STRUCTURAL BARRIERS AND RACIAL DISPARITIES IN BREAST CANCER CARE: A SCOPING REVIEW OF ACCESS, DIAGNOSIS, AND TREATMENT OUTCOMES

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ABSTRACT

Introduction: *Racial disparities in breast cancer diagnosis, treatment access, and outcomes are significant public health issues worldwide. Despite advancements in early detection and treatment, these disparities persist, particularly among racial and ethnic minority groups. Socioeconomic factors, geographic barriers, and systemic inequities within healthcare systems contribute to these disparities. This review aims to synthesize empirical evidence on the factors contributing to racial disparities in breast cancer diagnosis and treatment access,* **Methods:** *Using the framework by Arksey and O'Malley, refined by Levac et al., relevant literature was sourced from, Science Direct, Google Scholar, and Springer Link with search terms related to breast cancer, racial disparities, and treatment. Inclusion criteria focused on empirical studies addressing racial disparities in breast cancer diagnosis and treatment access,* **Results:** *Nine studies met the inclusion criteria, showing that racial disparities in diagnosis and treatment are influenced by socioeconomic factors, healthcare facility quality, and cultural barriers. Minority groups, especially African American, Latina, and Indigenous women, face delays in diagnosis and treatment, leading to poorer outcomes. Key barriers include inadequate healthcare facilities, lack of insurance, and cultural obstacles*, **Discussion:** *Racial disparities in breast cancer care highlight the need for more inclusive healthcare policies and community-based interventions to improve access for minority groups. Further research is necessary to identify culturally sensitive and systemic solutions to these disparities.*

Keywords: Racial Disparities, Breast Cancer, Treatment Access, Diagnostic Barriers, Vulnarable populations

INTRODUCTION

Breast cancer is one of the most prevalent diseases globally, and despite advances in early detection and treatment, racial disparities in access to diagnosis, therapy, and treatment outcomes remain a significant public health issue. These disparities arise from the complex interplay of factors such as socio-economic status, health insurance, geographic barriers, and differences in healthcare systems. Research by (Ko et al., 2020) shows that health insurance plays a critical role in reducing the risk of late-stage breast cancer diagnosis among racial and ethnic minorities. However, while health insurance is important, it is not enough to address these disparities, as socio-economic and environmental factors also play a significant role in exacerbating these issues (Hines et al., 2023). Furthermore, geographic barriers and the quality of healthcare facilities are major obstacles leading to delayed diagnoses and diagnoses at more advanced stages (Choe et al., 2021). Therefore, in-depth research is needed to understand how these factors interact in creating disparities in breast cancer diagnosis access.

In addition to diagnosis, inequalities in breast cancer treatment also remain a significant concern. Cultural, economic, and systemic barriers related to healthcare often hinder access to treatment for women from racial and ethnic minority groups. For instance, Latina women, despite having a lower incidence of breast cancer compared to other ethnic groups, have significantly lower mammography screening rates, often due to cultural and economic barriers (Pariser et al., 2022). Similarly, in African immigrant communities in the United States, cultural factors such as discomfort speaking with maledoctors act as barriers to treatment and screening (Rauch et al., 2024). Economic barriers, such as limited health insurance or high treatment costs, are often

the main obstacles preventing Black women from accessing breast cancer care, leading to delayed treatments and worsened prognoses (Gbenonsi et al., 2021). In low- and middle-income countries, logistical issues, such as distance to healthcare facilities, further exacerbate treatment delays (Afaya et al., 2022). This highlights the importance of investigating the existing systemic and economic barriers and identifying solutions that can be implemented to improve the situation.

Differences in breast cancer treatment outcomes between various races and ethnicities are also prominent, influenced by factors such as access to care, insurance status, and tumor biology. For example, HR-negative breast cancer, which is more common in Black women, often responds poorly to treatment compared to the HR-positive subtype more commonly found in other ethnic groups, which tends to have a better prognosis (Akinyemiju et al., 2016). Triple-negative breast cancer (TNBC), which occurs more frequently in Black women, is also associated with poorer treatment outcomes, further exacerbating treatment inequalities (Ademuyiwa et al., 2016). Research by (Navarro et al., 2021)

reveals that Black and Hispanic women often experience delays in surgical care, which contributes to a decrease in their survival rates. These treatment delays worsen patient prognoses, especially when diagnoses are made at more advanced stages. Socio-economic factors, including income levels and employment status, also significantly impact healthcare-seeking behavior and adherence to therapy, all of which are critical for optimal treatment outcomes (Yedjou et al., 2019).

This study aims to identify and analyze racial disparities in breast cancer diagnosis access, therapy, and treatment outcomes through a review of the existing literature. The primary goal of this research is to understand the factors influencing inequalities in breast cancer diagnosis access, treatment, and outcomes across different races and ethnicities, as well as to identify efforts made to address these disparities. This study will also explore how socio-economic factors and health policies contribute to exacerbating or reducing these disparities. In relation to the existing literature, studies by (Hines and Li, 2023) indicate that health insurance plays a critical role in access to cancer care; however, disparities persist even when health insurance is considered. Therefore, this study aims to suggest a more comprehensive approach, including updates to health policies and community-based interventions to reduce these disparities.

Existing literature suggests that, although factors such as health insurance and socio-economic status play significant roles in access to breast cancer diagnosis, inequalities persist even when these factors are accounted for. This study seeks to map the literature on gaps in understanding and solutions for issues related to disparities in diagnosis access, barriers to treatment, and differences in treatment outcomes resulting from racial and ethnic disparities. This research is expected to make a meaningful contribution to improving health equity in access to healthcare services and to assist in designing more targeted and effective policies to address the existing inequalities. The research questions for this study are: How do racial disparities affect access to breast cancer diagnosis, treatment, and outcomes? What factors contribute to these inequalities, and what steps can be taken to address them?

METHODS

This study employs a scoping review design to map and analyze the relevant literature on racial disparities in access to diagnosis, therapy, and treatment outcomes of breast cancer. This method follows the guidelines established by the Joanna Briggs Institute (JBI) (Schell et al., 2021) and the PRISMA-ScR framework (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews) (Tricco et al., 2018) which are designed to ensure that the literature review is conducted systematically and transparently.

The first step in this research is to formulate the research objectives and questions using the Population, Concept, Context (PCC) framework, which helps clarify the focus and scope of the study (Schell et al., 2021) Afterward, a research protocol is developed, which includes inclusion and exclusion criteria, literature search strategies, and data extraction methods. This protocol ensures that the research is conducted transparently and can be replicated, and it is also recommended to be registered on platforms such as the Open Science Framework (OSF) or JBI Evidence Synthesis.

The literature search process is carried out across various relevant academic databases, as well as grey literature, to identify all studies that meet the inclusion criteria. Expert librarians are involved in developing the optimal search strategy, and every step of the search is documented clearly (Tricco et al., 2018). Article selection is conducted in several stages: beginning with screening based on titles and abstracts, followed by full-text evaluation to ensure that the selected articles meet the criteria. The PRISMA-ScR flow diagram is used to ensure transparency in the study selection process (Tricco et al., 2018). After articles are selected, data is extracted and analyzed descriptively to map the key findings, research trends, and gaps in the existing literature. This process is designed to produce a credible, systematic scoping review that provides a comprehensive overview of racial disparities in breast cancer treatment.

Table 1. PCC Framework

POPULATION	Patients with breast cancer from diverse racial or ethnic groups, including but not limited to African-American, Asian, Hispanic/Latina, Indigenous populations, and other minority groups based on the study's geographical context
CONCEPT	Access to breast cancer treatment, including early diagnosis access, initiation of therapy, adherence to therapy, availability of medical interventions (surgery, chemotherapy, hormone therapy), barriers to care, and disparities in treatment outcomes due to unequal access
CONTEXT	Research conducted in various geographical regions, including developed and developing countries, both urban and rural settings, and public or private healthcare systems

Eligibility Criteria

This scoping review applied predefined inclusion and exclusion criteria to identify relevant studies regarding racial disparities in access to and treatment of breast cancer. The inclusion criteria were empirical studies that addressed disparities in breast cancer diagnosis, therapy, and outcomes based on race or ethnicity. Studies included were published in indexed journals between 2015 and 2024, conducted in various geographical regions worldwide (both developed and developing countries), and written in English. The studies needed to present quantitative or qualitative data on barriers to breast cancer care, including factors like early diagnosis access, treatment initiation, therapy adherence, and outcomes for patients from diverse racial or ethnic backgrounds, such as African-American, Asian, Hispanic/Latina, Indigenous populations, or other racial/ethnic minorities. Only studies that focused on breast cancer specifically, and not other types of cancer, were considered.

The exclusion criteria included theoretical or opinion-based articles without empirical data, studies not focusing on breast cancer, research that did not explore access to treatment or racial/ethnic disparities, studies published before 2015 or after 2024, and those that were not accessible in English. Articles that failed to report valid empirical evidence or lacked clear data on racial/ethnic disparities in diagnosis, treatment, or outcomes were also excluded. These criteria were designed to ensure methodological rigor and empirical relevance to the research questions, focusing on studies that directly addressed the core issue of racial disparities in breast cancer care across different populations.

Literature Search Strategy

Related literature search, this article uses databases from Science Direct, Google Scholar and Springer Link using Boolean codes.

Table 2. Databases

DATABASE	LINK	BOOLEAN CODES
Scince Direct	https://www.sciencedirect.com	("breast cancer") AND ("access to treatment" OR "healthcare access") AND ("race" OR "ethnicity") AND ("open access") AND ("original research")
Google Scholar	https://scholar.google.com	("breast cancer") AND ("access to treatment" OR "healthcare access") AND ("race" OR "ethnicity") AND ("open access") AND ("original research")
Springer Link	https://link.springer.com	("breast cancer") AND ("access to treatment" OR "healthcare access") AND ("race" OR "ethnicity") AND ("open access") AND ("original research")

Identification and Selection of Literature

A comprehensive literature search was conducted using reputable academic databases, including ScienceDirect (https://www.sciencedirect.com), Google Scholar (https://scholar.google.com), and SpringerLink (https://link.springer.com). The selection process aimed to identify empirical studies that examined racial or ethnic disparities in access to diagnosis, treatment, and outcomes of breast cancer. Articles retrieved were systematically screened for relevance based on the predefined inclusion and exclusion criteria, focusing on publication year, study population, and core variables related to access and racial disparities.

All identified records were imported into a data management system, where duplicate entries were removed, and the remaining studies underwent a two-step screening process: initial screening based on titles and abstracts, followed by full-text evaluation. Each article was assessed for alignment with the Population, Concept, and Context (PCC) framework. Any inconsistencies or ambiguities in inclusion were resolved through team discussion.

The entire selection process followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines (Tricco et al., 2018)), ensuring transparency, replicability, and methodological rigor. A PRISMA flow diagram was developed to document the number of articles identified, screened, assessed for eligibility, and included in the final review.

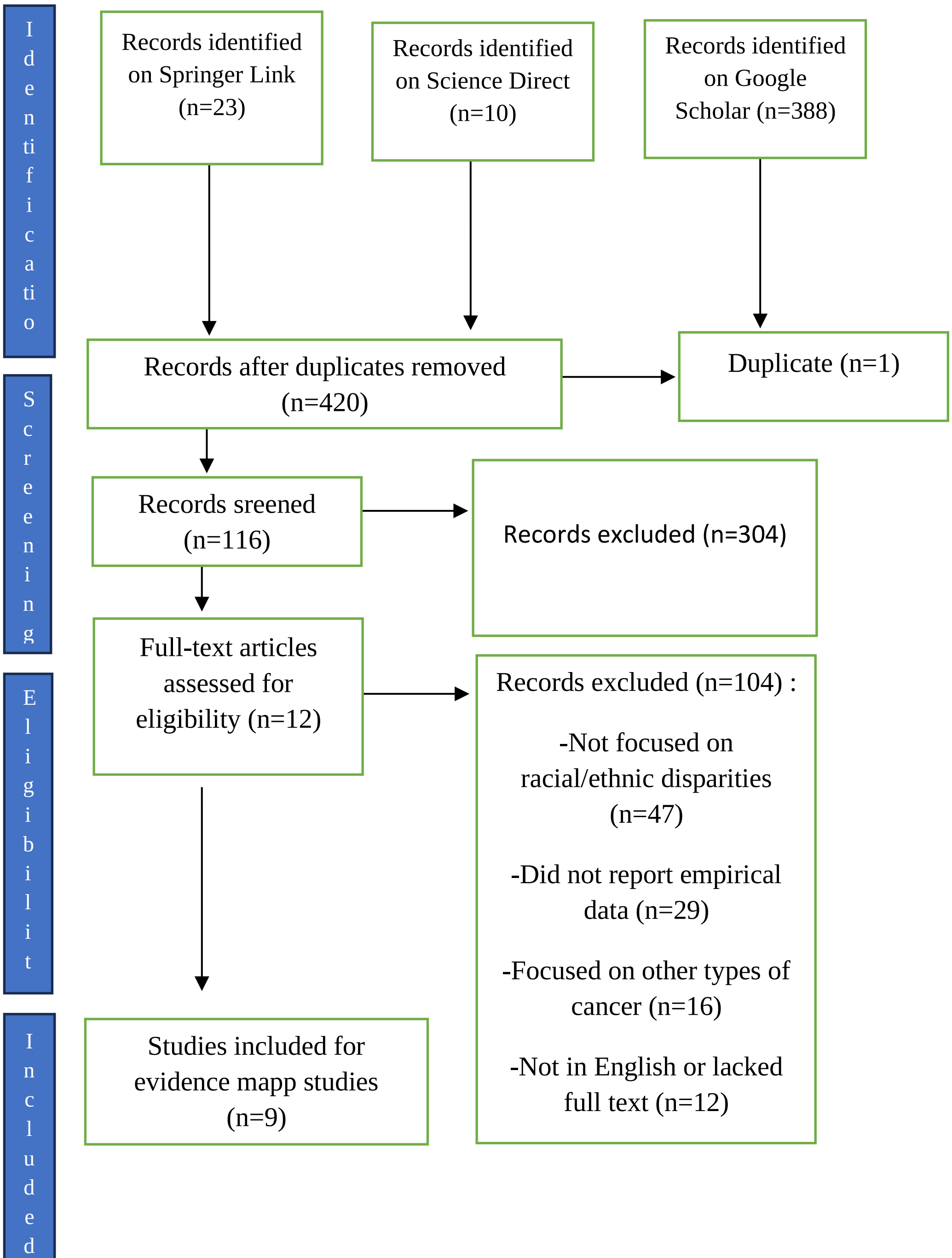

Figure 1.PRISMA Flow diagram of studies search

RESULTS

Characteristics of the Studies

A total of 421 articles were retrieved from the Science Direct (10), Springer Link (23), and Google Scholar (388) databases.

After screening based on the inclusion and exclusion criteria, 304 articles were excluded owing to publication outside the 2015–2025 range, lack of full-text access, or non-English language. Of the remaining 117 articles, 47 were literature reviews, 60 had irrelevant abstracts, 1 were duplicates, 9 were relevant. Subsequent to the screening process, nine articles met the inclusion criteria and were evaluated using the Joanna Briggs Institute (JBI) Scoping Review Checklist.

Thematic Analysis Based on Nine Articles

A total of nine empirical studies published between 2015 and 2024 were included in this scoping review after screening 421 records. These studies, mostly conducted in the United States, explored racial disparities in breast cancer care among African American, Hispanic/Latina, Indigenous, and Asian women. Thematic synthesis revealed seven interrelated findings. First, racial and ethnic minorities face significant delays in diagnosis due to limited healthcare access, geographic isolation, and institutional mistrust, resulting in late-stage detection. Second, treatment barriers such as financial hardship, lack of culturally competent care, and systemic delays in surgery or chemotherapy contribute to poorer survival outcomes. Third, cultural and psychosocial determinants—including religious beliefs, stigma, language challenges, and limited social support—affect care-seeking and treatment adherence. Fourth, disparities in outcomes are evident, with minority women more frequently diagnosed with aggressive subtypes (e.g., triple-negative breast cancer) and experiencing higher mortality and lower survival rates. Fifth, structural issues such as underfunded facilities, inadequate health system infrastructure, and provider bias further reinforce inequities. Sixth, although interventions like patient navigation, mobile screening, and culturally adapted education show promise, their implementation remains inconsistent and under-evaluated. Finally, persistent knowledge gaps—particularly in longitudinal studies, inclusion of smaller minority groups, and evaluations of systemic healthcare interventions—highlight the need for further research and targeted policy responses. Together, these findings underscore the multifactorial nature of racial disparities in breast cancer care and the urgency for intersectional, equity-driven strategies.

Types of Access Barriers

This scoping review identified five primary types of access barriers that contribute to racial and ethnic disparities in breast cancer diagnosis and treatment. Socioeconomic barriers, including poverty, lack of insurance, and low income, limit the ability of minority populations—particularly African American, Hispanic, and Indigenous women—to afford screening and timely treatment. Healthcare system-related barriers also persist, as minority patients often rely on under-resourced public facilities with limited diagnostic tools, insufficient staffing, and longer wait times. Cultural and social factors, such as stigma, spiritual beliefs, and mistrust in the healthcare system, further discourage help-seeking behaviors, especially when coupled with low health literacy and reliance on traditional healing practices. Geographic barriers also play a critical role: many underserved populations live in rural or remote areas with limited transportation options and scarce access to specialized care. Finally, psychosocial challenges such as fear, anxiety, and lack of social support undermine patients' willingness or ability to seek and adhere to care. These multidimensional barriers operate simultaneously and synergistically, reinforcing existing inequities in breast cancer outcomes across racial and ethnic groups.

Impact of Racial/Ethnic Disparities on Breast Cancer Outcomes

The synthesis of the reviewed literature reveals that racial and ethnic minority populations disproportionately experience adverse breast cancer outcomes. These disparities are driven by a confluence of delayed diagnoses, unequal access to timely and adequate treatment, and structural inequities within healthcare systems. African American and Hispanic women are notably more likely to be diagnosed at advanced stages and to encounter treatment delays, particularly in surgical and chemotherapeutic interventions—factors that critically diminish prognostic outlooks. Moreover, these populations exhibit disproportionately higher incidence of biologically aggressive subtypes, such as triple-negative breast cancer (TNBC), which are associated with limited therapeutic options and reduced survival.

Psychosocial dimensions—including heightened psychological distress, insufficient social support, and culturally embedded stigma—further impede adherence to treatment regimens and engagement with care. Compounding these issues are interethnic variations in tumor biology and genetic expression, which add a layer of complexity to treatment planning and outcome predictability. Collectively, these findings highlight a multidimensional nexus of social determinants, systemic healthcare barriers, and molecular pathology that sustains racial inequities in breast cancer prognosis and survival.

Interventions and Policies to Address Racial Disparities

The literature highlights a range of targeted interventions and policy strategies aimed at mitigating racial disparities in breast cancer care. Efforts to expand access to early detection include community-based screening initiatives (e.g., mobile mammography) and patient navigation programs that assist underserved women in overcoming logistical, linguistic, and bureaucratic barriers to timely diagnosis.

Enhancing equitable treatment access involves policy reforms such as expanding insurance coverage, improving resource allocation to public hospitals, and leveraging telemedicine to reduce geographic disparities.

Culturally responsive strategies are also critical. These include tailored educational campaigns, spiritual support integration, and the involvement of trusted community figures to reduce stigma and improve treatment adherence. Addressing provider-level factors such as implicit bias and limited cultural competence is essential, and several studies advocate for mandatory bias training and curricular reforms in medical education.

Furthermore, policy advocacy is needed to improve data infrastructure and support inclusive research. Increasing minority participation in clinical trials and implementing race- and ethnicity-specific data monitoring are key to informing equitable care delivery. Collectively, these interventions underscore the importance of multi-level, culturally informed, and system-wide approaches to dismantling structural inequities in breast cancer outcomes.

Cultural and Systemic Influences on Racial Disparities

Racial and ethnic disparities in breast cancer care are strongly mediated by a confluence of cultural and systemic determinants. The literature reveals that cultural beliefs—including religious worldviews, fatalistic attitudes, and reliance on non-biomedical healing traditions—can significantly delay diagnosis and reduce adherence to conventional treatment. In some minority communities, breast cancer is stigmatized, and spiritual coping mechanisms are prioritized, sometimes at the expense of timely medical intervention. Mistrust of healthcare institutions, particularly among African American, Hispanic, Indigenous, and immigrant populations, is rooted in historical discrimination and continues to act as a barrier to engagement with formal care systems.

Systemic barriers intersect with cultural influences, further exacerbating inequities. Minority populations disproportionately experience socioeconomic disadvantage, with lower levels of income, education, and insurance coverage—factors that restrict access to early screening and advanced treatment options. These groups are more likely to receive care at underfunded public or safety-net hospitals, where resource constraints limit the quality and timeliness of cancer services. Furthermore, implicit bias and a lack of cultural competence among healthcare providers result in unequal communication, inadequate shared decision-making, and reduced trust, all of which contribute to suboptimal outcomes.

Efforts to mitigate these disparities emphasize the importance of culturally tailored interventions, such as the use of community health workers and patient navigators who understand patients' sociocultural contexts. Educational initiatives designed to improve health literacy within minority populations have also shown promise in increasing screening uptake and treatment compliance. At the policy level, public health campaigns, structural reforms in care delivery, and advocacy for equitable insurance access and minority representation in research are identified as essential components in addressing the root causes of racial disparities in breast cancer outcomes.

Gaps in Literature and Research

Despite the expanding body of literature on racial disparities in breast cancer care, critical knowledge gaps continue to impede the development of holistic, equity-driven strategies. Chief among these is the absence of longitudinal research capable of illuminating the enduring effects of delayed diagnosis and treatment among racially and ethnically minoritized populations. The dominance of cross-sectional study designs limits understanding of long-term survival trajectories, recurrence risks, and quality-of-life outcomes—dimensions essential to capturing the full burden of disparity.

Moreover, intersectionality remains insufficiently addressed. The complex interplay between race and other social determinants—such as socioeconomic deprivation, immigrant status, and geographic marginalization—has yet to be adequately theorized or empirically examined. This gap not only obscures the multifactorial nature of disadvantage but also restricts the capacity to tailor interventions across diverse contexts. Additionally, substantial underrepresentation of Asian, Indigenous, Middle Eastern, and other minoritized groups, particularly in non-Western settings, constrains the generalizability and cultural sensitivity of current evidence.

There is also a notable dearth of rigorous evaluations of culturally adapted interventions. While strategies like patient navigation and community outreach have demonstrated potential, their effectiveness remains uneven due to limited attention to cultural congruence and contextual fit. Likewise, structural dimensions of healthcare—ranging from differential resource allocation and institutional accreditation to implicit provider bias—have been insufficiently problematized in empirical analyses.

Treatment adherence is another neglected domain. Few studies interrogate how cultural beliefs, financial barriers, logistical constraints, and psychosocial stressors converge to disrupt continuity of care in racialized populations. Finally, while cultural competence is widely promoted in policy and practice, there is a lack of robust evidence evaluating the actual impact of provider training on clinical equity and patient-centered outcomes.

Collectively, these lacunae underscore the pressing need for inclusive, intersectional, and methodologically rigorous research that informs policy reform and targeted interventions. Without addressing these foundational gaps, efforts to advance racial equity in breast cancer care risk remaining superficial and fragmented.

Subgroup-Specific Disparities in Breast Cancer Care

Across the nine included studies, notable subgroup-specific disparities emerged, illustrating how racial and ethnic identities intersect with structural and cultural factors to shape breast cancer trajectories.

1. African American Women

This group consistently experiences delayed diagnosis, suboptimal treatment, and poorer survival outcomes. Contributing factors include socioeconomic disadvantage, geographic isolation, and underinsurance. Additionally, African American women exhibit a higher prevalence of aggressive subtypes such as triple-negative breast cancer, compounding clinical risk and limiting treatment efficacy.

2. Hispanic/Latina Women

Although incidence rates are generally lower among Latinas, they face critical barriers related to language, cultural health beliefs, and limited financial resources. Reliance on traditional remedies and mistrust in Western healthcare often delay diagnosis and affect adherence. Culturally responsive, community-based interventions have shown promise in improving screening uptake and engagement.

3. Asian Women

Particularly among immigrant subgroups, stigma, fatalistic health beliefs, and language barriers contribute to delayed care-seeking and low screening rates. Despite limited representation in clinical literature, findings suggest that religious coping and familial support may serve as protective psychosocial factors that influence engagement with care.

4. Indigenous Populations

Indigenous women face compounded disadvantages due to geographic remoteness, underfunded healthcare infrastructure, and systemic mistrust. Diagnoses often occur at advanced stages. While culturally rooted support networks may facilitate treatment adherence, evidence on how to effectively integrate Indigenous values into care models remains scarce.

5. Other Minority Groups

Populations such as Native American and Middle Eastern women experience unique cultural and systemic barriers, including high poverty rates, stigma surrounding cancer, and limited screening access. Tailored educational outreach and culturally grounded healthcare delivery are urgently needed to mitigate these disparities.

Table 3. Review the Articles

ID	TITLE, AUTHORS	REGION OF STUDY	STUDY TYPE	RACE/ETHNICITY STUDIED	SAMPLE AND POPULATION	FOCUS ON TREATMENT ACCESS	MAIN BARRIERS	MAIN FINDINGS
RAS1	Race/ethnicity and socio-economic	United States	Cohort Study	White (non-Hispanic), Black (non-	>300.000 pasien dari National	Differences in treatment	Access to academic	Low-SES NHBs at

	differences in breast cancer surgery outcomes, Akinyemiju et al. (2015).	(NCDB)	(Retrospective)	Hispanic), Hispanic	Cancer Database	outcomes (survival, complications)	hospitals, insurance, patient education	highest risk of breast cancer mortality
RAS2	Impact of Race, Ethnicity, and BMI on Achievement of Pathologic Complete Response Following Neoadjuvant Chemotherapy, Warner et al. (2016)	United States (clinical trial)	Secondary analysis	White (non-Hispanic), Black (non-Hispanic), Hispanic	2,795 women from 4 phase III clinical trials	Response to neoadjuvant therapy	Interaction of race and BMI on pCR	High BMI → significantly decreased pCR, especially in NHB women
RAS3	Racial Disparities in Breast Cancer Outcomes in the Metropolitan Atlanta Area: New Insights and Next Steps, Collin et al. (2019)	Atlanta, AS	Retrospective cohort	White (non-Hispanic), Black (non-Hispanic)	4,943 White and 3,580 Black women (Georgia Cancer Registry, 2010–2014)	Survival & type of therapy	Difference between therapy and early detection	NHB with luminal A still has high mortality despite high SES
RAS4	Differences in Breast Cancer Stage at Diagnosis and Cancer-Specific Survival by Race and	United States	Cohort Study (Retrospective)	White (non-Hispanic), Black (non-Hispanic), Hispanic, Asian	373,563 women from SEER (2004-2011)	Diagnosis stage & survival	NHB is more often diagnosed at an advanc	NHB less frequent stage I, higher mortality

	Ethnicity, Iqbal et al. (2015)						ed stage	
RAS5	Racial/ethnic disparities in time to a breast cancer diagnosis: the mediating effects of healthcare facility factors, Molina et al. (2015)	United States (Chicago)	Population cohort	Various Ethnicities	606 pasien dari Breast Cancer Care in Chicago Study	Timing of diagnosis & early access	Facilities with low accreditation	43% of diagnosis disparities are mediated by facility characteristics
RAS6	Racial/Ethnic Disparities in Knowledge About One’s Breast Cancer Characteristics, Freedman et al. (2015)	United States	Cross-sectional Study	White (non-Hispanic), Black (non-Hispanic), Hispanic	500 women with breast cancer stage 0–III	Knowledge about tumor characteristics	Education, health literacy	NHB and Hispanic less knowledgeable about their cancer than White women
RAS7	Differences in breast cancer incidence among young women aged 20–49 years by stage and tumor characteristics, age, race, and ethnicity,	United States (CDC, NPCR, SEER data)	Epidemiologic, Population-Based Analysis	White, Black, Hispanic, Asian/Pacific Islander, American Indian/Alaska Native	Women aged 20–49 diagnosed with breast cancer (2004–2013)	Patterns of incidence by race/ethnicity and tumor features	Higher incidence of late-stage and aggressive subtypes in minority women	Young Black women had the highest incidence and were more likely diagnosed at later stages with

	2004–2013, Shoemaker et al. (2018)							higher-grade tumors. Disparities were also present among American Indian/ Alaska Native and Hispanic groups.
RAS8	Age, Body Mass Index, Tumor Subtype, and Racial and Ethnic Disparities in Breast Cancer Survival, Lipsyc-Sharf et al. (2023)	United States	Cohort Study (Retrospective)	White (non-Hispanic), Black (non-Hispanic), Hispanic, Asian	9,479 women from 4 adjuvant clinical trials	Therapy response & survival	Interactive effects of age and BMI with race	Disparities persist despite standardized therapy protocols.
RAS9	A Latent Class Assessment of Healthcare Access Factors and Disparities in Breast Cancer Care Timeliness, Matthew R. Dunn et al. (2024)	AS (Chicago)	Cross-sectional Study (Analytical)	Black, Hispanic, White	606 women with breast cancer	Time to breast cancer diagnosis	Non-accredited facilities	Low-quality facilities correlated with delayed diagnosis

A total of nine articles were critically appraised using the appropriate tools from the Joanna Briggs Institute (JBI) Critical Appraisal Checklists, corresponding to the study design of each article. These included Analytical Cross-Sectional Studies and Cohort Studies.The results demonstrated a high level of methodological quality across all studies, with each article fulfilling 100% of the relevant JBI criteria.

Tabel 4. Review Berdasarkan JBI Critical Appraisal Checklist for Analytical Cross-Sectional Studies

ID	JUDUL ARTIKEL	POIN 1	POIN 2	POIN 3	POIN 4	POIN 5	POIN 6	POIN 7	POIN 8	TOTAL
RAS 1	Race/ethnicity and socio-economic differences in breast cancer surgery outcomes	✓	✓	✓	✓	✓	✓	✓	✓	100%
RAS 5	Racial/ethnic disparities in time to a breast cancer diagnosis: the mediating effects of healthcare facility factors	✓	✓	✓	✓	✓	✓	✓	✓	100%
RAS 6	Racial/Ethnic Disparities in Knowledge About One's Breast Cancer Characteristics	✓	✓	✓	✓	✓	✓	✓	✓	100%
RAS 7	A latent class assessment of healthcare access factors and	✓	✓	✓	✓	✓	✓	✓	✓	100%

	disparities in breast cancer care timeliness									

Tabel 5.Review Berdasarkan JBI Critical Appraisal Checklist for Cohort Studies

ID	JUDUL ARTIKEL	POIN 1	POIN 2	POIN 3	POIN 4	POIN 5	POIN 6	POIN 7	POIN 8	POIN 9	POIN 10	POIN 11	TOTAL
RAS2	Impact of Race, Ethnicity and BMI on Achievement of Pathologic Complete Response Following Neoadjuvant Chemotherapy for Breast Cancer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100 %
RAS3	Differences in Breast Cancer Stage at Diagnosis and Cancer-Specific Survival by Race and Ethnicity in the United States	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100 %

RAS4	Racial Disparities in Breast Cancer Outcomes in the Metropolitan Atlanta Area: New Insights and Approaches for Health Equity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100 %
RAS8	Differences in Breast Cancer Incidence Among Young Women Aged 20–49 Years by Stage and Tumor Characteristics, Age, Race, and Ethnicity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100 %
RAS9	Age,Body Mass Index, Tumor Subtype, and Racial and Ethnic Disparitie	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100 %

	s in Breast Cancer Survival												

DISCUSSION

This scoping review integrates insights from nine empirical studies published between 2015 and 2024, offering a comprehensive examination of the intricate and multidimensional nature of racial and ethnic disparities in breast cancer care. The synthesis identifies seven interrelated thematic domains that collectively structure the experiences of minority women across the entire breast cancer continuum—from initial diagnosis through treatment processes and eventual outcomes. Each domain reflects a complex interplay of social, structural, cultural, and clinical determinants, underscoring the need for critical analysis and sustained, equity-oriented intervention.

Diagnostic Delays and Access Inequities

The findings of this review corroborate a robust body of evidence indicating that racial and ethnic minority women—most notably African American, Hispanic/Latina, Indigenous, and Asian populations—experience marked delays in breast cancer diagnosis. These delays are largely attributable to inadequate access to early detection services, which are, in turn, shaped by entrenched socioeconomic disadvantages, geographical remoteness, and longstanding institutional mistrust. The consequence of such diagnostic delays is a higher incidence of late-stage presentation, thereby significantly diminishing treatment efficacy and survival prospects. These findings accentuate the urgent need for system-wide initiatives to expand timely and affordable screening, particularly in structurally underserved communities.

Inequities in Treatment Access and Delivery

Beyond diagnostic delays, disparities in access to high-quality treatment further compound racial inequities in breast cancer care. Minority patients are disproportionately treated in under-resourced healthcare settings, where they face prolonged wait times and reduced access to standard-of-care therapies. These institutional constraints are exacerbated by patient-level barriers, including insurance instability, financial toxicity, and limited access to care navigation resources. The convergence of these factors undermines adherence to treatment protocols and widens survival gaps. Targeted structural investments in healthcare infrastructure, alongside policy reforms to ensure equitable coverage and resource distribution, are imperative to rectify these disparities.

Cultural and Psychosocial Determinants of Care Engagement

Cultural worldviews, spiritual belief systems, and psychosocial stressors critically shape healthcare behaviors and treatment engagement among minority groups. In some communities, cancer is perceived through a fatalistic or moral lens, which may delay help-seeking or foster ambivalence toward biomedical treatment. Moreover, stigma, linguistic barriers, and low health literacy serve to disrupt effective patient–provider communication and continuity of care. These dynamics underscore the importance of culturally grounded interventions—such as community health workers, language-concordant services, and spiritual integration—that resonate with the values and lived experiences of diverse populations.

Outcome Disparities and Tumor Biology

The intersection of diagnostic and treatment inequities culminates in stark outcome disparities. African American and Hispanic women, in particular, are more likely to be diagnosed with advanced-stage disease and biologically aggressive subtypes such as triple-negative breast cancer (TNBC). These subtypes present limited therapeutic options and poorer prognoses, further exacerbating survival gaps. Without equitable access to timely diagnosis, state-of-the-art treatment modalities, and genomic profiling, these outcome disparities are likely to persist. Thus, expanding access to precision oncology and early-risk stratification tools represents a critical avenue for reducing mortality differentials.

Structural and Systemic Drivers of Inequity

At a macro level, structural and systemic forces sustain racial disparities in breast cancer care. Underinvestment in safety-net hospitals, geographic maldistribution of cancer services, and implicit bias among providers contribute to inequitable care pathways. Minority patients frequently encounter clinical environments that lack cultural competence, thereby reinforcing alienation and diminishing care quality. Addressing these entrenched inequities necessitates institutional accountability, enhanced provider training in cultural humility, and mechanisms for redistributing resources in alignment with population-level needs.

Intervention Efficacy and Policy Implications

Although multiple interventions—such as teleoncology, patient navigation, and culturally tailored health education—have demonstrated promise, their implementation is often fragmented and under-evaluated. Moreover, few programs undergo rigorous assessment for cultural adaptability, scalability, or long-term efficacy. A coherent, multi-level strategy is needed—one that integrates structural reform, community engagement, and evidence-based practices within a framework of cultural and contextual responsiveness. Policymakers must prioritize inclusive policy designs that embed equity considerations at every level of care delivery.

Research Gaps and Future Directions

Despite increasing scholarly attention to racial disparities in breast cancer, critical empirical gaps remain. Notably, the dearth of longitudinal studies constrains understanding of long-term survival trajectories, recurrence risks, and quality-of-life outcomes. Intersectional dynamics—such as the interplay of race with socioeconomic status, immigration status, or rurality—remain insufficiently theorized or measured. The underrepresentation of smaller racial and ethnic groups, coupled with limited examination of treatment adherence mechanisms and the impact of provider cultural competence, further narrows the evidence base. Future research should be methodologically rigorous, community-engaged, and explicitly intersectional to support the design of equitable, durable, and culturally congruent solutions.

CONCLUSION

This scoping review elucidates the complex and multifactorial nature of racial and ethnic disparities in breast cancer diagnosis, treatment, and outcomes. Drawing from nine empirical studies published between 2015 and 2024, the review identifies seven interwoven domains—diagnostic delays, treatment inequities, cultural and psychosocial determinants, disparities in clinical outcomes, systemic barriers, intervention efforts, and research gaps—that collectively shape the cancer care continuum for minority women.

The findings affirm that disparities are not merely the result of individual-level behaviors or biological predispositions but are structurally embedded within healthcare systems, sociocultural contexts, and policy environments. Late-stage diagnosis, limited access to quality treatment, inadequate provider-patient communication, and implicit bias converge to systematically disadvantage African American, Hispanic/Latina, Indigenous, and Asian women across the cancer trajectory. Moreover, cultural worldviews, spiritual coping mechanisms, and social stigma further mediate help-seeking behaviors and treatment adherence, particularly among immigrant and underserved communities.

Importantly, while promising interventions—such as mobile screening units, patient navigation, and culturally adapted health education—have emerged, their scale, cultural congruence, and sustained impact remain insufficiently addressed. Similarly, institutional reforms and policy responses have yet to fully confront the deep-rooted structural determinants of inequality, including healthcare underfunding, geographic maldistribution of services, and lack of cultural competence among providers.

The implications of this review are twofold. First, any meaningful effort to eliminate racial disparities in breast cancer care must adopt an intersectional and system-wide perspective—one that transcends narrow clinical frameworks and addresses the social, structural, and cultural ecosystems in which care is delivered. This includes expanding culturally competent training for healthcare providers, integrating community-informed outreach models, and ensuring equitable access to precision medicine and diagnostic technologies. Second, future research must move beyond descriptive accounts and engage in rigorous, longitudinal, and equity-focused inquiry that includes underrepresented populations and contextualizes disparities within broader social determinants of health.

In conclusion, the persistence of racial and ethnic inequities in breast cancer care reflects not a deficit in knowledge, but a deficit in translation—from evidence to practice, from recognition to structural reform. Bridging this gap demands a reconfiguration of clinical, educational, and policy systems to ensure that all women, irrespective of race or ethnicity, receive timely, high-quality, and culturally respectful care across the cancer continuum.

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