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REVIEW

A Scoping Review of Patient Navigation in the Continuity of Cancer Care for Women

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Background: Cancer is a significant cause of morbidity and mortality among women worldwide, particularly breast and cervical cancers. Continuity of care (CoC) is essential for effective cancer management but is often hindered by systemic, social, and economic barriers. Patient navigation has emerged as a promising intervention to improve access and coordination across the cancer care trajectory.

Purpose: This review aimed to explore how patient navigation has been applied to support continuity of cancer care for women.

Methods: This scoping review was conducted based on the framework developed by Arksey and O'Malley (2005). Comprehensive literature search across five electronic databases, including CINAHL, PubMed, ScienceDirect, Scopus, Taylor & Francis, and search engine: Google Scholar. Eligible studies included English-language, original articles that involved women aged 18 years or older, focusing on the impact of patient navigation on continuity of care for cancer. Data were extracted independently by three reviewers using a standardized form. A thematic analysis approach was used to synthesize the findings across key domains.

Results: A total 26 studies were included, most of which were conducted in the United States. Patient navigation demonstrated positive impacts across the cancer care continuum: (1) improved screening, especially in minority populations; (2) reduced time to diagnostic resolution; (3) improved patient treatment and rehabilitation. Five thematic domains were identified: care coordination, education/information, empowerment, emotional and social support, and logistical or financial assistance.

Conclusion: This scoping review provides an overview of how patient navigation contributes to strengthening the continuity of cancer care for women and identifies gaps in its current implementation across settings. Future research should investigate scalable and culturally adapted navigation models in low-resource settings, evaluating their cost-effectiveness and long-term outcomes.

Keywords: breast cancer, care coordination, cancer care, cancer screening, cervical cancer, continuity of care, patient navigation

Introduction

Cancer remains one of the leading causes of morbidity and mortality among women globally.[1] In 2025, it is estimated that there will be 2,041,910 new cases of cancer, with 988,660 of them in women.[1] Breast cancer is the most common type of cancer in women.[2] In addition, the incidence of mortality in cervical cancer is estimated at 684,996 deaths in 110 of 185 countries.[2] Cervical cancer is also a significant concern, with 604,127 new cases and 341,831 deaths,[2] and 4320 deaths by 2025 in the United States.[1] The high mortality and morbidity rates due to cancer in women are closely related to late diagnosis, limited access to health services, and a lack of education and public awareness.[2,3]

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Continuity of care (CoC) is an important principle in modern healthcare,[4] especially in cancer care that require long-term and multidisciplinary approach.[5,6] CoC is defined as the patient's experience of receiving coordinated, consistent, and continuous care, from early detection and diagnosis through treatment, rehabilitation, and follow-up.[7] Previous studies reported that CoC contributed to increased patient satisfaction, adherence to treatment, and better clinical outcomes.[5,7–9] Moreover, studies also reported that CoC contributed to increased patient satisfaction, adherence to treatment, and better clinical outcomes.[10–13] However, the implementation of CoC in many countries, especially in developing countries, still faces various challenges.

Although the concept of CoC in cancer patients has been recognized as important, its implementation in practice often faces various obstacles.[14] Women with cancer often face multiple barriers in accessing health care, including gender norms that limit decision-making, domestic and caregiving roles that add to the emotional burden, and the social stigma attached to certain types of cancer.[14–16] In addition, many women in developing countries experience gaps in access to information, early detection, and comprehensive cancer treatment.[17,18]

Patient navigation has the potential to bridge the gap in continuity of care by providing structured and personalized support to patients in navigating the complex healthcare system.[19–21] Patient navigators can be professional or non-professional healthcare workers who are trained to provide education, emotional support, and help coordinate care, as well as overcome non-medical barriers such as transportation or financial costs.[22] Navigators act as a liaison between patients, families, and the medical team, ensuring that patients receive clear information, a coordinated schedule of tests and treatments, and ongoing support throughout their cancer treatment journey.[23]

Various previous studies have proven that patient navigation programs have a significant positive impact on improving the continuity of cancer care.[19,24–26] In addition, previous reviews have reported that patient navigation improves quality of life and patient satisfaction with care during the survival phase, and reduces hospital readmission times in both the active treatment and survivorship care phases.[27] Another study in the patient navigation research program found that patient navigator interventions significantly increased the proportion of patients receiving timely treatment, reduced treatment delays, and increased patient satisfaction with healthcare services.[28] Therefore, it is important to further explore the effectiveness of this intervention, specifically in groups of women with cancer.

Recent interdisciplinary perspectives have enriched the understanding of patient navigation by integrating insights from behavioral science, public health, and digital health innovations. Advances in telehealth and technology-enabled coordination have improved communication and continuity of cancer care across settings.[29,30] Behavioral theories, such as the Health Belief Model and Social Cognitive Theory, also inform patient-centered strategies that enhance motivation and self-management among women with cancer.[31,32] From a health-system viewpoint, navigation is increasingly recognized as a multidimensional approach that addresses psychosocial and structural barriers to care.[4,33] Incorporating these interdisciplinary insights underscores that patient navigation functions not only as a logistical intervention but as an integrative model promoting equitable continuous cancer care.

Although the effectiveness of patient navigation has been widely studied, most previous reviews have focused on cancer in general without distinguishing specific types.[34,35] Studies specifically evaluating the impact of patient navigation on continuity of care for various cancer types in women are still limited. Therefore, a comprehensive scoping review is necessary to assess the extent to which patients navigation can enhance the continuity of care for women with cancer.

Materials and Methods

Study Design

This study employed a scoping review methodology based on the framework developed by Arksey and O'Malley (2005).[36] The review process followed five stages: (1) identifying the research question; (2) identifying relevant studies; (3) study selection; (4) charting the data; and (5) collating, summarizing, and reporting the results. The review was conducted in accordance with the PRISMA guidelines to ensure transparency and rigor[37,38] and PRISMA checklist (see in Table S1). This protocol was registered in PROSPERO with the number ID CRD420251066580.

Eligibility Criteria

In this review, three reviewers independently selected relevant articles based on the PRISMA guidelines (see Figure 1). The PICOT framework guided the formulation of research questions and the development of eligibility criteria. The population (P) targeted was women of any age at risk or diagnosed with cancer. The intervention (I) examined was patient navigation. The comparator (C) was usual care, while the outcome (O) focused on improved cancer screening, diagnosis, treatment, and rehabilitation.

Studies were eligible for inclusion if they were full-text articles published in English and employed a clinical trial or observational study to assess the effectiveness of patient navigation in cancer care among women. Only studies published in English were included, considering the research team's proficiency in English and the dominance of English-language publications in major health and nursing databases. This restriction aimed to ensure methodological consistency, minimize misinterpretation during data extraction, and maintain analytical rigor throughout the review process. Exclusion criteria encompassed inaccessibility of the complete text, non-English publications, and secondary research studies. To ensure a thorough review, no limitations were imposed regarding the year of publication, allowing for an exhaustive examination of pertinent studies.

Search Strategy

The identification of relevant articles was systematically conducted by two authors (HH and TP) across five major databases on July 10, 2025: CINAHL Plus with Full Text, PubMed, ScienceDirect, Scopus, and Taylor and Francis. The general keywords used in the search process included: "cancer patients" OR "breast cancer" OR "cervical cancer" OR "gynecology cancer" AND "patient navigation" OR "navigation programs" OR "patient navigator" AND "cancer screening" OR "early detection" OR "diagnostic resolution" OR "diagnostic testing" OR "cancer diagnosis" OR "cancer treatment". To optimize the search process and enhance the retrieval of relevant articles, trim and fill methods were applied to account for database-specific indexing systems, metadata structures, and search algorithms. This approach

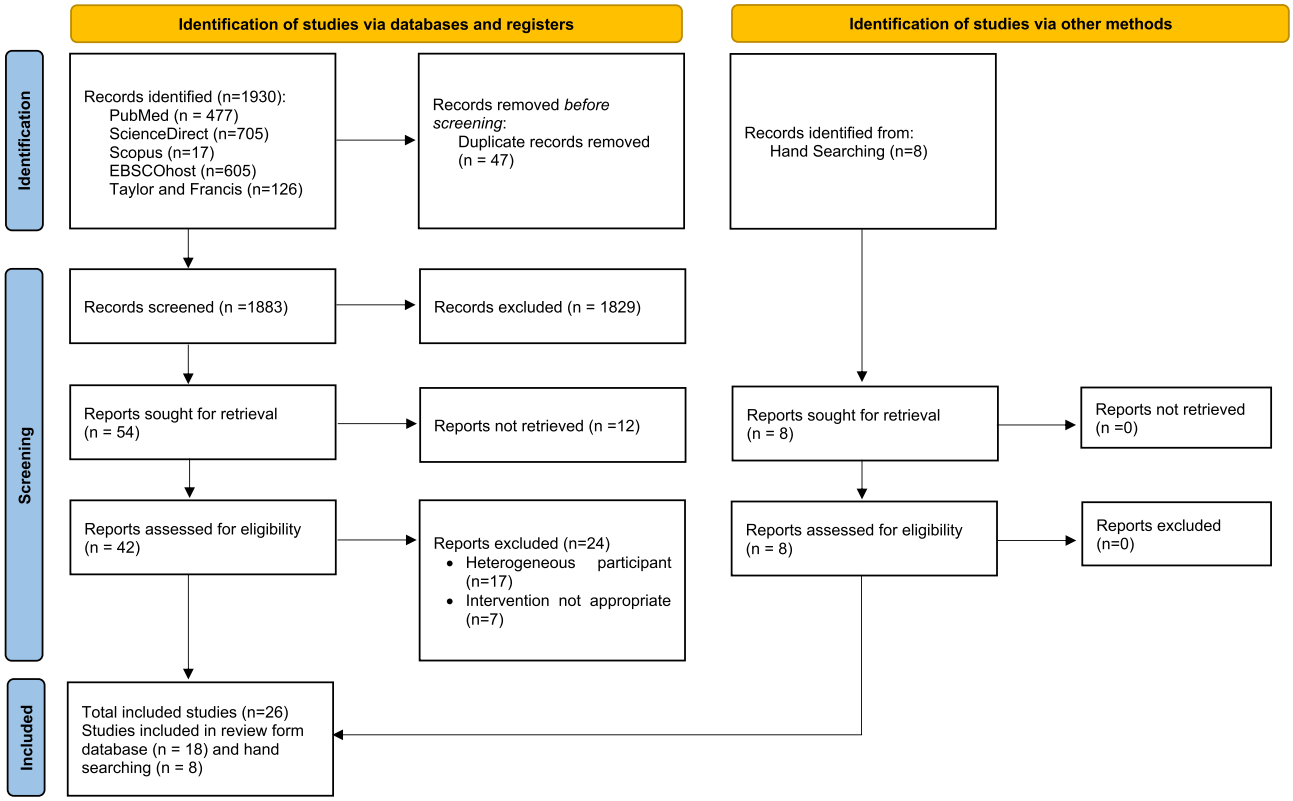

Figure 1 PRISMA Flow Chart.

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enabled the fine-tuning of keywords to ensure the broadest possible scope of relevant articles, while mitigating potential search biases or limitations imposed by database characteristics.

The use of Boolean operators AND and OR was strategically employed to both refine and expand the search results, ensuring that the literature covered all stages of the cancer care continuum, including cancer screening, diagnostic processes, treatment, and patient navigation interventions. Given the complexity of the databases involved and the need to ensure a comprehensive search, the final list of articles obtained is detailed in Table S2 in supplementary files, where the results of the search strategy, along with the specifics of the trim and fill approach used, can be reviewed for further transparency and accuracy.

In addition to database searching, hand searching was also conducted in Google Scholar. Hand searching refers to the manual process of reviewing reference lists of relevant articles, journals, or conference proceedings to identify additional studies that may not have been retrieved through electronic databases. This approach was used to ensure a more comprehensive identification of eligible studies for inclusion in the review.

Study Selection

Three authors (HH, HRA, and CWMB) conducted an independent screening of studies following the predefined eligibility criteria. During the initial phase of selection, duplicate entries were identified and removed utilizing the Mendeley reference manager. Subsequently, the titles, abstracts, and full texts of the articles were meticulously examined for their relevance to the research focus, and the inclusion and exclusion criteria were rigorously applied. To resolve differences of opinion in assessing the articles, all the authors conduct a group discussion to formulate and determine which articles align best with the established objectives. In this process, two authors (HH and TP) serve as the final decision-makers, ensuring the selection of articles that meet the desired criteria.

Data Extraction and Analysis

In this review, data from included studies were extracted and carefully analyzed through the use of tables designed to summarize all relevant findings related to the research focus by five authors (HH, TP, CWMS, GNAW, and CPA). The data extraction tables included important study characteristics, such as authorship, country, study design, types of cancer examined, participant demographics, intervention strategies, and primary outcomes.

The analysis process began with the systematic organization and presentation of the extracted data in a tabular format, based on information extracted from the reviewed articles. Thematic analysis was employed to identify, analyze, and report patterns (themes) within the data, providing insight into the commonalities across studies. This method allowed for a deeper understanding of the variations in findings and how these variations may relate to different research contexts or participant groups. Each finding was then examined and discussed in depth, in line with the categorized data to offer a deeper understanding. To ensure the integrity and accuracy of the data extraction, the authors conducted a comprehensive final review of all included studies, minimizing potential errors and enhancing the robustness of the analysis.

Results

Study Selection

Figure 1 PRISMA illustrates the process of selecting and including studies in a review. The first stage began with the identification of 1.930 articles obtained through searches in various databases, including PubMed, ScienceDirect, Scopus, EBSCOhost, and Taylor & Francis. Of these, 47 duplicate articles were removed before further screening, leaving 1.883 articles for the screening stage. All articles found were then screened based on their relevance to the inclusion criteria, resulting in the elimination of 1.829 ineligible articles. Only 54 articles proceeded to the next stage, the full-text search. However, 12 articles could not be retrieved, resulting in only 42 articles being evaluated further.

After an eligibility assessment, 24 articles were ultimately excluded. The reason for exclusion was discrepancies in participant characteristics, with 17 articles having heterogeneous participants, while 7 articles used interventions that did not meet the study criteria. Additionally, eight additional articles were identified through manual searching. Finally,

a total of 26 studies were considered eligible for inclusion in this review, with 18 studies obtained from electronic databases and the remaining 8 through hand searching.

Characteristics of Studies and Participants

The included studies comprised a total of 26 studies, predominantly conducted in the United States, with a few from other countries such as Singapore, Mexico, and China (See Table 1). These studies employed various research designs, including randomized controlled trials (RCTs), quasi-experimental designs, prospective and retrospective cohort studies, and pre-post intervention assessments. The primary focus across the studies was on breast and cervical cancer, with some addressing gynecologic cancers more broadly.

Participant characteristics varied widely across studies, with sample sizes ranging from fewer than 30 to several thousand participants (n = 4199).[25] The majority of participants were women aged 40 years and older, frequently including older adults aged 65 and above. The populations studied were ethnically and culturally diverse, highlighting groups such as African Americans, Hispanic/Latina women, Chinese American women, Somali and Serbo-Croatian refugees, and non-English speakers.[24,39,40,46] Many participants were from low-income backgrounds or considered medically underserved, reflecting populations disproportionately affected by cancer disparities and barriers to care.[55] Clinically, the participants included women at risk for cancer, those with abnormal screening results, newly diagnosed patients with early to advanced stage cancer, and survivors undergoing follow-up care.

Key Domain of Patient Navigation

In this review, key domains are classified into five categories, including (1) care coordination, (2) education/information, (3) support, (4) empowerment, and (5) logistic and financial planning (see Figure 2 and Table 2). Patient navigation involves several critical domains that work together to improve healthcare access and outcomes. More detail about key domain for each study, can be see in Table S3 (Supplementary file).

Care coordination focuses on organizing and managing patient care to ensure timely and efficient treatment while overcoming barriers such as language, transportation, and insurance issues. Education and information empower patients by providing precise, culturally sensitive knowledge about their health conditions, treatment options, and necessary follow-up, enabling them to make informed decisions. Empowerment enhances patients' confidence and encourages active participation in their care, thereby reducing anxiety and promoting autonomy. Emotional, social, and psychosocial support addresses the mental and social challenges patients encounter throughout their care journey by offering counseling, peer support, and ongoing assessment of their needs. Lastly, logistic and financial assistance ensures patients can access services without practical or economic barriers by facilitating transportation, insurance processes, and access to financial aid programs.

The Outcome of Patient Navigation

Patient navigation is applied at various stages in the trajectory of cancer care, from screening and early detection, diagnosis, treatment, to rehabilitation and survivorship. In general, most studies indicate that patient navigation interventions have a significant positive impact on various aspects of cancer care (see Tables 1 and 3).

Theme I: Patient Navigation for Cancer Screening

Patient navigation interventions during the screening phase consistently increased cancer screening rates, particularly in populations that traditionally face access barriers, such as minority and immigrant women. For instance, navigation combined with educational materials and language support successfully increased mammography rates among African American women, Bosnian immigrants, and Somali, Arabic, and Serbo-Croatian refugees.[20,24,39,40] Culturally and linguistically tailored approaches were shown to be effective in increasing screening participation to 70% compared to control groups.[41] Additionally, the use of reminder phone calls and letters by navigators helped improve screening adherence among low-income, non-English-speaking populations.

Patient navigation interventions at the screening stage focus on increasing community participation in early cancer detection through education, scheduling examinations, and eliminating access barriers. Navigators in this phase are

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Table 1 Study Characteristics (N = 26)

Study and Country	Design	Cancer (Evaluated)	Participants	Detail Intervention	Key Findings
Patient Navigation for Cancer Screening					
USA [24]	RCT	Breast cancer	1.358 African American female Medicare beneficiaries aged ≥65 in Baltimore	Printed educational materials + patient navigation	Increased self-reported mammography utilization
USA [39]	Pre-post intervention study	Breast cancer	91 Serbo-Croatian speaking refugee/ immigrant women, ages 40–79, overdue or never had mammograms	Culturally Tailored Patient Navigation	Significantly improve mammography rates in refugees/ immigrants.
USA [40]	Retrospective program evaluation of an implemented intervention.	Breast cancer	188 refugee women (36 Somali, 48 Arabic, 104 Serbo-Croatian speakers), plus English (2072) and Spanish (2014) speaking comparison groups	Linguistically and culturally tailored navigation with individually tailored interventions	Screening rates in refugee women increased significantly, reducing disparities over 3 years
USA [20]	RCT	Breast cancer	3.895 women aged 51–70 at an inner-city academic medical center; 71% racial/ethnic minorities, 23% non-English speakers	Phone calls and reminder letters by navigators are integrated into primary care teams	Patient navigation improves biennial mammography rates among inner-city, low-income, minority populations.
USA [41]	Quasi-experimental	Cervical cancer	134 Chinese American women (80 intervention, 54 control) recruited from Asian community organizations	Combined cervical cancer education with patient navigation, including interaction with Chinese-speaking physicians and help accessing free/low-cost Pap screening services	Screening rates increased to 70% in the intervention group vs 11% in the control group at 12-month follow-up
Patient Navigation for Cancer Diagnosis					
USA [42]	Retrospective cohort	Breast cancer	176 patients with breast cancer diagnosed in the cancer center with stage 0 to III disease	Nurse navigation was implemented at an academic cancer center, with a focus on coordinating care and reducing delays.	Reduced time to oncology consultation, especially for patients >60 years old.
USA [21]	Quasi-experimental	Breast & cervical	3041 women with an abnormal breast or cervical cancer screening test performed	Navigators embedded in community health centers offer barrier identification and care coordination.	Reduced time to diagnostic resolution, especially for cervical cancer screening abnormalities beyond 60 days.
USA [43]	RCT	Breast cancer	374 women with early-stage breast cancer who underwent surgery	Community-Based Patient Assistance Programs.	Patients with breast cancer who connect to relevant patient assistance programs receive useful informational and psychosocial, but not practical help.
USA [44]	Quasi-experimental	Breast cancer	460 Hispanic women with an abnormal breast cancer screening or untreated biopsy-proven breast cancer	A combined patient navigator and promotora team provides assessment, care plan, and support.	Shortened time from diagnosis to treatment initiation; improved diagnosis rates.
USA [45]	RCT	Breast cancer	105 urban minority women with suspicious mammograms	Patient navigation plus usual care vs usual care; navigators assisted with system navigation, emotional support, and appointment facilitation	Navigation reduced the time to diagnosis (from 25 to 43 days), decreased anxiety, and improved patient satisfaction.

USA [19]	Prospective cohort	Breast cancer	2601 women with suspicious breast abnormality; 1047 navigated, 1554 non-navigated	Patient navigation, including education, barrier resolution, appointment scheduling, and follow-up	Navigated women, especially biopsied, reached diagnosis faster than non-navigated women.
USA [26]	Cluster randomized trial	Breast cancer	1039 patients with breast screening abnormality: 494 navigated, 545 control	Patient navigation from abnormal screening to diagnostic resolution	Patient Navigation did not affect diagnostic resolution within the first 3 months but had a substantial positive impact on speeding resolution after 3 months, especially noticeable after about 4.7 months. This suggests a delayed or "lagged" benefit of navigation on resolving abnormal breast cancer screening results.
USA [46]	Nonrandomized controlled design	Breast & Cervical Cancer	897 low-income minority women with abnormal breast or cervical cancer screening results	Patient navigation aimed to accelerate diagnostic resolution after abnormal screening	Navigated patients are more likely to achieve diagnostic resolution within 60 days; shorter time to diagnosis
Patient Navigation for Cancer Treatment and Rehabilitation					
USA [47]	Pre-post study of patient navigation program	Breast cancer	100 newly diagnosed patients	Bilingual, bicultural navigators providing outreach, education, and care coordination in a public hospital.	Increased overall adherence to breast cancer quality care indicators, especially surveillance mammography.
USA [25]	Retrospective cohort	Cervical cancer	4199 women attended the referral colposcopy clinic before and after the navigator program	Patient navigation, including bilingual navigator, barrier resolution, appointment reminders, and education	Patient navigator programs at referral centers reduce no-show rates, thus improving patient follow-up, which may reduce disparities in cervical cancer screening and treatment
USA [48]	Secondary analysis of the multicenter Patient Navigation Research Program (Group randomized trial, quasi-experiment)	Cervical cancer	2.317 women with cervical abnormalities, split into low-risk and high-risk groups	Patient navigation focused on timely diagnostic follow-up within guideline timeframes (60–180 days)	Navigation improved timely follow-up in the low-risk group, especially among non-English-speaking Hispanic women.
USA [49]	Retrospective case series	Breast cancer	322 women diagnosed with breast cancer	Patient navigation program aimed at decreasing the time from presentation to treatment	The median time to first treatment decreased by 9 days post-navigation; however, there was no change in stage or survival.
Singapore [50]	Observational program evaluation with pre-post	Breast cancer	55 newly diagnosed cases of breast cancer	Patient navigation addresses barriers, facilitates access, coordination, and education	Trend toward reduced time from biopsy to consultation and treatment; high patient satisfaction.
USA [51]	Mixed method with pre-post intervention	Breast cancer	20 underserved newly diagnosed breast cancer patients (average age 54), 40% Hispanic, 50% uninsured, 70% unemployed	Up to 9 telephone counseling sessions + minimum of five navigation sessions; focused on overcoming treatment barriers	Reduced depression and cancer distress; increased social support; helped overcome financial, transportation, and communication barriers
USA [52]	Prospective pre-post	Breast cancer	130 English- or Spanish-speaking women with stage 0–III breast cancer, completed active therapy ≤2 years ago	Patient-centered intervention using a survivorship wallet card containing personal cancer history and follow-up care instructions, delivered by patient navigators or community health workers	Improved patient knowledge of stage, treatment, and recurrence symptoms; knowledge gains retained up to 3 months; improved communication with providers

(*Continued*)

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Table 1 (Continued).

Study and Country	Design	Cancer (Evaluated)	Participants	Detail Intervention	Key Findings
USA/Mexico [53]	Quasi-experimental design	Breast cancer	480 self-identified Latinas; 251 navigated, 229 non-navigated controls; recruited from community clinics	Culturally-tailored patient navigation by bilingual community health workers; activities included appointment scheduling, education, accompaniment, barrier resolution (transport, childcare, insurance, language, psychosocial)	Navigated Latinas had a shorter time from diagnosis to treatment initiation (within 30 and 60 days) than controls
USA [54]	Prospective cohort	Cervical cancer	46 navigated vs 85 non-navigated patients with locoregional cervical cancer	Socially determined cervical cancer care navigation program addressing medical, financial, and psychosocial barriers	Navigation improved treatment adherence, reduced treatment time, and was associated with improved survival.
USA [55]	RCT	Breast and gynecologic cancers	487 low-income, predominantly Hispanic women randomized: 248 received telephone patient navigation, 239 enhanced usual care (written info)	Telephone patient navigation plus health education, counseling, assistance with appointments, resource linkage	Both groups had similar rates of completing, delaying, or refusing chemotherapy and radiation.
Mexico [56]	Prospective cohort study	Breast cancer	656 symptomatic patients contacted the Alerta Rosa navigation program	Navigation via call center/Facebook; prioritization by clinical risk; scheduling medical consults and biopsies	Reduced median time from alert activation to treatment initiation (33 days); effective in reducing system delays
USA [57]	Retrospective cohort	Breast cancer	368 women with stage I–III breast cancer; 134 pre-navigation, 234 post-navigation program implementation	Patient navigation program aimed at improving adherence to Breast Cancer Care Quality Indicators, focusing on education, decision-making, and overcoming treatment barriers	Overall compliance improved from 74.1% to 95.5% ($p < 0.001$), with significant gains in patient education and treatment adherence. In the intervention group, 70% (56=80 women) had obtained screening, whereas 30% (24=80) had not been screened.
China [58]	RCT	Breast cancer	26 breast cancer patients in a single-center pilot trial	Financial navigation program including needs assessment, cost-related health education, resource referral, personalized counseling via face-to-face and telephonic follow-up	Feasible and acceptable intervention; improved patients' cost-related health literacy; no significant change yet in financial toxicity observed

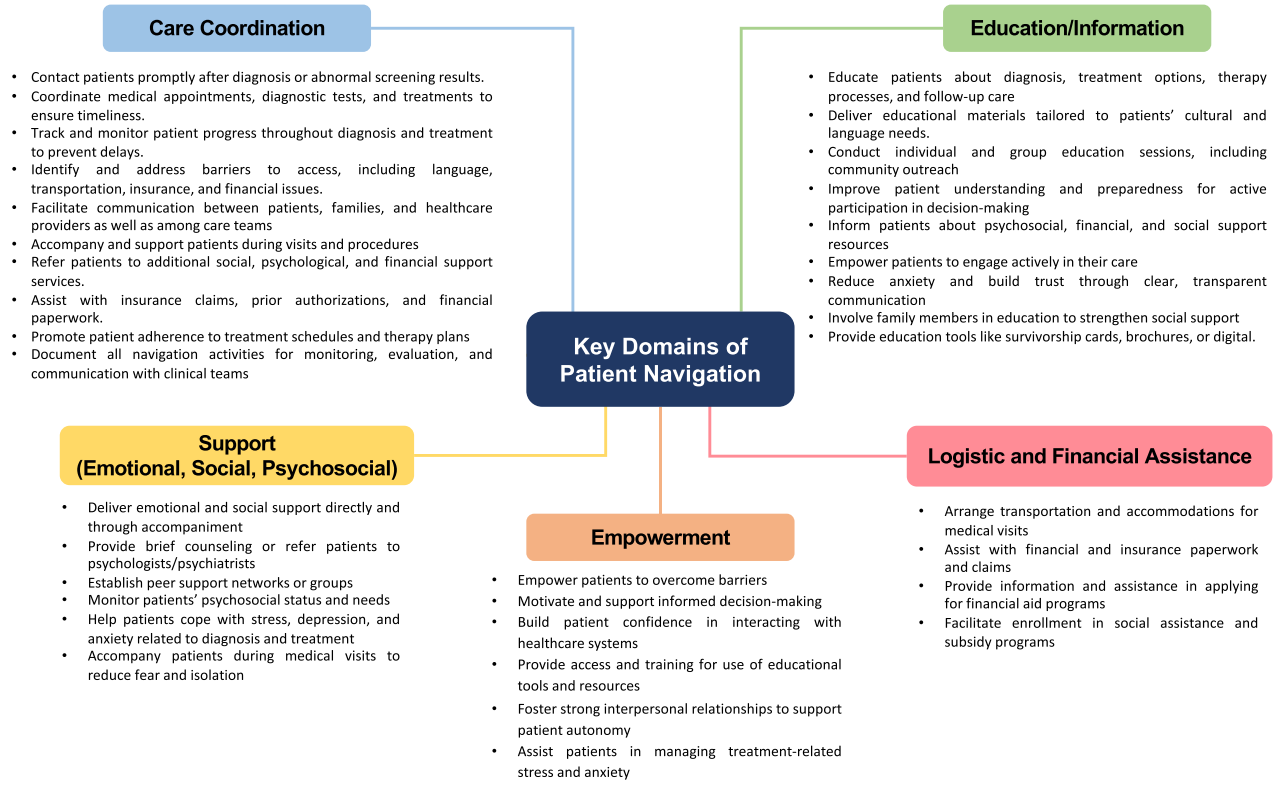

Figure 2 Key Domain of Patient Navigation.

generally non-medical personnel such as community workers or lay navigators who come from the same cultural and language background as the participants. Strategies used include counseling based on behavioral theories such as the Health Belief Model and Social Cognitive Theory,[41] small group education with culturally adapted printed or video materials,[39,40] and reminders via letters, telephone calls, and direct coordination with service providers.[20] Marshall et al (2016) argued that navigation is also equipped with coaching and direct assistance during screening. In general, the results of these studies indicate increased adherence to mammography and pap smear screening, as well as reduced access disparities among minority and immigrant female populations.

Theme II: Patient Navigation for Diagnostic

At the diagnostic stage, patient navigation was effective in reducing the time to diagnostic resolution, particularly for patients with abnormal screening results. Studies showed significant reductions in the time to oncology consultation and diagnostic resolution, especially for breast and cervical cancer patients.[19,21,26,42] Furthermore, navigation helped reduce anxiety and improve patient satisfaction during the diagnostic process.[45,51] This approach also addressed practical and social barriers such as language, transportation, and patient understanding of the diagnostic process.[25,44]

During the diagnostic phase, navigation plays a crucial role in ensuring prompt and thorough follow-up for individuals with abnormal screening results. The navigator's role focuses on monitoring the timeline to diagnostic resolution, scheduling follow-up examinations, providing psychosocial support, and liaising between patients, clinicians, and the health system. Models used vary from community navigators to clinical social workers, with a mix of face-to-face and telephone approaches[26,44] In some centers, navigators also assist with financial administration and public insurance enrolment.[46]

Theme III: Patient Navigation for Cancer Treatment and Rehabilitation

During treatment and rehabilitation, patient navigation improved adherence to treatment schedules and overall care quality.[47,51,54,57] Navigation programs effectively reduced the time from diagnosis to treatment initiation,[49,53] decreasing

Table 2 Summary of Key Responsibilities in Patient Navigation

Key Domain	Detailed Key Responsibilities	Studies
Care Coordination	• Contact patients promptly after diagnosis or abnormal screening results. • Coordinate medical appointments, diagnostic tests, and treatments to ensure timeliness. • Track and monitor patient progress throughout diagnosis and treatment to prevent delays and ensure optimal outcomes. • Identify and address barriers to access, including language barriers, transportation issues, insurance concerns, and financial difficulties. • Facilitate communication among patients, their families, healthcare providers, and care teams. • Accompany and support patients during visits and procedures • Refer patients to additional social, psychological, and financial support services as needed. • Assist with insurance claims, prior authorizations, and financial paperwork. • Promote patient adherence to treatment schedules and therapy plans • Document all navigation activities for monitoring, evaluation, and communication with clinical teams.	[19–21,24–26,39–58]
Education / Information	• Educate patients about diagnosis, treatment options, therapy processes, and follow-up care. • Deliver educational materials tailored to patients' cultural and language needs. • Conduct individual and group education sessions, as well as community outreach. • Improve patient understanding and preparedness for active participation in decision-making. • Inform patients about psychosocial, financial, and social support resources. • Empower patients to engage actively in their care • Reduce anxiety and build trust through clear, transparent communication • Involve family members in education to strengthen social support • Provide education tools like survivorship cards, brochures, or digital aids	[19,21,24,25,39–43,46,47,49,50,52,54–56,58]
Empowerment	• Empower patients to overcome barriers • Motivate and support informed decision-making • Build patient confidence in interacting with healthcare systems • Provide access and training for the use of educational tools and resources • Foster strong interpersonal relationships to support patient autonomy • Assist patients in managing treatment-related stress and anxiety	[20,21,24,39–44,46–49,51–53,55–58]
Support (Emotional, Social, Psychosocial)	• Deliver emotional and social support directly and through accompaniment • Provide brief counseling or refer patients to psychologists/psychiatrists • Establish peer support networks or groups • Monitor patients' psychosocial status and needs • Help patients cope with stress, depression, and anxiety related to diagnosis and treatment. • Accompany patients during medical visits to reduce fear and isolation	[19,21,24–26,39–43,46,47,51–54,57,58]
Logistic and Financial Assistance	• Arrange transportation and accommodations for medical visits • Assist with financial and insurance paperwork and claims • Provide information and assistance in applying for financial aid programs • Facilitate enrollment in social assistance and subsidy programs	[20,21,24,26,40,41,47,49–51,53–55,57,58]

Table 3 Characteristics of Patients Navigation

Study	Navigator	Intervention Component	Delivery Mode	Duration	Setting
Patient Navigation for Cancer Screening					
[24]	Community navigators with clinical supervision	1. Printed educational materials 2. Behavioral counselling 3. Barrier identification and problem-solving 4. Appointment scheduling 5. Patient–provider coaching 6. Accompaniment to screening 7. Quarterly phone/in-person follow-up 8. Continuous documentation	Phone + in-person + educational materials	Median 17.8 months (follow-up to 45 months)	Community & clinical settings
[39]	Community lay navigator (language-concordant)	1. Culturally appropriate breast-health education 2. Motivational interviewing and emotional reassurance 3. Individual barrier assessment 4. Appointment scheduling and reminder calls 5. Transportation/insurance assistance 6. Home visits and group sessions 7. Accompaniment to screening	Telephone, home visits, and in-person support	1 year	Community health centre
[40]	Community lay navigators (culturally and linguistically matched)	1. Six-session navigator training (12 h) 2. Mailed educational materials in native language 3. Phone or in-person education 4. Individualized navigation for barriers 5. Transport & insurance assistance 6. Appointment scheduling 7. Reminder calls 8. Accompaniment to screening 9. Community outreach (churches, mosques)	Letter + phone + in-person + community outreach	3 years	Community health centre
[20]	Non-clinical lay navigators (trained in care-management model)	1. Telephone & mailed reminders 2. Barrier assessment (transport, fear, scheduling) 3. Direct appointment scheduling 4. EMR-based patient tracking 5. Provider coordination and feedback 6. Documentation and follow-up logging	Telephone, mail, and EMR-linked communication	9 months	Hospital-based primary-care practice
[41]	Chinese speaking physician and trained community health educators	1. Group health education based on HBM + SCT models Self-efficacy and goal-setting 2. Open Q&A session with physician 3. Distribution of culturally tailored video and handouts 4. Patient navigation for appointment scheduling, translation, transportation, and linkage to free or low-cost screening	Two small-group sessions + in-person assistance	12-month	Community-based organizations

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Table 3 (Continued).

Study	Navigator	Intervention Component	Delivery Mode	Duration	Setting
Patient Navigation for Cancer Diagnosis					
[42]	Clinical nurse navigators	1. Coordinate oncology consults 2. Patient education 3. Barrier resolution 4. Team communication 5. Tracking of timeliness	Face-to-face + phone coordination	9 months	Academic comprehensive cancer centre
[21]	Lay navigators (trained, non-clinical)	1. Identify women with abnormal screening 2. Barrier assessment 3. Appointment scheduling 4. Coordination 5. Interpreter & logistical support 6. Tracking until diagnosis	Phone + in-person + mail	60 and 365 days	Community based
[43]	Lay outreach navigators	1. Needs assessment 2. Individualized action plan 3. Matching to community programs 4. Telephone reinforcement 5. Outreach follow-up	Mailed action plan + phone contact	6 months	Hospital based
[44]	Hybrid model (professional + community lay workers)	1. Intake & barrier assessment 2. Individualized care plan 3. Navigation from abnormal screen → treatment completion 4. Cultural & language mediation by promotora 5. Tracking & evaluation 6. Continuous contact to reduce delay	Telephone + in-person + tracking database	Median 6–12 months	County hospital and community clinics
[45]	Lay community navigator (non-clinical)	1. Emotional & social support 2. Scheduling and reminder for follow-up appointments 3. Transportation and financial-aid facilitation 4. Coordination with radiology, surgeon, and clinic 5. Tracking diagnostic results and follow-up 6. Reassurance and patient education about procedure outcomes	In-person + telephone + appointment accompaniment	Unclear	Hospital and community based
[19]	Hybrid (social worker + navigator)	1. Counseling & education 2. Appointment scheduling 3. Reminder & follow-up 4. Transport support 5. Emotional reassurance	Phone + in-person	60–90 days	Hospital based
[26]	Community lay navigators (language-concordant)	1. Culturally tailored education 2. Scheduling & translation 3. Follow-up reminders 4. Family-involved outreach	Phone + face-to-face + community events	Active follow-up for 3 months or until diagnostic completion	Community screening clinics

[46]	Hybrid: clinical social workers + trained lay navigators	1. Identification & recruitment after abnormal screening results 2. Individual barrier assessment 3. Individualized care plan 4. Case management and tracking until diagnostic resolution 5. Assistance with registration to public assistance and linkage to community resources 6. Coordination across providers	Phone + face-to-face; on-site navigator	60 days and time-to-event up to 365 days	Hospital based
Patient Navigation for Cancer Treatment and Rehabilitation					
[47]	Hospital-embedded bilingual lay navigators with case-management training	1. Community outreach and patient education 2. One-on-one navigation from diagnosis to completion of acute treatment 3. Coordination of appointments, transport, financial aid 4. Psychosocial support and continuity of care	In-person and telephone	1 year	Hospital-based
[25]	Lay navigator trained in health prevention	1. Barrier assessment for financial, transport and language issues 2. Education about Pap smear, HPV and procedures 3. Reminder and rescheduling of missed appointments 4. Family education and support 5. Follow-up telephone contact	In-person and telephone	90 days	Hospital-based
[48]	Lay navigators supervised by clinical staff	1. Scheduling and reminder for diagnostic appointments 2. Transportation and child-care coordination 3. Language translation and health education 4. Barrier identification and problem solving 5. Tracking until diagnostic resolution	Telephone + in-person contact	180 days	Hybrid (hospital + community)
[49]	Lay community navigators supervised by clinical team	1. Identify newly diagnosed breast-cancer patients 2. Coordinate appointments, diagnostic imaging, biopsy, and oncology referral 3. Assist with financial paperwork, transportation, and scheduling 4. Provide emotional and educational support 5. Track patient progress through completion of first treatment	In-person + telephone	60 days	Hospital-based
[50]	Professional nurse navigators	1. Barrier identification and resolution (financial, communication, transport) 2. Coordination from diagnosis to treatment 3. Scheduling of specialist consults 4. Patient education and emotional support 5. Evaluation of timeliness and satisfaction	In-person and telephone follow-up	6 months	Hospital-based
[51]	Hybrid model – lay navigator and psychologist team	1. Barrier assessment (logistical, psychosocial, communication) 2. Patient navigation for appointment and financial assistance 3. Telephone psychosocial counseling 4. Education on resources and support 5. Tracking through treatment completion	Telephone + in-person sessions	1 month	Hospital-based

(*Continued*)

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Table 3 (Continued).

Study	Navigator	Intervention Component	Delivery Mode	Duration	Setting
[52]	Lay navigator / community health worker	1. Delivery of patient-centered survivorship wallet card containing treatment history and follow-up information 2. Explanation of card contents and symptom awareness 3. Encouragement to communicate care plans with providers 4. Reinforcement of knowledge	In-person session at clinic + brief telephone reinforcement	3 months	Hospital-based
[53]	Community lay navigators trained in cultural tailoring	1. Culturally tailored education on diagnosis and treatment 2. Assistance with appointments and transportation 3. Coordination with oncology services 4. Psychosocial support and family engagement 5. Documentation of activities and barrier resolution	In-person and telephone support	30 days	Hybrid (community–hospital linkage)
[54]	Clinical social-work–based navigator	1. Comprehensive assessment of medical, financial and psychosocial needs 2. Scheduling of external beam radiotherapy, chemotherapy and brachytherapy 3. Assistance with financial aid applications and transportation 4. Coordination among oncology, radiation and social service departments 5. Continuous tracking and reminder for therapy completion 6. Documentation of all navigation encounters in database	In-person and telephone contact	Median follow up 33.6 (5.5–75.3)	Hospital-based
[55]	Clinical social-work–based navigators + telephone navigation model (IMPA ACT)	1. Structured telephone interview for barrier assessment 2. Health education, problem-solving, self-management support 3. Tailored service intensity based on risk algorithm 4. Emotional support and depression counselling 5. Coordination with financial and transport services	Telephone + in-person contacts	12 months	Hospital-based
[56]	Centralized non-clinical navigation staff	1. Receive patient alerts by phone/Facebook 2. Record symptoms and triage clinical risk 3. Schedule rapid consultations with specialists 4. Coordinate diagnostic procedures and referrals 5. Follow-up until treatment starts	Telephone + in-person appointments	Median 33 days	Hybrid (centralized + hospital-linked)
[57]	Registered nurse navigator	1. Barrier assessment and education 2. Scheduling and coordination of diagnostic, surgical and adjuvant therapy 3. Health-education sessions to improve decision-making 4. Follow-up tracking for guideline-based care 5. Patient preference support	In-person at clinic and telephone follow-up	12 months	Hospital-based
[58]	Clinical nurse navigators with financial focus	1. Needs assessment of financial toxicity 2. Health education about cost communication, insurance policies, budget planning 3. Referral to financial and psychological resources 4. Personalized counseling and WeChat-based peer support group	Face-to-face education during hospital stay + telephone and WeChat follow-up	3 months post-discharge follow-up	Hospital-based

anxiety and depression,[45,51] and enhancing patients' understanding of their condition, treatment options, and recurrence risks.[52] These interventions also played a role in reducing depression and anxiety in newly diagnosed breast cancer patients through psychosocial counseling and emotional support.[51] In addition, navigation helped patients overcome financial and logistical barriers, which are often major obstacles during treatment.[51,58] Overall, patient satisfaction and care experiences improved, particularly through continuous education and enhanced communication with healthcare teams.[45]

Navigation during the treatment and rehabilitation phases focused on improving continuity of care, psychosocial support, and patient preparedness for long-term therapy and the post-treatment period. Navigators at this stage vary widely—ranging from professional nurses and social workers,[54,57,58] to lay navigators who help patients understand therapy and side effects.[25,51] Intervention components include coordination between oncology services, transportation and financial assistance, behavioral counseling, and education on follow-up plans and symptom monitoring with follow-up duration varies between 1–12 months.

Discussion

This review aimed to explore how patient navigation has been applied to support continuity of cancer care for women. As the prevalence of cancer in women, especially breast and cervical cancer increases, continuity of care in cancer care is an essential aspect to maintain the quality of life of patients and treatment outcomes.[59,60] The review found that patient navigation interventions play a significant role in improving various aspects of cancer care for women, encompassing key phases of the cancer care journey, from early detection to treatment and rehabilitation. Of the 26 studies included in the review, most demonstrated a significant positive impact of patient navigation interventions, particularly in reducing delays in diagnosis and treatment, as well as improving treatment adherence. The majority of participants were women with breast and cervical cancer, although some studies also included patients with other gynecological cancers.[55]

In this study, five main domains were identified as being related to the role of patient navigation in improving continuity of cancer care: care coordination, education/information, emotional and social support, patient empowerment, and logistical and financial assistance. Care coordination was the first domain to emerge in this study, indicating that patient navigation successfully ensured that patients received well-coordinated care involving multiple healthcare providers, reducing the likelihood of delays in care.[19–21,24–26,39–58] In several studies, patient navigators are responsible for connecting patients with doctors, scheduling appointments, and periodically monitoring the patient's treatment progress.[21,42,43,45,47,54] This finding shows that the role of patient navigators contributes significantly to accelerating access to cancer care services and overcoming practical barriers that can slow down the treatment process.[19,41,51]

On the other hand, education and information are also important domains in patient navigation. As part of the intervention, patient navigators provide clear and easy-to-understand education about cancer diagnosis, treatment options, and the associated risks and benefits.[19,21,24,25,39–43,46,47,49,50,52,54–56,58] These educational materials, tailored to the patient's cultural background, have been shown to increase patients' level of understanding of their condition and reduce the anxiety that often arises after a cancer diagnosis.[24,47] Cultural-based education has also been shown to be effective in increasing patient participation in cancer screening, particularly among women from ethnic minority backgrounds who often face language barriers and difficulty understanding complex medical information.[39,46,61,62]

Patient empowerment is also an integral part of patient navigation, where patients are given more control over their care process.[20,21,24,39–44,46–49,51–53,55–58] By increasing patient understanding and involvement in medical decision-making and empowerment can improve patient confidence.[28] In addition, this empowerment reduces patient dependence on unilateral medical decisions, allowing them to be more active in planning and choosing treatments that suit their preferences.[51]

Emotional and social support are also crucial, especially for cancer patients who frequently experience stress and anxiety. This review found that several studies demonstrated that patient navigation provides not only practical support but also emotional support, enabling patients to cope with fear and anxiety related to the treatment.[45,51] Several studies have shown that emotional support provided by patient navigators, either through brief counseling or support groups, reduces patient anxiety levels and increases satisfaction with the care provided.[19,42,47] This support is important, especially in helping patients manage the stress associated with a cancer diagnosis and the treatment they undergo.

Finally, logistical and financial assistance has proven to be crucial, particularly in overcoming the practical barriers that cancer patients often experience.[20,21,24,26,40,41,47,49–51,53–55,57,58] Many patients face difficulties in accessing transportation or paying for treatment.[25,46,48,56] In this review, patient navigation demonstrated a vital role in facilitating access to medical services through transportation arrangements and assistance in managing insurance or financial claims, significantly reducing the patient's burden in both practical and financial terms.[41,53] This assistance is especially helpful for patients from low-income backgrounds, who are often prevented from continuing treatment due to logistical or cost constraints.

The five domains are key factors in improving the quality of care for female cancer patients. These five domains play a significant role in supporting three crucial aspects of the cancer care journey: cancer screening, diagnosis completion, and cancer treatment and rehabilitation. Patient navigation in the context of cancer screening helps increase participation by empowering patients by providing appropriate information and logistical support, such as reminders and transportation assistance, especially among underserved groups.[39–41,48,57] At the diagnostic stage, patient navigation accelerates the resolution of the diagnosis by overcoming communication and logistical barriers, and increasing the patient's understanding of the diagnostic process.[21,26,45,48,49] During treatment and rehabilitation, patient navigation ensures timely initiation of treatment and supports adherence to care, reduces anxiety, and provides much-needed emotional and financial support.[42,43,49,50] Therefore, patient navigation interventions involving these five domains strengthen the continuity of cancer care and have a positive impact on treatment outcomes and quality of life for female cancer patients.

The findings of this review show variations in the effectiveness of patient navigation across contexts. Budde et al[22] reported that placement of navigators in community health service centers significantly reduced time to diagnosis, especially in patients with abnormal cervical cancer screening results, while Ell et al[55] found that navigation had no significant impact on treatment adherence or therapy completion in low-income women with breast and gynecologic cancer. These differences in results are likely due to differences in the phase of the intervention, where navigation at the diagnosis stage has a more direct impact on service delivery than implementation at the therapy stage. Meanwhile, Madore et al[51] highlighted psychosocial benefits in the form of reduced depression and distress and increased social support in low-income breast cancer patients, in contrast to the findings of Ramirez et al[53] who emphasized structural aspects, where culturally tailored navigation shortened the time between diagnosis and treatment initiation in Latina patients. Overall, this comparison shows that the success of patient navigation is strongly influenced by the socio-cultural context, the phase of intervention implementation, and the balance between psychosocial and structural support within the healthcare system.

In addition to differences in results between studies, heterogeneity in study characteristics also influences the effectiveness of patient navigation interventions. Variations in the background of navigators whether health professionals or community workers can influence the depth of clinical support and the level of social closeness with patients.[24,46,50,51,57] Different intervention durations, ranging from a few weeks to more than a year, also determine the sustainability of the impact on adherence and continuity of care. In addition, the level of cultural adaptation of each program is an important factor explaining differences in effectiveness, especially in populations with diverse social and linguistic backgrounds. Thus, this diversity of designs and implementations suggests the need for a more in-depth comparative approach and contextual analysis in future studies to understand which factors most determine the success of patient navigation across different health system contexts.[23,63]

Although various studies have demonstrated the effectiveness of patient navigation in improving access to and continuity of cancer care, evidence regarding the economic aspects of this intervention remains limited and is predominantly focused on high-income countries. A previous systematic review identified only a few studies that assessed costs and cost-effectiveness.[64] Most of these studies were conducted in the United States and indicated potential cost savings through increased screening adherence, faster diagnostic resolution and reduced hospitalisations.[64] In addition, Yuan et al (2025) in China showed that a financial navigation programme could reduce the financial burden on breast cancer patients and improve cost literacy.[58] However, it did not include a full economic evaluation. Therefore, further research must integrate cost-effectiveness and economic feasibility analyses to ensure the equitable and sustainable implementation of PN in various state revenue contexts.

This review found that the vast majority of included studies originated from high-income countries, particularly the United States, with one study from Singapore and only two from upper-middle-income countries (China and Mexico). No primary studies were identified from low- or lower-middle-income countries (LMICs). This geographic concentration reflects a major limitation in the current evidence, as most patient navigation programs have been developed and evaluated in well-resourced health systems with established infrastructures, funding mechanisms, and multidisciplinary cancer care networks. Consequently, the transferability and generalizability of these findings to LMIC contexts remain limited.

Implications for Practice

The findings of this review highlight the crucial role of patient navigation in promoting continuity of care for women with cancer, particularly across three key stages: screening, diagnosis, and treatment. In clinical practice, the integration of patient navigation services has demonstrated improved screening uptake, particularly among underserved and minority women, resulting in reduced diagnostic delays for abnormal findings and increased adherence to treatment protocols.

Healthcare practitioners should consider embedding trained patient navigators as integral members of multidisciplinary cancer care teams. Training programs should include competencies in navigating the health system, culturally sensitive communication, and psychosocial support. Additionally, policies and funding mechanisms must support the expansion of navigation services, particularly in resource-constrained settings, to address structural barriers and reduce disparities in cancer care. Then, most of the identified studies originated in the United States, limiting the generalizability of the findings to low- and middle-income countries. This situation indicates a geographic gap in the empirical evidence regarding the effectiveness of patient navigation. Therefore, future research should focus on developing culturally adapted and community-based navigation models, adapting them to the social and cultural characteristics and capacities of healthcare systems in various local contexts.

The absence of studies from LMICs also underscores a critical research gap in understanding how patient navigation could function in resource-constrained environments, where barriers to care such as limited workforce capacity, fragmented referral systems, and financial hardship are often more pronounced. Future studies should therefore prioritize culturally adapted and community-based navigation models that account for the sociocultural, economic, and health-system realities of LMICs. Such research is essential to ensure that navigation strategies are equitable, feasible, and sustainable across diverse global settings.

Strengths and Limitation

A significant strength of this review is the inclusion of 26 primary studies encompassing a wide range of methodological designs, including RCTs, cohort studies, pre-post interventions, and quasi-experimental approaches, as well as participant populations from diverse ethnic, economic, and geographic backgrounds. This diversity provides a rich and comprehensive understanding of how patient navigation interventions are implemented and evaluated across various healthcare settings.

However, several limitations should be acknowledged. First, the majority of studies were conducted in high-income countries, particularly the United States, which limits the applicability of the findings to low- and middle-income countries. Second, there was substantial heterogeneity across studies in terms of intervention components, delivery models, outcome measures, and healthcare system contexts. This variability not only limits the feasibility of conducting a meta-analysis but also affects the generalizability of the findings across different settings.

Conclusion

The findings of this review suggest that patient navigation plays a supportive role in promoting the continuity of cancer care for women across four main phases: screening, diagnosis, treatment, and rehabilitation. The included evidence indicates that such interventions may help improve access to screening services, facilitate timely diagnosis, strengthen treatment adherence, and address patients' psychosocial and logistical challenges. Five interrelated domains were commonly identified across studies, including care coordination, education and information, emotional and social support, patient empowerment, and logistical or financial assistance.

However, considerable heterogeneity among studies particularly in navigator backgrounds, intervention duration, and the degree of cultural adaptation indicates that outcomes are likely influenced by contextual and system-level factors. Furthermore, as most of the reviewed studies were conducted in the United States, the transferability of these findings to low- and middle-income countries remains uncertain. Future research should therefore aim to develop and evaluate culturally tailored, community-based navigation models and context-specific training frameworks that incorporate behavioral, digital, and public health perspectives to support equitable and sustainable cancer care systems.

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