

## Role of the Nurse Navigator: integrative review

*Atuação do Nurse Navigator: revisão integrativa*

*Actuación del Nurse Navigator: revisión integrativa*



Fernanda Felipe Pautasso<sup>a</sup>  
 Alice de Medeiros Zelmanowicz<sup>a</sup>  
 Cecília Dias Flores<sup>b</sup>  
 Rita Catalina Aquino Caregnato<sup>b</sup>

### How to cite this article:

Pautasso FF, Zelmanowicz AM, Flores CD, Caregnato RCA. Role of the Nurse Navigator: integrative review. Rev Gaúcha Enferm. 2018;39:e2017-0102. doi: <https://doi.org/10.1590/1983-1447.2018.2017-0102>.

### ABSTRACT

**Objective:** To identify scientific literature on oncology nurses who provide patient navigation services as nurse navigators.

**Methods:** Integrative review of literature searches in the databases LILACS, MEDLINE/PubMed, SCOPUS, SciELO, Web of Science and Science Direct based on the descriptors patient; navigation; nurse; professional; cancer; oncology; navigator; and navigators.

**Results:** Seventeen articles were identified and grouped according to the following thematic approach: Care Processes; Patients; and Health Workers. It was observed that scientific literature on nurse navigators mostly comes from the United States, Australia, Canada, Sweden, and Denmark, where the first nurse navigator programmes were introduced. No studies were found in local journals or populations.

**Conclusions:** The nurse navigator offer a unique service for the provision of quality care. Although international research is recent, further studies on the role of these professionals are clearly needed.

**Keywords:** Nursing. Patient navigation. Patient. Medical oncology.

### RESUMO

**Objetivo:** Conhecer a produção científica sobre o enfermeiro atuando na oncologia com a função de navegador de pacientes, Nurse Navigator.

**Métodos:** Revisão integrativa com buscas nas bases de dados LILACS, MEDLINE/PubMed, SCOPUS, SciELO, Web of Science e Science Direct, utilizando os descritores: patient; navigation; nurse; professional; cancer; oncology; navigator e navigators.

**Resultados:** Identificaram-se 17 artigos. Estes foram agrupados conforme a abordagem temática: Processos Assistenciais; Pacientes; e Profissionais de Saúde. Evidenciou-se que o conhecimento científico produzido sobre Nurse Navigator concentra-se nos Estados Unidos, Austrália, Canadá, Suécia e Dinamarca, países onde os primeiros Programas de Navegação de Pacientes foram implantados. Não houveram estudos publicados em periódicos ou populações locais.

**Conclusões:** A atuação do Nurse navigator, proporciona um diferencial para a qualidade assistencial dos serviços. Apesar de serem recentes as pesquisas internacionais abordando o tema, ficou claro que ainda se faz necessária a realização de mais estudos acerca do papel deste profissional.

**Palavras-chave:** Enfermagem. Navegação de pacientes. Paciente. Oncologia.

### RESUMEN

**Objetivo:** Conocer la producción científica sobre enfermero actuando en oncología con la función de navegador de pacientes, Nurse Navigator.

**Métodos:** Revisión integradora con búsqueda en bases de datos LILACS, MEDLINE/PubMed, SCOPUS, SciELO, Web of Science y Science Direct, utilizando descriptores: patient; navigation; nurse; professional; cancer; oncology; navigator y navigators.

**Resultados:** Se identificaron 17 artículos. Se agruparon conforme abordaje temático: Procesos Asistenciales; Pacientes; y Profesionales de Salud. Se evidenció que el conocimiento científico producido sobre Nurse Navigator se concentra en Australia, Estados Unidos, Canadá, Suecia y Dinamarca, países donde se implantaron los primeros Programas de Navegación de Pacientes. No hay estudios publicados en periódicos o poblaciones locales.

**Conclusiones:** La actuación del Nurse navigator, proporciona un diferencial para la calidad asistencial de los servicios. A pesar de recientes las investigaciones internacionales abordando el tema, se hace necesaria la realización de más estudios acerca del papel de este profesional.

**Palabras clave:** Enfermería. Navegación de pacientes. Paciente. Oncología médica.

<sup>a</sup> Irmandade Santa Casa de Misericórdia de Porto Alegre (ISCMPA), Unidade de Promoção da Saúde e Prevenção de Doenças. Porto Alegre, Rio Grande do Sul, Brasil.

<sup>b</sup> Universidade Federal de Ciências da Saúde de Porto Alegre (UFCSIPA), Programa de Pós- Graduação em Ensino na Saúde. Porto Alegre, Rio Grande do Sul, Brasil.

## ■ INTRODUCTION

Patient navigation in healthcare is a concept conceived by the North American doctor Harold Freeman in 1990, to speed up confirmation of the diagnosis and ensure the continuity of treatment from start to finish for people with any proven or unproven chronic disease<sup>(1)</sup>. In this process, one person, called the patient navigator, guides others through social, economic, financial, cultural, bureaucratic, and psychological barriers that hinder their access to healthcare services<sup>(1)</sup>. It is used widely in the USA in cancer patients to increase the likelihood of their adherence to the recommended treatment<sup>(2)</sup>. In partnership with the American Cancer Society (ACS), Dr. Harold Freeman created the first patient navigation programme at the Harlem Hospital in New York, with navigator volunteers (health workers and laypersons)<sup>(1)</sup>.

These programmes seek to identify barriers patients confront when accessing oncology care by reducing delays from the start of investigations and treatment to palliative care<sup>(2)</sup>. Navigators assess patient needs and create a plan with patients to overcome the barriers that prevent them from gaining access to quality care<sup>(3)</sup>.

The figure of the nurse navigator for oncology patients emerged in the first patient navigator programme<sup>(4)</sup>. These oncology workers use their expert knowledge, clinical experience, and skills to provide care based on the physical, social, and emotional needs of patients<sup>(5)</sup>. They help patients, their families, and caregivers make joint decisions with the multidisciplinary team responsible for the treatment<sup>(4)</sup>. Their work covers more than care management since they also supervise the entire treatment process, empower patients, provide information and support, and act as a link between the patients and the healthcare team<sup>(4)</sup>.

Patient empowerment is based on the education patients receive and involves improving their knowledge, skills, attitudes, and self-knowledge to better manage their health conditions and actively participate in treatment<sup>(6)</sup>. Empowered patients interact more effectively with health workers because they are more aware, involved, and accountable<sup>(6)</sup>.

A study conducted in the USA<sup>(7)</sup> evaluated the performance of nurse navigators in oncology care and found a significant improvement in the perception of patients regarding treatment. The patients felt more involved in their care and better prepared for the future because they had more knowledge about how cancer affects their lives<sup>(7)</sup>.

Patient navigation is evolving steadily<sup>(5)</sup>. In today's international programmes, the navigators are healthcare workers, students, and lay volunteers, each with specific assignments according to their level of knowledge. In Brazil, only a few health institutions offer this type of programme;

in the locations where it does exist, the service is intended for patients with breast cancer and the navigators are social workers and nurses<sup>(8-9)</sup>. Despite the importance of navigators in the international arena, the figure of the nurse navigator, with all its attributions and specificities, does not exist in Brazil.

Nurse navigation is considered a significant and unique part of the oncology service in Brazil since these nurses help patients cope with the impact of diagnosis and difficulties understanding evolution of the disease and overcome barriers to the healthcare system that would otherwise delay treatment.

Consequently, two authors of this article, who work in the reference oncology hospital known as a centre of high complexity in oncology ("CACON"), reviewed the bibliography on nurse navigators to create and implement this type of programme. The aim of this study is to find and review the production of scientific articles on nurse navigators in oncology and subsequently support any reflection on this type of service and the role of professional nurses.

## ■ METHOD

This is an integrative review, a method widely used internationally in nursing research and evidence-based practices because it can synthesise the findings of studies with different methodologies in the same review<sup>(10)</sup>. The six steps of the integrative review were the following: 1) identify the theme and create the guiding question of research; 2) define the criteria to include and exclude studies and choose the databases for searches; 3) define the information to be extracted from the selected studies and categorise this information; 4) review the selected studies; 5) interpret and discuss the results; and 6) apply the data analysis and synthesis proposal and present the produced knowledge<sup>(11)</sup>.

The guiding research question was the following: What is the knowledge in scientific papers regarding the theme "nurse navigator"? The inclusion criteria were freely accessible online scientific articles published in full; in Portuguese or Spanish or English; addressing the research question; and all study types without a defined publication period. The exclusion criteria were publications classified as editorial, letters, dissertations, theses, manuals, and protocols.

The online healthcare databases defined for the searches were the following: Latin American and Caribbean Health Sciences Literature ("LILACS"), Medical Literature Analysis and Retrieval System Online (MEDLINE/PubMed), SCOPUS, Web of Science, and the libraries Scientific Electronic Library Online ("SciELO"), and Science Direct. The ar-

ticles were identified in the databases from 26 August to 6 September 2016 using the controlled descriptors obtained from Health Sciences Descriptors (“DeCS”) and Medical Subject Headings (MeSH), namely patient; navigation; nur-

se; professional; cancer; oncology. Two uncontrolled descriptors were also used, namely navigator and navigators. The descriptors were combined using the Boolean operators “AND” and/or “OR” as shown in Chart 1.

Search steps	Combinations of keywords with Boolean operators
1 <sup>st</sup>	(patient navigator OR patient navigators OR patient navigation).
2 <sup>nd</sup>	(nurse navigator OR nurse navigators OR professional navigators OR oncology nurse navigator).
3 <sup>rd</sup>	(cancer patient navigator OR oncology patient navigator).
4 <sup>th</sup>	(patient navigator OR patient navigators OR patient navigation) AND (cancer patient navigator OR oncology patient navigator OR cancer navigation) AND (nurse navigator OR nurse navigators OR professional navigators OR oncology nurse navigator).

**Chart 1** - Descriptors combined with Boolean operators in each article search step

Source: Authors.

Initially, the authors identified the titles followed by the abstracts to ensure the papers met the criteria for inclusion. The countries of origin of the journals and the studied populations were also identified. As shown in Table 1, 395 papers were found in the searches, of which 292 were excluded after reading the titles. Of the remaining 103 papers

from the first selection, 74 were eliminated after reading the abstracts because they met one or more of the criteria for exclusion and 8 were repeated in other databases. After reading the articles in full, four were excluded because they did not directly address the studied subject. Therefore, the final sample consisted of 17 publications.

**Table 1** – Summary of database search and article selection

Database	Initial search		Reading of Abstracts	Reading of Full Article	Final
	Identified in the search	Excluded	Excluded	Excluded	Selected articles
LILACS	1	1	0	0	0
SCIELO	0	0	0	0	0
MEDLINE/PubMed	86	66	13	1	6
SCOPUS	39	27	6	1	5
Science Direct	174	150	19	0	5
Web of Science	83	36	44	2	1
COCHRANE	12	12	0	0	0
<b>TOTAL</b>	<b>395</b>	<b>292</b>	<b>82</b>	<b>4</b>	<b>17</b>

Source: Research data, 2016.

The articles were assessed and classified according to the scientific rigour and characteristics, resulting in a classification by level of evidence and grades of recommendation based on validity and reliability. In this step, we used an instrument based on the Rating System for the Hierarchy of Evidence for Intervention/Treatment Question to classify the studies by level of evidence<sup>(12)</sup>. This system is used to rate the quality of the research evidence in nursing<sup>(13)</sup>. In short, the levels refer to the following: Level I, systematic reviews or meta-analyses of randomised clinical trials; Level II, one or more

randomised clinical trials; Level III, controlled trials without randomisation; Level IV, case control and cohort studies; Level V, systematic reviews of descriptive and qualitative studies; Level VI, evidence of a single descriptive or qualitative study; and Level VII, reports of expert committees<sup>(12)</sup>.

## ■ RESULTS AND DISCUSSION

In relation to the characteristics of the reviewed articles, all the papers were published in international journals, na-

mely: Seminars in Oncology Nursing (n = 4); The American Journal of Surgery (n = 2); Current Oncology: A Canadian Cancer Research Journal (n = 1); Journal of the American Board of Family Medicine (n = 1); Journal Of Clinical Oncology (n = 1); BMC Health Services Research Journal (n = 1); Mayo Clinic Proceedings Journal (n = 1); European Journal of Cancer Care (n = 1); Journal of Radiology Nursing (n = 1); The Australian Journal of Nursing Practice, Scholarship and Research (n = 1); European Journal of Oncology Nursing (n = 1); General Hospital Psychiatry Journal (n = 1); and European Journal of Cancer: EJC Supplements (n = 1). The countries of origin of the studies were USA (n = 9); Canada (n = 4), Denmark (n = 2); Australia (n = 1); and Sweden (n = 1).

The studies on the subject were initiated recently, as the years of publication of the articles are 2009 (n = 1); 2010 (n = 2); 2012 (n = 1); 2013 (n = 5); 2014 (n = 3); 2015 (n = 3); and 2016 (n = 2).

The design of the studies was randomised trial (n = 3); literature review (n = 3); qualitative research (n = 3); quantitative research (n = 2); case study (n = 2); integrative review (n = 1); case studies (n = 1); reflection paper (n = 1); and mixed (qualitative and quantitative, n = 1). Thus, the studies

were classified with the following levels of evidence: 3 with Level II; 1 with Level IV; 6 with Level VI; and 2 with Level VII. However, five papers did not fit into the chosen system, so four of them were classified as Level VI (three literature reviews, one integrative review) and one as Level V (a mixed study, quantitative and qualitative).

The analysis of the findings resulted in the following thematic categories: Care Processes; Patients; and Health Workers. Charts 2, 3, and 4 show a summary of the articles included in this integrative review.

Internationally, patient navigation is a widely used strategy in oncology services. Patient navigation programmes are mostly managed by nurses and are therefore widely recognised mechanisms to ensure the continuity of cancer care<sup>(14-15)</sup>. In addition to management, nurses who act as navigators with patients, family members/caregivers, and the multidisciplinary healthcare team provide information on treatment, facilitate communication between the people involved, and identify and eliminate the barriers of the care process<sup>(14)</sup>. Their work has an effect on the care processes, on the lives of patients before, during and after treatment, and on the work of health professionals.

### Thematic Category Care Processes

Articles Found		
Objectives	Type and location of the study	Main results
To assess whether nurse navigators help to simplify the investigation and selection of new patients diagnosed with malignant neoplasms <sup>(14)</sup> .	Case study Canada	With the implementation of nurse navigators, the number of patients receiving systemic therapy increased, suggesting improvements in the patient selection and investigation process.
To investigate whether the actions of nurse navigators increases the number of colonoscopies in patients who test positive in colon cancer screening tests <sup>(16)</sup> .	Randomised controlled trial USA	Patients were divided: 70 without navigator and 70 with a nurse navigator. Without the navigator, 56 patients completed the investigation (colonoscopy) and 64 accompanied by the nurse navigator completed the investigation.
To know whether the activities of nurse navigators are effective to increase the participation of black cancer patients in clinical trials <sup>(17)</sup> .	Case study USA	The nurse navigators worked with the doctors to increase the participation of black cancer patients in studies and the greatest barrier to this increase is the absence of appropriate studies for this population.
To determine the impact of the navigator programme with nurse navigators during waiting times for the start of surgery <sup>(18)</sup> .	Quantitative cohort study with prospective data analysis Canada	The waiting times for surgery dropped (from 59 to 48 days on average) after the introduction of nurse navigators.
To reduce delays in diagnosing patients without health insurance with altered mammograms by implementing a navigator programme <sup>(19)</sup> .	Quantitative study, descriptive USA	The average interval between screening after the altered mammography and diagnosis was 60 days for patients with bi-rad 4 and 5 chances of cancer.

To describe the operation and implementation of the navigation programme with nurse navigators to obtain data on the incidence of lung cancer in screened women and the role/expertise of these navigators in the process <sup>(20)</sup> .	Experience study USA	Of the total patients in the programme (1,123), 48% were women. Fifty-three percent were diagnosed with lung cancer. Of these patients, most were diagnosed in the early stages of the disease, which validates the preventive screening measures.
To review the evolution and current situation of patient navigation in oncology care and its processes to optimise results associated with navigation and the functions of nurse navigators <sup>(21)</sup> .	Literature review Canada	Summary of the review on the history and evolution of navigation; the context of nursing in navigation; functions of nurse navigators; education and training for navigation; nurse navigator programme models; challenges in the practice of navigation; outcomes, evaluation, and tools to measure the effectiveness of programmes.
To discuss and describe the fundamental concepts that support the role of oncology nurse navigators for cancer patients <sup>(22)</sup> .	Literature review USA	Function of the oncology nurse navigator, by the Oncology Nurse Society (ONS): literature demonstrates that the functions of navigators are determined by the facilities where they work and the institutions where these programmes are offered.
To review literature on the navigation programme in a large healthcare centre in USA and support other navigation programmes in other centres <sup>(23)</sup> .	Literature review USA	Review of the functions of navigators; the development of navigation; functions of the nurse navigator and lay navigator; description of the patient navigation process; patient flow; efficiency and delay reduction, and programme considerations.
To describe the roles of nurse navigators based on the evolution of nursing care models, in the historical context of patient navigation, its functions and potential within the interdisciplinary care models in primary healthcare <sup>(24)</sup> .	Reflection paper Australia	Background of patient navigation and how this model was introduced in Australia; role, function, and history of nurse navigators describing how it was implemented in the country; construction of a nurse navigator model for the national healthcare system.

**Chart 2** - Summary of the articles included in the thematic category Care Processes

Source: Research data, 2016.

The articles included in this category address the impact of patient navigation carried out by nurses in cancer patient care, whether preventive, diagnostic, treatment or rehabilitation. Nurse navigation is considered a function and process with the same characteristics as other types of professional and lay navigators<sup>(21)</sup>. The role of the nurse navigator in the screening of patients at risk of developing neoplasms grants oncology doctors access to information that may influence future decisions in diagnostic investigations<sup>(14)</sup>.

A study assessed the performance of this professional in the screening of patients at risk of developing lung cancer and revealed a greater effectiveness in the process since patients diagnosed with the neoplasm initiated systemic treatment 10 days earlier than those diagnosed without the intervention of the nurse navigator<sup>(14)</sup>. In another study with patients with an early diagnosis of breast cancer, the

work of navigators reduced the waiting time of surgery by an average of nine days<sup>(18)</sup>. In contrast, according to another study that investigated whether intervention with patients with a colon cancer screening test (faecal occult blood) could effectively increase the number of colonoscopies for the diagnosis of neoplasm, the intervention in the process did not significantly change the result<sup>(16)</sup>. According to these studies, not all processes will be benefited by the intervention of nurse navigators and the outcome of this intervention depends on the moment in which it occurs. Literature suggests that navigation and the functions of navigators start at the beginning of cancer treatment (screening and diagnosis) to achieve the desired outcomes<sup>(22)</sup>.

Navigation programmes have been widely used in countries like the USA, Canada, and Australia to optimise processes and overcome barriers patients confront when

seeking treatment and healthcare services and systems. Consequently, different navigation models have been designed according to the characteristics of the locations in which they will be implemented. Essentially, however, they share the same concept and main objective.

Although these programmes have existed for more than two decades in these countries, defining the processes and functions, preparing and qualifying navigators, and conducting more research on this subject are still important challenges<sup>(21,23)</sup>. According to a study that describes the implementation of a navigator programme for women without health insurance and mammograms with abnormal findings, the work of nurse navigators is effective in targeting processes to define the diagnosis of these patients<sup>(19)</sup>. One of the biggest difficulties and the most evident barrier is the problems patients face when seeking specialised services to define the diagnosis, which delays treatment<sup>(19)</sup>.

A considerable challenge of patient navigator programmes is finding sensitive, reliable, and validated methods to assess the effectiveness of navigation and measure whether the planned outcomes were achieved<sup>(15)</sup>. These data are important for managers and other professionals invol-

ved to assess the impact of navigation in their processes and they are essential for the success, sustainability and future of these services<sup>(15)</sup>.

The functions of navigators in these programmes are defined by the facilities and services where they perform their activities<sup>(22)</sup>. Experienced oncology nurses working as navigators have the required knowledge of disease processes to provide patient-centred services within the continuum of care<sup>(22)</sup>. The performance of navigators in oncology has a positive effect on patients and health teams because it promotes the continuity of care and enhances care and communication processes<sup>(22)</sup>. Communication problems between health workers is one of the main barriers of the continuity of care; however, an efficient navigation programme helps to establish closer working relationship and enables communication<sup>(20)</sup>. A study conducted in Australia<sup>(24)</sup> described the evolution of navigation models in primary care and concluded that nurse navigators in these programmes can be an innovative way for patients to complete their trajectory smoothly in the future in the health system<sup>(24)</sup>. This finding also reinforces the importance of these workers with the multidisciplinary team in health promotion and patient self-care<sup>(22,24)</sup>.

### Thematic Category Patients

Articles found		
Objectives	Type and location of the study	Main results
To investigate whether the intervention of nurse navigators influences the development of depressive symptoms of patients with initial diagnosis of lung, breast, and colorectal cancer <sup>(25)</sup> .	Randomised controlled trial USA	Fifty-five percent of the research participants did not have initial symptoms of depression; 31% had mild symptoms of depression at the moment of diagnosis; 14% had moderate to severe depression at the moment of diagnosis.
To determine whether nurse navigators help improve the quality of life of patients with an initial diagnosis of breast, colorectal, and lung cancer <sup>(7)</sup> .	Randomised controlled trial USA	Significant differences in quality of life were found among the groups of patients in the study. Those assisted by a nurse navigator had higher quality-of-life scores and lower scores for care-related problems (psychological assistance, coordination of care, and information).
To explore the type of patient that could benefit from the help of nurse navigators in the initial stage of cancer treatment <sup>(26)</sup> .	Qualitative study with phenomenological and hermeneutical approach Denmark	Nurse navigators improved the relationship of trust between patients and the healthcare team and helped patients feel more supported during their trajectory. It was not possible to determine which type of patient could benefit from this extra help, suggesting the need to conduct further studies on the subject.

Articles found		
To investigate who benefits from the help of nurse navigators and the meaning of these workers for patients with gynaecological cancer <sup>(27)</sup> .	Longitudinal, hermeneutical, and phenomenological study Denmark	Issues raised about the meaning of patient-nurse navigator relations: patient trust in health workers after contact with the nurse navigator and the meaning of this relationship with the nurse navigator for these women. It was not possible to determine who could actually benefit from this intervention.
To investigate the level of patient satisfaction with the follow-up and orientation of nurses and the nurse navigator <sup>(28)</sup> .	Mixed (qualitative and quantitative) Sweden	Patient satisfaction with the work of nurses remained steady during the research years (2007, 2009, 2011, 2013) — more than 90% of patients responded that they were satisfied and contact with the same nurse was important, while 52% of patients reported they were designated a worker called a nurse navigator (a nurse working as a navigator) and they were satisfied with the performance of this worker.

**Chart 3** - Summary of the articles included in the thematic category Patients

Source: Research data, 2016.

Cancer treatment can be extremely frightening and stressful for most patients<sup>(26)</sup>. Uncertainty, anxiety, and concerns are usually reported by individuals during the trajectory<sup>(26)</sup>. Patients diagnosed with cancer must make decisions that can completely change their lives while having to deal with an often fragmented healthcare system<sup>(7)</sup>. This often increases the suffering of having to cope with a diagnosis that puts their future at risk<sup>(7)</sup>. Moreover, the search for specialised care and the difficulties they face in this process delays access to the treatment they need, causing an extra dose of anxiety and insecurity about their future<sup>(25)</sup>. The articles included in this category addressed the effects of navigation provided by nurses in the lives of patients.

Sick people are at higher risk of developing depression<sup>(25)</sup>. In the context of a recent cancer diagnosis, sufferers can exhibit significant depressive symptoms that hinder their capacity to cope with the disease, follow treatment and therapeutic regimes, and commit to self-care, which affects the outcomes<sup>(25)</sup>. A study conducted in the USA investigated whether the intervention of nurse navigators influenced the onset of depressive symptoms in patients recently diagnosed with cancer<sup>(25)</sup>. The study found that the support of nurse navigators benefited these patients since it had a positive effect on those who already had the symptoms at the moment of diagnosis and those who did not exhibit these symptoms<sup>(25)</sup>. The work of nurse navigators improves the quality of life of patients, guides them toward a better perception of care during

treatment, and reduces the occurrence of problems related to psychosocial issues, the coordination of care, and access to information<sup>(7,29)</sup>.

In relation to the type of patient who could benefit from the support of nurse navigators, a study conducted in Denmark found that all could and/or should be offered the help of these workers; however, it did not conclude how to identify such patients<sup>(26-27)</sup>. Consequently, new studies are needed to provide vital information for other healthcare workers and managers who wish to implement this programme in the service in view of its cost-effectiveness<sup>(17,27)</sup>.

In terms of the patient-nurse navigator relationship, another study also conducted in Denmark addressed the meaning of these workers to the navigated patients<sup>(26)</sup>. According to this study, the relationship of trust and empathy between navigator and patient is one of the key points of this work<sup>(20,27)</sup>. When patients accompanied by these workers establish a relationship of trust, they feel emotionally supported, more involved with treatment (empowered) and, consequently, more capable of planning their future and of making the necessary decisions to direct their lives<sup>(7,14)</sup>.

Research conducted in Sweden investigated patient satisfaction with the performance of navigators and identified satisfied patients who considered the work of navigators necessary in the care process<sup>(28)</sup>. In this same research, the exception was identified in the aspects related to the continuity of care and information since the patients thought these areas needed improvements.

## Thematic Category Health Workers

Articles found		
Objectives	Type and location of the study	Main results
To know the evolution and outcomes of patient navigation from the perspective of nurses and to measure the impact of this process <sup>(15)</sup> .	Integrative review USA	Evolution and measurement of outcomes: Access to healthcare needs of the community; Measuring the outcomes and assessing measuring instruments.
To explore patient navigation especially provided by nurses and their performance during the diagnostic stage of cancer <sup>(29)</sup> .	Qualitative research with data collection by interviews and focus group Canada	There is fairly limited literature on the impact and effectiveness of the programmes. The role of nurses as navigators differs in relation to the work of other professionals because navigators have the knowledge and skills needed to support patients in the range of experiences during the treatment trajectory and they work with the coordination of care.

**Chart 4** - Summary of the articles included in the thematic category Health Workers

Source: Research data, 2016.

In this thematic category, the articles addressed the impact of nurses working as patient navigators on the work of health professionals involved in cancer care.

Patient navigation has the potential to positively affect the range of outcomes of cancer patient care<sup>(15)</sup>. Navigators can be health workers, called professional navigators, or people without health education, called lay navigators<sup>(15)</sup>. Nurses are trained to anticipate and understand the impact a cancer diagnosis has on patients and their families<sup>(29)</sup>. Planned and unexpected hospital admissions and the emotional and financial impact of treatment call for additional patient support<sup>(29)</sup>. They have the knowledge and skills needed to directly intervene in these areas because they accompany patients during the entire trajectory<sup>(29)</sup>. In oncology, these workers have sustained the position of navigators in a wide range of international programmes by working with interdisciplinary teams and directing their actions to collaboratively obtain the desired patient outcomes<sup>(15)</sup>.

Nurse navigators have a positive impact on both the patient and the healthcare team since they promote the continuity of care, help improve processes, better direct patient needs, and reduce the barriers patients confront when they seek oncology care<sup>(22)</sup>. Given the knowledge base and practical skills needed for patient navigation, in 2013, the Oncology Nursing Society (ONS) conceived and published the Oncology Nurse Navigator Core Competencies describing the knowledge and skills nurses must have or acquire in the first one or two years as navigators<sup>(22,30)</sup>.

Other health workers and trained lay persons can work as navigators to help patients overcome barriers related to oncology care during the treatment stages<sup>(22)</sup>. Only an experienced oncology nurse, however, has the specific and specialised knowledge and skills needed for clinical reasoning during navigation, particularly in the diagnostic stage<sup>(22,29)</sup>. The benefits of using nurse navigators include the capacity to coordinate the continuum of oncology care, manage the complexity of treatment, educate patients and family members, enable integration with the multidisciplinary team, and improve communication and the care process of institutions<sup>(29)</sup>.

## ■ CONCLUSIONS

The articles reviewed on the chosen subject focused on three points: care-related processes; the lives of patients during cancer treatment; and the work of health professionals, especially nurses acting as patient navigators. The knowledge and process of nursing work focuses on care and assisting patients in all dimensions (physical, emotional, psychosocial, and family) in order to understand care as a whole, be it preventive, curative or for rehabilitation during cancer treatment. These findings reveal that navigation programmes with nurses as the coordinators of care and enablers of the continuum of care provide patients and health services and systems with a unique service that can potentially improve the quality of healthcare. Although studies on this subject

are recent, further research is needed to shed light on the role and performance of nurse navigators.

This integrative review also provides evidence that scientific knowledge on the subject of nurse navigators is mostly produced in countries like the United States of America, Australia, Canada, Sweden, and Denmark, where the first patient navigation programmes were implemented. All the studies identified in this review were published in international journals and studies by authors from Brazil or Latin America or with these populations were not found. The absence of national references with which to compare work conducted in other countries is an important limitation of this study. It was concluded that the figure of the nurse navigator is not the focus of studies and research in Brazil or in Latin America. It was also found that this area of professional performance was conceived in oncology patient care, a specialty from which the first patient navigators emerged and the target of most navigation programmes. We hope that this review helps and encourages Brazilian nurses to plan and implement navigation programmes and publish papers on national experiences. This paper can contribute to education and research.

## ■ REFERENCES

- Freeman HP, Rodriguez RL. History and principles of patient navigation. *Cancer*. 2011 [cited 2016 Aug 27];117(15 Suppl):3539-42. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4557777/>.
- Wells KJ, Battaglia TA, Dudley DJ, Garcia R, Greene A, Calhoun E, et al. Patient navigation: state of the art or is it science? *Cancer*. 2008 [cited 2016 Aug 27]; 113(8):1999-2010. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/18780320>.
- Carroll JK, Humiston SG, Meldrum SC, Salamone CM, Jean-Pierre P, Epstein R, et al. Patients' experiences with navigation for cancer care. *Patient Educ Couns*. 2010 [cited 2016 Aug 28];80(2):241-7. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/20006459>.
- Shejila CH, Mamatha SP, Fernandes DJ. Oncology nurse navigator programme: a narrative review. *Nitte Univ J Health Sci*. 2015 Mar [cited 2016 Aug 26];5(1):103-7. Available from: <http://nitte.edu.in/journal/december2014/ONNP.pdf>.
- Smith J. Patient navigator's role definition. Boiling Springs: Hunt School of Nursing, Gardner-Webb University; 2014 [cited 2016 Aug 26]. Nursing theses and capstone projects. paper 37. Available from: [http://digitalcommons.gardnerwebb.edu/cgi/viewcontent.cgi?article=1036&context=nursing\\_etd](http://digitalcommons.gardnerwebb.edu/cgi/viewcontent.cgi?article=1036&context=nursing_etd).
- Taddeo OS, Gomes KWL, Caprara A, Gomes AMA, Oliveira GC, Moreira TMM. Acesso, prática educativa e empoderamento de pacientes com doenças crônicas. *Ciênc Saúde Coletiva*. 2012 [cited 2016 ago 10]; 7(11):2923-30. Disponível em: <http://www.scielo.br/pdf/csc/v17n11/v17n11a08.pdf>.
- Wagner EH, Ludman EJ, Aiello Bowles EJ, Penfold R, Reid RJ, Rutter CM, et al. Nurse navigators in early cancer care: a randomized, controlled trial. *J Clin Oncol*. 2014 [cited 2016 Aug 29];32(1):12-8. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3867643/>.
- Hospital Dr. Helio Angotti [Internet]. Uberaba: O Hospital; c2009-2016 [cited 2016 ago 10]. Parceria internacional orienta pacientes com câncer de mama; [aprox. 2 telas]. Disponível em: [http://www.helioangotti.com.br/noticiasMaterias\\_.asp?cod=589](http://www.helioangotti.com.br/noticiasMaterias_.asp?cod=589).
- Macedo T. Parceria internacional orienta pacientes com câncer de mama [Internet]. *JM Online*. 2014 ago 23 [cited 2016 ago 16]. Disponível em: <http://jmonline.com.br/novo/?noticias,7,SAUDE,98558>.
- Soares CB, Hoga LAK, Peduzzi M, Sangaleti C, Yonekura T, Silva DRAD. Revisão integrativa: conceitos e métodos utilizados na enfermagem. *Rev Esc Enferm USP*. 2014 abr [cited 2016 ago 12];48(2):335-45. Disponível em: [http://www.scielo.br/scielo.php?pid=S0080-62342014000200335&script=sci\\_arttext&tlng=pt](http://www.scielo.br/scielo.php?pid=S0080-62342014000200335&script=sci_arttext&tlng=pt).
- Mendes KDS, Silveira RCCP, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. *Texto Contexto Enferm*. 2008 out-dez [cited 2016 ago 11];17(4):758-64. Disponível em: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0104-07072008000400018](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-07072008000400018).
- Melnik BM, Fineout-Overholt E. Evidence-based practice in nursing & healthcare: a guide to best practice. 2nd ed. Philadelphia: Lippincott Williams & Wilkins; 2011.
- Galvão CM, Sawada NO, Mendes IAC. A busca das melhores evidências. *Rev Esc Enferm USP*. 2003 [cited 2016 ago 30];37(4):43-50. Disponível em: <http://www.scielo.br/pdf/reeusp/v37n4/05.pdf>.
- Zibrik K, Laskin J, Ho C. Integration of a nurse navigator into the triage process for patients with non-small-cell lung cancer: creating systematic improvements in patient care. *Curr Oncol*. 2016 [cited 2016 Aug 26];23(3):e280-3. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4900849/>.
- Crane-Okada R. Evaluation and outcome measures in patient navigation. *Semin Oncol Nurs*. 2013 [cited 2016 Sep 5];29(2):128-40. Available from: [http://www.seminaroncologynursing.com/article/S0749-2081\(13\)00018-1/fulltext](http://www.seminaroncologynursing.com/article/S0749-2081(13)00018-1/fulltext).
- Green BB, Anderson ML, Wang CY, Vernon SW, Chubak J, Meenan RT, et al. Results of nurse navigator follow-up after positive colorectal cancer screening test: a randomized trial. *J Am Board Fam Med*. 2014 [cited 2016 Sep 2];27(6):789-95. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/25381076>.
- Holmes DR, Major J, Lyonga DE, Alleyne RS, Clayton SM. Increasing minority patient participation in cancer clinical trials using oncology nurse navigation. *Am J Surg*. 2012 [cited 2016 Sep 2];203(4):415-22. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/21996347>.
- Baliski C, McGahan CE, Liberto CM, Broughton S, Ellard S, Taylor M, et al. Influence of nurse navigation on wait times for breast cancer care in a Canadian regional cancer center. *Am J Surgery*. 2014 [cited 2016 Sep 2]; 207(5):686-92. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/24791628>.
- Palmieri FM, Deperi ER, Mincey BA, Smith JA, Wen LK, Chewar DM, et al. Comprehensive diagnostic program for medically underserved women with abnormal breast screening evaluations in an urban population. *Mayo Clin Proc*. 2009 [cited 2016 Sep 4];84(4):317-22. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2665975/>.
- Rosario M, McKinney M, Alcott S. Lung Screening Programs and the effectiveness of the Lung Screening Navigator. *J Radiol Nurs*. 2016 [cited 2016 Sep 4];35(2):138-41. Available from: [http://www.radiologynursing.org/article/S1546-0843\(16\)30007-4/fulltext](http://www.radiologynursing.org/article/S1546-0843(16)30007-4/fulltext).
- Cantril C, Haylock PJ. Patient navigation in the oncology care setting. *Semin Oncol Nurs*. 2013 [cited 2016 Sep 4];29(2):76-90. Available from: [http://www.seminaroncologynursing.com/article/S0749-2081\(13\)00013-2/fulltext](http://www.seminaroncologynursing.com/article/S0749-2081(13)00013-2/fulltext).
- McMullen L. Oncology nurse navigators and the continuum of cancer care. *Semin Oncol Nurs*. 2013 [cited 2016 Sep 4];29(2):105-17. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/23651680>.
- Shockney LD, Haylock PJ, Cantril C. Development of a breast navigation program. *Semin Oncol Nurs*. 2013 [cited 2016 Sep 4];29(2):97-104. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/23651679>.
- McMurray A, Cooper H. The nurse navigator: an evolving model of care. *Collegian*. 2016 [cited 2016 Sep 4];24(2):205-12. Available from: [http://www.collegianjournal.com/article/S1322-7696\(16\)00003-2/pdf](http://www.collegianjournal.com/article/S1322-7696(16)00003-2/pdf).

25. Ludman EJ, McCorkle R, Bowles EA, Rutter CM, Chubak J, Tuzzio L, et al. Do depressed newly diagnosed cancer patients differentially benefit from nurse navigation? *Gen Hosp Psychiatry*. 2015 May-Jun [cited 2016 Sep 4];37(3):236-9. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/25835508>.
26. Thygesen MK, Pedersen BD, Kragstrup J, Wagner L, Mogensen O. Gynecological cancer patients' differentiated use of help from a nurse navigator: a qualitative study. *BMC Health Serv Res*. 2012 Jun 21 [cited 2016 Sep 4];12:168. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/22721253>.
27. Thygesen MK, Pedersen BD, Kragstrup J, Wagner L, Mogensen O. Nurse navigation is helpful for cancer patients, but with some restrictions. *EJC Suppl*. 2013 [cited 2016 Sep 5];11(2):294-5. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4041311/>.
28. Berglund CB, Gustafsson E, Johansson H, Bergenmar M. Nurse-led outpatient clinics in oncology care - patient satisfaction, information and continuity of care. *Eur J Oncol Nurs*. 2015 [cited 2016 Sep 5];19(6):724-30. Available from: <https://www.ncbi.nlm.nih.gov/labs/articles/26071199/>.
29. Gilbert JE, Green E, Lankshear S, Hughes E, Burkoski V, Sawka C. Nurses as patient navigators in cancer diagnosis: review, consultation, and model design. *Eur J Cancer Care (Engl)*. 2011 [cited 2016 Sep 5];20(2):228-36. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/20955374>.
30. Oncology Nursing Society. Oncology nurse navigator core competencies. Pittsburgh: NOS; 2013 [cited 2016 Sep 5]. Available from: [https://www.ons.org/sites/default/files/ONNCompetencies\\_rev.pdf](https://www.ons.org/sites/default/files/ONNCompetencies_rev.pdf).

■ **Corresponding author:**

Fernanda Felipe Pautasso

E-mail: [enfermeirafpautasso@hotmail.com](mailto:enfermeirafpautasso@hotmail.com)

Received: 05.24.2017

Approved: 08.25.2017