Article

Design and Validity of a Patient Navigation Program for Adults with Cancer Undergoing Chemotherapy

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Theme: Care processes and practices

Contribution to the field: The navigation program for adults with cancer undergoing chemotherapy is now established and available for use in clinical nursing practice and future studies. It seeks to support knowledge transfer through a healthcare model that improves access to treatment and continuity of care. To this end, it is essential to identify needs or barriers, promote self-management behaviors, educate patients about symptoms and side effects, and empower patients. Further experimental approaches are required to confirm the effectiveness of the program in the defined variables of interest.

Abstract

Introduction: Consolidating oncology navigation programs is required as a strategy to address system-fragmentation barriers, facilitate access to treatment, and educate patients on shared decision-making. **Objective:** To develop a professional navigation program for cancer patients undergoing chemotherapy, to promote appropriate symptom management and foster self-management. **Materials and Methods:** A methodological research study was conducted to develop a navigation program using the ADDIE methodology, which comprises analysis, design, development, implementation, and evaluation, with only the first three elements being addressed. Content validity was assessed by eight clinical oncology experts. **Results:** The program adopts the conceptual framework of professional navigation. Eight sessions were designed to address the dimensions of facilitating continuity of care and promoting patient empowerment. Content validity with experts showed high acceptability (CVC 0.82) and usefulness (CVC 0.8) of the intervention, as well as coherence with the conceptual framework. **Conclusion:** A chemotherapy navigation program was obtained that addresses self-management behaviors and the management of treatment-related symptoms. It is necessary to continue its implementation and evaluation through an experimental study.

Keywords (Source: DeCS)
Oncologic nursing; health education; patient navigation; neoplasms; chemotherapy.

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Diseño y validez de un programa de navegación para adultos con cáncer en quimioterapia

Resumen

Introducción: se requiere consolidar programas de navegación en oncología como estrategia para abordar las barreras de fragmentación del sistema, facilitar el acceso a los tratamientos y educar para la toma de decisiones compartidas del paciente. **Objetivo**: desarrollar un programa de navegación profesional para pacientes con cáncer en tratamiento de quimioterapia, con el fin de promover un manejo adecuado de los síntomas y fomentar el automanejo. **Método:** investigación metodológica que desarrolló un programa de navegación, según la metodología ADDIE, que consiste en el análisis, diseño, desarrollo, implementación y evaluación, con el abordaje de los primeros tres elementos. Se acudió a validación de contenido con ocho expertos clínicos en oncología. **Resultados:** el programa acoge el marco conceptual de navegación profesional. Se diseñaron ocho sesiones de forma que se cubrieran las dimensiones de facilitación de la continuidad del cuidado y promoción del empoderamiento del paciente. La validez de contenido con los expertos reportó alta aceptabilidad (CVC 0,82) y utilidad (CVC 0,8) de la intervención, así como coherencia con el marco conceptual. **Conclusiones**: se obtiene un programa de navegación en quimioterapia que aborda los comportamientos de automanejo y el manejo de los síntomas derivados del tratamiento. Es necesario continuar con la implementación y evaluación mediante un estudio experimental.

Palabras clave (Fuente DeCS)
Enfermería oncológica; educación en salud; navegación de los pacientes; neoplasias; quimioterapia.

Desenho e validação de um programa de navegação para adultos com câncer em quimioterapia

Resumo

Introdução: É necessário consolidar os programas de navegação em oncologia como estratégia para superar as barreiras de fragmentação do sistema, facilitar o acesso a tratamentos e educar para a tomada de decisão compartilhada dos pacientes. **Objetivo:** desenvolver um programa profissional de navegação para pacientes com câncer em tratamento de quimioterapia, com o propósito de promover o manejo adequado dos sintomas e incentivar a automanejo. **Materiais e método:** Trata-se de uma pesquisa metodológica que desenvolveu um programa de navegação segundo a metodologia ADDIE, que compreende análise, desenho, desenvolvimento, implementação e avaliação, abordando-se os três primeiros elementos. A validação de conteúdo foi realizada com oito especialistas clínicos em oncologia. **Resultados:** O programa adota o referente conceitual da navegação profissional. Foram planejadas oito sessões destinadas a contemplar as dimensões de facilitar a continuidade do cuidado e promover o empoderamento do paciente. A validação de conteúdo apresentou alta aceitabilidade (CVC 0,82) e utilidade (CVC 0,8), além de coerência com o referente conceitual. **Conclusões:** Foi desenvolvido um programa de navegação em quimioterapia que aborda comportamentos de automanejo e o manejo dos sintomas derivados do tratamento. É necessário prosseguir com a implementação e avaliação por meio de um estudo experimental.

Palavras-chave (Fonte DeCS)
Enfermagem oncológica; educação em saúde; navegação dos pacientes; neoplasias; quimioterapia.

Introduction

Cancer is the leading cause of death worldwide. In 2020, nearly ten million deaths were attributed to this disease. The World Health Organization (WHO) reports that low- and middle-income countries bear the greatest burden of cancer, accounting for more than 70% of deaths (1). In response to the growing concern about cancer, the Sustainable Development Goals (2) have focused on reducing premature deaths and improving well-being among survivors. For this reason, both effective treatment and continuity of healthcare and treatment are crucial.

Professional patient navigation is structured to facilitate continuity of care, encompassing aspects of information, management, and relational continuity, and to promote education in concepts such as self-management, active coping, and supportive services. Each concept is applied by connecting detailed, timely, and adequate intervention contents throughout the treatment process to improve satisfaction with the treatment experience (3, 4). This differs from conventional standardized education methods, as it involves structured, individualized interventions that provide information and treatment-aligned adjustments, along with emotional support and the integration of dispersed information (5). It should be noted that professionals who provide patient navigation programs are nurses with clinical experience, communication and problem-solving skills, educational competencies, and an in-depth understanding of the healthcare system; in addition, they ensure access to treatment, identify patients' needs, and coordinate medical services (6, 7).

These patient navigation programs have been shown to have positive effects on individuals at risk for or diagnosed with cancer because they reduce the interval between diagnosis and treatment initiation, enhance patients' and caregivers' knowledge, and improve treatment adherence and quality of life (8-11). Likewise, in clinical settings, patients and their families have been supported in overcoming healthcare system barriers by providing individualized support and facilitating timely engagement in informed decision-making and access to high-quality healthcare and psychosocial therapies throughout all stages of treatment. Regarding symptom management, these programs improve quality of life and reduce symptom severity such as mucositis, dysphagia, and pain (9); they also reduce anxiety and uncertainty, increase resilience (12), and decrease hospital readmissions due to preventable complications.

Furthermore, the symptom experience of cancer patients is multicausal and influenced by factors such as tumor type, disease stage, and specific treatment (13), as well as by patients' understanding of the phenomenon's complexity, perceptions, and underlying causes (14). Chemotherapy is the most common and frequently used treatment for oncologic diseases and is responsible for multiple immediate side effects (hypotension, generalized and facial flushing, taste alterations), intermediate-term side effects (nausea, vomiting,

gastrointestinal disorders, mucositis), and long-term side effects (fatigue, alopecia, renal toxicity, and sexual dysfunction, among others) (15). An ineffective approach can lead to interruptions and delays in treatment with negative implications for survival (16), quality of life, and adherence to therapy (17).

It is important to note that the meanings patients attribute to the disease are considered mediators of responses to the diagnosis and treatment of the oncologic disease (18). These meanings may be culturally dependent and interact in distinctive ways in health-related quality of life and how individuals manage chemotherapy-related symptoms. In this regard, the development of patient navigation interventions centered on patients' real needs, with an emphasis on self-management, is considered pivotal (19).

Although there are previous studies on cancer patient navigation experiences, they do not address symptoms in the local context. For this reason, the study aimed to design and validate a nursing-led patient navigation program for patients with cancer undergoing chemotherapy, with an emphasis on symptom self-management and the expectation to generate evidence for clinical practice that promotes effective symptom control, improving patients' quality of life.

Materials and Methods

The research was conducted within the framework of professional patient navigation between August 2023 and November 2024. The first three of the five stages of the ADDIE instructional design model were applied: analysis, design, and development, followed by implementation and evaluation (20). During the analysis stage, relevant factors and necessary content were identified; in the design stage, the resources, objectives, and associated activities were defined; and during the development stage, a pilot version of the program was created, and its feasibility was validated by experts.

- *Analysis and Design Stage:* Based on a review of national and international literature, a prior assessment conducted by the research group on symptom burden and self-management behaviors among adults with cancer undergoing chemotherapy, and the patient navigation framework, the objectives and content of the chemotherapy patient navigation program were analyzed. Intervention strategies were also established, including the most appropriate delivery methods, implementation settings, timing, and frequency.

- *Intervention Development Stage:* Based on the professional navigation framework, the intervention components, the timing of implementation, and the delivery method identified in the analysis phase were developed.

The professional navigation framework is a health service delivery model that was established with the aim of overcoming barriers faced by patients with cancer, such as fragmentation of medical services, delays, lack of information and coordination, and insufficient guidelines. In addition, it aims to provide timely information about the disease, its treatment, and the available resources, facilitating better communication between healthcare professionals and patients. The professional navigation framework is patient-centered and encompasses concepts of informational continuity, management continuity, and relational continuity, as well as active coping, self-management, supportive care, follow-up, and empowerment (4).

- *Content Validation by Experts:* To ensure the validation of the content of the navigation program, an oncology expert reviewed the preliminary intervention outline. Subsequently, eight clinical experts, contacted via email, evaluated the proposed intervention outline. The inclusion criteria for experts were: nurses with a specialization or master's degree in oncology nursing and at least four years of experience in chemotherapy.

An ad hoc questionnaire was designed to assess the acceptability and usefulness of the activities, as well as the delivery method and dose of each session. For each session, the objective, activities to be performed, time, responsible professional, and evaluation indicators are specified. Each expert rated the intervention contents on a Likert scale ranging from not at all appropriate (1 point) to very appropriate (4 points). The content validity coefficient (CVC) for each item was calculated as follows: CVC = $\frac{Mx}{Vmax}$, where M_x is the item's mean score rated by the experts, and V_{max} is the maximum score that the item can obtain. Results greater than 0.75 were considered acceptable (21).

The study was approved by the Research Ethics Committee of the Faculty of Nursing at the Universidad Nacional de Colombia, Approval No. 020-23, Minuta 13, July 24, 2023. Experts' participation was voluntary, and the informed consent procedures were followed.

Results

The intervention was developed through the following sequential stages:

- *Analysis:* It was determined that the objectives of the program would be 1) to increase self-management behaviors, 2) to reduce symptom burden, 3) to provide education on the management of the most prevalent symptoms, 4) to improve user satisfaction, and 5) to reduce barriers to accessing care.

The intervention included an initial nursing consultation, educational sessions, and telephone follow-up for eight to twelve weeks from the start of chemotherapy.

A nursing consultation is proposed to conduct a comprehensive assessment at the start of treatment to establish navigation goals in collaboration with the patient, assess experienced barriers and symptoms, and guide the individualized care plan. In addition, educational materials and the symptom monitoring form are provided based on the nature of the oncologic condition and the characteristics of the chemotherapy regimen.

For adequate symptom control, education tailored to patients' individual characteristics regarding the self-management of chemotherapy-related side effects was considered pivotal. Educational sessions should begin within one week of treatment initiation and include very brief follow-up sessions every two weeks to assess, together with the patient, the presence of treatment-related symptoms, as well as compliance with each proposed activity, including psychological and social support.

The intervention should be led by oncology-trained nurses with communication and coordination skills across clinical and administrative areas.

The expected outcomes of the individualized plan focus on goals jointly agreed upon with the patient and include learning to identify and assess symptoms; recognizing side effects; knowing when to seek medical care or consult health services; learning how to use prescribed medications such as premedication correctly; maintaining activities of daily living; learning how to ask for help; and learning how to navigate administrative procedures, among others.

- *Design:* The effects of the navigation program will be assessed through changes in the variables of interest: self-management behaviors and symptom scale scores.

The educational content and material derived from it must apply to the clinical and patient care settings, with an initial in-person session led by a nurse in a physical space designated by the institution.

Patients must assess their symptoms, which involves educating them on the use of symptom-assessment tools and on documenting symptoms in a symptom diary. The educational material and the diary or symptom monitoring form are developed in accordance with guidelines for the management of chemotherapy-related side effects and have been validated by clinical oncology professionals and patients for clarity and satisfaction with the proposed format.

Ongoing, consistent communication among the medical team in the chemotherapy units is encouraged to ensure follow-through on the plan agreed upon with the patient.

The assessment of symptom patterns, adjustments to therapy for potential side effects, and additional interventions, including

emotional and social support, are conducted through a weekly telephone follow-up schedule or an in-person consultation, depending on the patient's condition and the options available at the institution.

Active strategies are used to promote communication between the medical team and patients regarding symptom management and patient-reported barriers to accessing timely care. This is how presentation and follow-up sessions in the patient navigation program are conducted, with the participation of medical oncologists, psychologists, social workers, and representatives from insurance companies and/or administrative entities.

This includes guidance with social workers and administrative entities on matters related to social support services, appointment scheduling, care or referral pathways, and the healthcare provider network.

A space for remote guidance is provided to answer questions about symptom management through email, WhatsApp, and other technological tools available to the patient and supported by the institution.

- *Development:* The program was structured and organized based on the elements identified in the analysis and design phases and guided by the defined framework. Eight sessions were structured (two in-person and six via telephone) to address all the elements proposed in the framework (Table 1).

Table 1. Professional Navigation Framework and Its Integration with the Proposed Program Sessions

Dimension	Concept	Process and Function	Session
Facilitating continuity of care	Informational continuity	Providing information about patients with cancer and their care. Working closely with the interdisciplinary team to improve continuity of the information and knowledge of family and patients' needs and changes. Using communication tools and strategies to increase continuity of information.	1-2
	Management continuity	Conducting assessments of patients' needs and available resources. Identifying resource gaps and coordinating temporary solutions. Informing about system barriers and deficiencies. Explaining the treatment plan. Mapping continuum of care. Establishing a rapid coordination link with medical and psychosocial care. Contributing to interprofessional collaboration in community settings.	2-5
	Relational continuity	Initiating and maintaining an ongoing relationship with the patient. Mapping the cancer trajectory, how the professional navigator is involved, and for how long. Being part of an oncology team and establishing trust among administrators and team members.	1-2

Dimension	Concept	Process and Function	Session
Promoting patient empowerment	Active coping	Assisting the patient and family to actively obtain information, support, and the referrals they needed. Reinforcing the patient's and family's sense of autonomy, self-management, and self-determination through education and support to maintain their sense of control and quality of life. Facilitating problem-solving and supporting decision-making. Setting and prioritizing shared goals.	5-6-7
	Self-management	Assessing and monitoring symptoms. Providing or facilitating symptom management. Assisting and reinforcing the patient in adjusting and managing his or her symptoms proactively. Self-care instructions. Assisting in following treatment plans. Supporting how to negotiate care. Educating and training in self-management skills.	2-4-6-8
	Supportive care	Providing referral to supportive care through screening, assessment, direct care, and intervention. Supporting the patient and family to mobilize their own resources and to explore new ones. Identifying structural barriers limiting access to supportive care and suggesting ways to address them; assisting and facilitating the development of community and healthcare resources (leadership).	1-2

Source: Adapted from (4).

A call guide was developed that includes key questions to address and guidance to ensure continuity of care if an emergency department consultation is required due to the presence of hard-to-manage symptoms. Three of the eight sessions emphasize adaptation to daily living, improving coping mechanisms, self-management, and empowerment (Table 2).

Table 2. Outline of the Chemotherapy Navigation Program

Session	Contents	Duration	Method
Initiating navigation	Comprehensive evaluation: cancer diagnosis and current status. Current chemotherapy treatment. Support system evaluation. Setting goals and plans for symptom management. Education on chemotherapy and its side effects. Delivering educational materials. Guidance on symptom recording. Guidance on healthcare provider networks. Guidance on additional support programs (psychology, social work, etc.). Contact information.	30 minutes	In-person session in the chemotherapy unit

Session	Contents	Duration	Method
Addressing barriers	Reviewing symptom recording for the past week. Addressing and discussing psychological symptoms such as anxiety and stress. Addressing effective ways of coping with feelings associated with the disease and treatment. Identifying barriers associated with treatment. Developing solutions to potential barriers. Referral to support groups.	30 minutes	In-person session in the chemotherapy unit
Navigating my treatment	Reviewing symptom recording for the past week. Reinforcing education on symptoms and side effects. Adjusting navigation plan activities.	20 minutes	Telephone or video call session
Continuing my self-management	Evaluating symptoms over the past week. Identifying the most prevalent symptoms. Reinforcing education on symptom self-management. Addressing and discussing physical symptoms such as pain, nausea/vomiting, oral mucositis, fatigue, sleep disturbances, alopecia, diarrhea/constipation.	20 minutes	Telephone or video call session
Thinking about who I am	Evaluating symptoms over the last week Confirming the emergence of new side effects. Identifying situations that trigger, decrease, or increase symptoms. Discussing self-image and self-perception. Promoting empowerment to develop a positive self-image. Providing psychological support. Exchanging information among professionals regarding the self-management plan.	20 minutes	Telephone or video call session
Empowering myself with the help of others	Evaluating symptoms over the past week. Confirming the emergence of new side effects. Determining social support needs. Discussing role changes and communication barriers with caregivers and other family members. Providing guidance to understand the challenges related to role changes and update positive solutions. Exchanging information among professionals regarding the self-management plan within the social support component.	20 minutes	Telephone or video call session
Continuing my treatment and advancing in navigation	Evaluating symptoms over the past week. Confirming the emergence of new side effects. Addressing and discussing socioeconomic barriers encountered during treatment. Possible alternatives. Supporting the expression of feelings about situations that have not been previously verbalized.	20 minutes	Telephone or video call session
Evaluating my navigation plan	Evaluating symptoms over the past week. Confirming the emergence of new side effects. Self-assessment of compliance with the proposed plan. Providing feedback on the implemented navigation plan. Agreed-upon medium- and long-term follow-up plan. Measuring the symptom scale scores and self-management behaviors.	20 minutes	Telephone or video call session

Source: Prepared by the authors.

In addition to the educational material, users received a symptom monitoring diary to complete once a week, recording their symptoms and any questions and/or concerns that arise throughout treatment. It uses a color-coded traffic light system to indicate when referral from consultation to the emergency department or the chemotherapy unit is required (Figure 1).

After the eighth and final session, the patient's self-management behaviors and scores on the symptom scale will be reassessed, and a medium- and long-term follow-up plan will be jointly established with the patient.

Figure 1. Symptom Monitoring Form Template for the Chemotherapy Navigation Program

Form code					Follow-up date:	
First name(s):	Last name:				ID:	
Phone number:	Cell phone number:			Email address:		
Primary caregiver's name:	Phone number:		Gender:	M	F	Occupation
Symptom management						
Over the past eight days, you have experienced the following symptoms:	Diarrhea	Yes ☐	No ☐	Grade:	I ☐: Up to 4 stools per day	
					II ☐: 4 to 6 stools per day	
					III ☐: Seven or more stools per day	
					IV ☐: Life-threatening consequences	
	Mucositis	☐	☐	Grade:	I ☐: Erythema (enanthema) of the mucosa	
					II ☐: Patchy ulcerations or pseudomembranes	
					III ☐: Ulcerations; bleeding with minor trauma	
					IV ☐: Tissue necrosis	
	Nausea	☐	☐	Grade:	I ☐: Loss of appetite without alteration in eating habits	
					II ☐: Oral intake decreased without significant weight loss, dehydration or malnutrition	
					III ☐: Inadequate oral caloric or fluid intake	
					IV ☐: Life-threatening consequences	
	Vomiting	☐	☐	Grade:	I ☐: One episode in 24 hours	
					II ☐: 2 to 5 episodes in 24 hours	
					III ☐: No fewer than 6 episodes in 24 hours	
					IV ☐: Life-threatening consequences	
	Rash/ desquamation	☐	☐	Grade:	I ☐: Macular or popular eruption or erythema without associated symptoms	
					II ☐: Lesions covering <50% of body surface area (BSA)	
					III ☐: Lesions covering ≥50% of BSA	
					IV ☐: Generalized exfoliative, ulcerative, or bullous dermatitis	
	Hand-foot skin reaction	☐	☐	Grade:	I ☐: Minimal skin changes or dermatitis without pain	
					II ☐: Edema, bleeding, blisters, or pain, not interfering with function	
					III ☐: Ulcerative dermatitis or skin changes with pain interfering with function	
					IV ☐: N/A	
	Febrile neutropenia	☐	☐	Grade:		

Of the above symptoms (if you experienced any), please describe how you managed them:
Observations:
Treatment-related knowledge (guiding questions)
Do I know the frequency of each chemotherapy cycle?
Do I know which tests I need to undergo before chemotherapy?
Have I experienced delays in receiving previous chemotherapy cycles? (If yes, please indicate the reasons.)
Do I know the implications of not adhering to the chemotherapy frequency?
Observations:
Knowledge related to administrative procedures (guiding questions)
Do I know what steps I need to take after I consult with the specialist (oncologist/hematologist)?
Do I know which administrative office can authorize my medical orders?
Do I know the process for scheduling my chemotherapy?
Do I know what steps I need to take after receiving chemotherapy?
Observations:

Source: Prepared by the authors.

- *Content validity:* The experts evaluated the proposal format in terms of its acceptability and usefulness, as well as the proposed outline to ensure its alignment with the navigation model. An adequate rating was obtained, with CVC values above 0.75 for each aspect, reaching as high as 0.98 (Table 2). The following recommendations are made: 1) include the chemotherapy professional navigator within the interdisciplinary team that is part of a functional unit of this nature as a requirement for its accreditation and service delivery; 2) determine the nurse-to-patient ratio for the oncology navigation role; 3) consider the possibility of conducting more in-person sessions; 4) explicitly include the initial nursing consultation as a mandatory step prior to the start of chemotherapy.

Table 2. Expert Content Validity Results, Outline of the Chemotherapy Navigation Program

Session	Acceptability CVC	Usefulness CVC
Initiating navigation	0.81	0.94
Addressing barriers	0.97	0.97
Navigating my treatment	0.81	0.88
Continuing my self-management	0.78	0.88
Thinking about who I am	0.84	0.88
Empowering myself with the help of others	0.75	0.78
Continuing my treatment and advancing in navigation	0.84	0.88
Evaluating my navigation plan	0.75	0.78

Source: Prepared by the authors.

Discussion

This study sought to consolidate an intervention based on the professional navigation framework for cancer patients undergoing chemotherapy to enable adequate symptom control, foster patient self-management behaviors, and provide crucial tools for implementing the nurse navigation role in Colombia.

Patients with cancer living in low- and middle-income countries constitute another group of underserved individuals in need of guidance (22). Emphasis is placed on innovative models to close recognized gaps, with establishing infrastructure as an essential first step. Once this issue has been addressed, creating navigation programs that guide patients through the complex healthcare system throughout the care continuum is recommended as a priority (22, 23).

Experiences among low- and middle-income patients have focused on women's health and include education on the signs and symptoms of cancer and its treatment, coordination of medical appointments, and connecting patients to resources. In all cases, positive indicators have been reported, such as increased knowledge among patients and family caregivers, and improvements in detection rates and treatment retention (24, 25), thus supporting the potential impact of these programs on cancer care outcomes. Although the navigator role is not described in detail, it is concluded that nursing professionals constitute the principal workforce providing this type of comprehensive intervention, encompassing care, education, and service coordination (22).

The professional navigation framework used to design this intervention incorporates elements of information, management, and continuity in interactions with patients. It also includes self-management of coping and support mechanisms, promoting the implementation of management plans developed through education, an approach similar to that reported in the design of a navigation program for cancer patients experiencing pain (26). Self-management in cancer pain control refers to the management of the physical and psychological consequences resulting from the symptom, the administration of analgesics, and the activation of communication mechanisms with the healthcare team, together with timely reporting and the facilitation of service coordination to overcome existing barriers (26).

Similarly, the proposed program outline is consistent with another intervention reported in the literature on symptom management (27), which suggests continuous interaction and comprehensive, individualized care led by nursing professionals, recognizing that patients experience complex problems during treatment and require ongoing counseling, education, and psychosocial support (28). These interventions have demonstrated clinical efficacy in women with breast cancer for coping with

symptoms (29), reducing fear and stress, and improving quality of life (29). In patients with head and neck cancer, psychosocial symptoms are reduced, and coping improves (30). In women with cervical cancer, depression levels decrease, as this is considered a complementary and integrative method to existing oncology roles, with the potential to be cost-effective and reliable upon implementation (31).

A key feature of the program is its focus on the barriers, needs, and preferences of individual patients across all aspects that arise throughout treatment, consistent with a navigation intervention conducted in Germany with lung cancer patients, in which information was obtained through an open-recruitment process on navigation service activities shared across chronic diseases and those unique to lung cancer to build a feasible model associated with the care process (32).

Patient navigation drives the development of sustainable solutions, which is an expectation within the current value-based healthcare environment. Three categories support navigation services: clinical outcomes, patient experience, and cost-effectiveness (33). The intervention should focus on improving the patient experience so that professional navigators, trained in the proximal, intermediate, and distal social determinants of health barriers, can apply this knowledge of care resources to resolve emerging problems, such as cultural limitations, insufficient social support, misinformation about existing resources, and obstacles to communication and coordination with health service administrators (33). In terms of clinical outcomes and improved cost-effectiveness, it is evident that patients who are contacted or followed throughout the continuum of care can more effectively address emerging barriers, resulting in improved treatment completion rates, better quality of life, greater adherence to oncology care, reduced readmissions and emergency department visits (33), as well as decreased rates of non-attendance at treatment sessions and medical oncology follow-up appointments.

Conclusions and Implications for Practice

An intervention program based on the professional navigation framework for people with cancer undergoing chemotherapy was established. Its objectives were to promote continuity of care, empower individuals, improve the experience of symptom self-management, and, naturally, enhance quality of life.

Navigation in oncology is regarded as an effective approach for individuals to develop self-management behaviors for addressing symptoms resulting from chemotherapy. It is therefore recommended to continue with multicenter studies that further develop approaches to symptom self-management. New oncology nursing practice guidelines are being established to promote professional development, underscoring the need to implement training plans

aligned with the skills required for this comprehensive approach, and to promote greater awareness of cancer navigation as a central component of care pathways.

This study reports several limitations. A small group of experts who work in tertiary care centers was consulted to validate the program content, which limits the applicability of the navigation model in rural settings. Patients were not consulted for input, which could have provided additional insight; however, in line with developing the navigation program, this was not considered. A pilot study is needed to describe the program outline adapted to the Colombian clinical practice context. Experimental studies will also be necessary to confirm the effectiveness of the intervention on the defined variables of interest.

Furthermore, there is a need to continue training nurses to assume professional navigation programs to ensure effective implementation and to achieve outcomes that benefit patients.

Conflict of interest: None declared.

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