, J., & Ho, C. 2016.	Assess the impact of NN, comparing a 1-year period before and after implementation, assessing timelines, molecular testing and treatment rates	Cohort Study Canada. Lung Cancer.	Implementin g a Nurse	The addition of nurse navigators helped reduce waiting time and testing molecules in a timely manner.
Ludman, E. J., et. al. 2015.	To examine whether the effects of a nurse navigator intervention for cancer vary with initial depressive symptoms.	Clinical trial USA Cancer	Effects of nurse navigator intervention	The intervention of nurse navigators for cancer patients helped patients cope with improving depression.



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ISSN 2523-9511

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Wagner, E. H., et. al. 2014.	To determine whether the intervention of a nurse navigator improves the quality of life and patient experience with care for people who have recently been diagnosed with breast, colorectal or lung cancer	Clinical trial. USA Breast, colorectal and lung cancer.	Nurse Navigator	Nurse navigator intervention improves patient care but does not significantly affect quality of life.
Thygesen, M.K, Pedersen B.D,	Know the benefits of the and importance of NN		Nursing navigation.	The nursing navigator is important because
Kragstrup, J. Wagner,	cancer patients.	Denmark	navigation.	it provided security to
L., & Mogensen, O.,	cancer paneme.	Gynecological		women during the
2013.		Cancer		course of their illness.
Korber, S. F., Padula, C.,	Identify barriers and	Qualitative	Breast	Through the role of
Gray, J., & Powell, M.	enhancers to breast	study	Browser	the nurse navigator,
·	cancer treatment	USA	Program	breast cancer care
2011.	completion from the	Breast cancer		and therapy can be
	perspective of participants			improved by
	in a breast health			managing symptoms
	navigation program.			through this means.

#### 4. Discussion

As a result of the integrative review, the emerging categories described below were obtained, considering the following thematic focuses: Use of nursing navigators for continuous care and patient satisfaction receiving education through nursing navigators:

#### Use of nursing navigators for continuous care.

The incorporation of nursing navigators in the health system promotes the timely care of cancer patients allowing to extend care at home in order to provide support, education and support to solve daily problems that arise in the patient. This statement coincides with Pautasso et al., (2018), Who consider that the programs used in virtual environments are innovative ways of caring for patients to improve their quality of life and maintain a state of well-being, likewise communication, interaction plays an important role in accompanying care to avoid the risks and complications caused by the same oncological disease, thus, these platforms allow timely attention, reducing the discomfort of transport and distance to health services and the economic expenses generated by them. Likewise, it allows to give support in situations of emotional alteration of the patient before the depression, anxiety and uncertainty and fear before the process of adaptation of the disease (Miller et al., 2020).

For Wagner et. al. (2014) They argue that the system used in nursing navigators significantly improves the coordination of services provided in the psychosocial environment. However, Tho et al., (2016) note that the nurse navigation program in patients undergoing radiation therapy and chemotherapy treatment was not effective, so it suggests that this program should be addressed in cancer patients in acute care settings.

On the other hand Zibrik et al., (2016) argues that nursing navigators gave good results in patients with lung cancer treatment, where the waiting time was reduced, also helped molecular tests to



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ISSN 2523-9511

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be taken in a timely manner, ensuring standardization and efficiency the participation of nurse navigators in triage and thus patients are identified and examined in time with the tests. molecular, which implies that they are derived for the appropriate and timely treatment.

In the same way Thygesen et al., (2013) maintains that patients with suspected gynecological cancer care was timely, they were assigned a nurse navigator from the beginning until she is referred to a specialized hospital to undergo a surgical procedure, the nurse manages to obtain a climate of trust with the patient through communication, which allows you to act effectively, decreasing anxiety, fear related to surgical intervention; since it is known that the cancer patient has critical periods during their disease process, it is possible that for them death is a close event, the nurse navigator acts as an attachment figure with high levels of availability, knowledge and help.

The education carried out by the nurse navigator through this platform is important, because it helps greatly to identify and reduce barriers to care, as well as enhances the treatment of breast cancer, addressing the management of symptoms produced by treatment or disease, the nursing work is to identify and provide continuity of care to avoid complications and reduce costs (Korber, et al., 2011).

#### Satisfaction of the patient who receives education through nursing navigators.

The results showed that the nursing navigators were successful in other countries, so they can be considered a model in Peru.

Nurse navigators allow to overcome the barriers of access to the health system, provide education and timely support for their oncological treatment, this platform helps patients to a large extent in the emotional aspect, followed by information, communication and education, given these care patients are significantly satisfied with this care platform and with the role played by nurse navigators. (Loiselle et al., 2020) Likewise, Rohsig et al., (2019) maintains that nurse navigators play an important role in the care of cancer patients, because through education and assertive communication, they are cared for in an opportune time for cancer treatment, for which patients consider a good alternative to solve their health problems and feel safe with the care provided by the nurse navigator.

Indeed, the navigator program by nurses for cancer patients, in addition to reducing access barriers, provides psychological support, since it is known that the cancer patient due to the disease process and aggressive treatment, needs emotional support, as is the case with patients with breast cancer, who suffer mutilations as part of their treatment, this affects their personal image and therefore their self-esteem, therefore one of the main roles of nurse navigators is to relieve anguish, anxiety, depression and provide quality of life. Mertz et al., (2017) reports that it helped reduce anxiety, depression and anguish in a period of 6 to 12 months through face-to-face sessions followed by 2 sessions by telephone, patients said they felt satisfied, because they felt safe and the nurse was able to answer their questions and doubts, took the issues of family problems, fatigue, sleep problems and also physical problems such as nausea, vomiting, pain related to the treatment and process of your disease.

Undoubtedly, this platform brings many benefits unlike traditional cancer care, in Western countries the number of cancer survivors increases and care protocols are currently not enough, in patients with colon and rectal cancer who were approached by nurse navigators, better positive results were obtained, they received help in cancer treatment and psychological support during the process of their disease. In patients receiving radiotherapy and chemotherapy treatment, there was an increase in patient satisfaction, due to patient education and family through navigators (Tho et al., 2016).



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**DOI:** https://doi.org/10.32829/ghmj.v6i1.164

Finally, the integration of the nursing navigator in cancer patients is very beneficial because it allows communication with the patient-nurse to be effective, through this navigator psychological, biological, social, family and economic problems are detected, being significantly beneficial in patients with depression, anxiety.

#### 5. Conclusions

The present work reveals that it is necessary to use navigators serve to promote educational actions for the management and health care of continuing and new patients.

In addition, implementing this platform in health services is a technological innovation strategy that will strengthen the continuity of care, in order to avoid the risk of complications in the patient's health and be addressed in a timely manner, to be referred to the competent personnel as appropriate. It also reduces the gap in care for cancer patients, improves quality of life and increases patient satisfaction.

It is important to implement navigation programs led by nurses in health facilities, to reduce barriers and accessibility for patient care, especially in populations with limited economic and geographical resources, among others. In addition, it is suggested to carry out quantitative and qualitative research in various contexts and specialties to evaluate the effectiveness of this platform in the health field.

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