

Breast Cancer (Knowledge and Attitude of Women toward Breast Cancer Screening)

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Abstract

Background: Breast cancer is still the most commonly diagnosed cancer and a top cause of cancer deaths in women worldwide. While we've made progress with diagnostic tech, finding cancer early through screenings like BSE, CBE, and mammograms is key to saving lives. Yet, there's a big difference between knowing about these screenings and actually doing them, especially in low- and middle-income areas. Socioeconomic, cultural, and educational obstacles make early intervention really hard in those places. Breast cancer has become the foremost cancer in females, especially in India, since studies have shown a stark contrast between rural and urban areas when it comes to screening awareness and uptake.

Methods: This study offers a detailed look at breast cancer screening today. We combine recent epidemiological info with regional KAP findings. Using a systematic method, we assess screening adherence by focusing on health literacy, institutional support, and economic factors. These elements help promote early detection.

Results: While global understanding of breast cancer grows, turning that knowledge into actual screenings is still tough due to lingering myths and inadequate systems. Studies show we need customized education and solid healthcare processes to bridge these gaps and boost screening rates in different groups.

Conclusion: To fight breast cancer, we need a range of public health plans. Educating women with targeted awareness campaigns and making screening easier through policy changes is key. This helps lower the worldwide spread of late-stage breast cancer.

Keywords: Breast Cancer; Cancer Screening; Early Detection; Knowledge, Attitude, and Practice (KAP); Public Health; Mammography; Global Health Disparities.

1. Introduction

Breast cancer is the most common cancer in women worldwide, causing big problems for public health systems everywhere (Bray et al., 2024). With its high rates of occurrence, breast cancer puts a huge strain on resources, especially since death rates are still way higher in low-to-middle-income countries compared to wealthier ones (Wilkinson and Gathani, 2021). Even though we have tools like mammography, CBE, and BSE to catch it early, these often don't get used properly, leading to diagnoses at later stages when chances of survival drop (Naik et al., 2024). The case of India is particularly telling in this regard, since even though there is a large number of women living in this country, facilities for mammography are largely confined to cities, denying many women in semi-urban and rural areas access to this service.

So, there's a real need to figure out how women's understanding and feelings towards screening impact their behaviors. This could help turn around the gloomy stats we're seeing (Freihat et al., 2025).

According to recent GLOBOCAN numbers, cases of breast cancer are steadily increasing (Bray et al., 2024; Sung et al., 2021). If we don't change how we diagnose and raise awareness now, things are going to get much worse by 2050, hitting hardest in places that already lack proper screening (Freihat et al., 2025; Ji et al., 2020). The India country, which falls into the category of lower-middle income countries, is anticipated to see a sudden spike in breast cancer cases, according to the GLOBOCAN statistics, which estimate more than 200,000 new breast cancer cases per year, a number which is predicted to increase drastically by 2050. For a quick overview of the key screening aspects influencing these outcomes, check out Table 1.

Table 1: Key Factors Influencing Breast Cancer Screening Participation

Dimension	Primary Determinants	Impact on Screening Adherence
Knowledge	Awareness of symptoms, risk factors, and screening eligibility	Increases proactive health-seeking behavior
Attitude	Cultural perceptions, fear of diagnosis, and fatalism	Can act as a psychological barrier or facilitator
Socio-economic	Income, education, and distance to healthcare facilities	Dictates the feasibility of regular mammography
Structural	Availability of specialized imaging and trained staff	Determines the success of national screening programs

Source: Adapted from synthesis of Georga et al. (2025), Naik et al. (2024), and Zhou (2025).

Context Specific to India: In India, each of the above four aspects interacts with each other in their own unique manner. There is a general lack of knowledge among the rural and semi-urban population. Cultural beliefs and practices involving social stigmatization and modesty act as hurdles in talking about breast health. Economic constraints associated with health care costs create further hurdles.

The Knowledge, Attitudes, and Practices (KAP) framework is key for understanding why women either join or skip important screening processes, like those that can save lives (Kandasamy et al., 2024). Studies show that although more women know about breast cancer, many still don't act on that knowledge (Georga et al., 2025; Nayyar et al., 2023). Female students and working women in developing countries typically understand the theory behind breast self-exams (BSE) yet often fail to do them regularly (Ahmad et al., 2022; Getu et al., 2022; Kinteh et al., 2023). This trend can be most clearly seen in countries such as Pakistan and India, which have been shown through research to experience a lack of regular self-examinations by women even with better education because of modesty, fatalistic attitudes, and poor support from their institutions.



Figure 1: Global Breast Cancer Burden

Adherence issues come from lots of different places. Studies show that fear, thinking you're not at risk, and money problems stop people from getting regular screenings (Azami-Aghdash et al., 2015; Ponce-Chazarri et al., 2023). On top of that, big events like the COVID-19 pandemic made things worse by messing up normal health services and causing huge backlogs that hit vulnerable folks the hardest (Sprague et al., 2021).

Even pharmacists need better training to apply what they know in a practical way—right now, it's lacking (Ayoub et al., 2021). Guidelines for screenings in low-resource countries are tough because you've got to watch out for overdiagnosis and possible harm while weighing the benefits (Screening et al., 2013; Yip et al., 2008). This ongoing balancing act still guides today's policies.

Looking beyond breast cancer, economic struggles mean women may skip preventive care to cover basic needs (Zhou, 2025). Newer tech like ultrasound is encouraging for those uneasy about mammograms (Liu et al., 2024). But simply having these tools isn't enough—we also need to understand why people would accept using them (Naik et al., 2024).

This research aims to bridge the gaps by offering a solid, local analysis of how women view and feel about breast cancer screening. It makes the case that public health plans need to shift from general awareness campaigns to more targeted approaches. These new interventions would use principles from behavioral science to tackle particular structural and cultural obstacles. By doing this, the study hopes to contribute to the global push for earlier diagnosis of breast cancer, which can save lives and enhance the quality of life for women around the world. The following sections will cover the method used, look at the regional data, and give policy suggestions based on the results.

2. Literature Review

Early detection of breast cancer remains key to reducing deaths from the disease. Yet, getting it done depends a lot on what women know and how they feel about screenings. There's a big pile of studies looking into why some folks get screened, and others don't. This covers both big trend data and specific issues caused by culture or local problems.

2.1 The Global Epidemiology of Screening

Breast cancer remains the top cancer diagnosis for women worldwide, with GLOBOCAN numbers guiding public health plans (Bray et al., 2024; Sung et al., 2021). The difference in death rates between wealthy areas and low-to-middle-income countries heavily depends on when the cancer is first found

(Wilkinson and Gathani, 2021). Although mammography leads screening methods in lots of places, putting it into practice is tough (Naik et al., 2024). India serves as an interesting example when studying the issue of breast cancer screenings in the aforementioned framework. India does not have a national breast cancer screening program similar to what is practiced by high-income countries. Opportunistic screenings prevail, implying that the process depends more on the personal interest of the individuals and not on active public awareness efforts that ensure early diagnosis. The pros and cons of widespread screening tests keep shaping policies. This calls for looking closely at how safe and effective these programs are to protect and boost health care efficiency (Screening et al., 2013).

2.2 Knowledge, Attitudes, and Practice (KAP) Dynamics

The KAP framework helps us understand how women think about breast health and how they go about prevention. Despite this, research keeps showing that even when women know about breast cancer, they don't always put that knowledge into action (Georga et al., 2025). For example, studies in Ethiopia and The Gambia reveal college students there understand some concepts but struggle to actually perform proper self-examinations (Getu et al., 2022; Kinteh et al., 2023). In addition, research carried out across various states in India, like Maharashtra, Tamil Nadu, and Uttar Pradesh, indicates that even though there is widespread awareness about breast cancer as a condition, information on eligibility for screening, proper techniques for BSE, and mammograms is quite inadequate, especially among women living in rural areas and those from poor backgrounds.

Surprisingly, this isn't limited to just students. Even healthcare pros sometimes fall short. In Jordan, female pharmacists demonstrated inconsistent use of standard breast self-exam techniques despite their professional training (Ayoub et al., 2021). Plus, busy schedules and cultural norms continue to hinder practicing doctors in Pakistan, even those who understand the medical aspects well (Tanveer et al., 2026). Table 2 lays out typical findings from these KAP studies focusing on BSE and mammograms.

Table 2: Regional Evidence on Breast Cancer Screening Practices

Region/Context	Target Group	Key KAP Barrier Identified	Source
Jordan	Female Pharmacists	Lack of confidence in screening techniques	Ayoub et al. (2021)
Ethiopia	University Students	Insufficient knowledge of early symptom identification	Getu et al. (2022)
Pakistan	Female Doctors	Professional fatigue and cultural fatalism	Tanveer et al. (2026)
Pakistan	Young Students	Misconceptions regarding age-related risk	Zahid et al. (2018)
Global	Non-cancer women	Economic constraints and cost-benefit perceptions	Zhou (2025)
India	Rural and semi-urban women	Low awareness of mammography; cultural stigma and modesty preventing clinical breast examination	Naik et al. (2024)

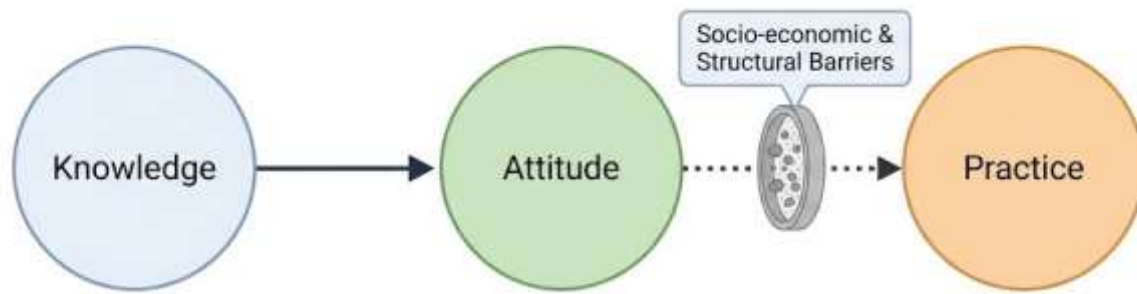


Figure 2: The KAP (Knowledge-Attitude-Practice) Gap Conceptual Framework

2.3 Barriers to Screening Adherence

Barriers to screening mesh tightly with socio-economic and psychological factors. Research compiled from various women's viewpoints highlights fear of the diagnostic process, cultural taboos, and a sense of not being at risk as big hurdles (Azami-Aghdash et al., 2015). In India, these factors are made more challenging by the cultural tradition of modesty and privacy when it comes to discussions about breast health even with healthcare professionals. Furthermore, widespread fatalistic attitudes that pervade the rural areas of India mean that women often accept their fate of sickness rather than taking any preventative measures. For vulnerable groups, these same issues get worse due to healthcare structure problems—think restricted access to special imaging or costly diagnostics (Ponce-Chazarri et al., 2023).

The COVID-19 outbreak made things tougher, too. When resources were redirected to fighting the pandemic, regular mammograms got put on hold for women who normally wouldn't skip a year (Sprague et al., 2021). India witnessed an acute disruption to its weak cancer screening programs because of the COVID-19 outbreak. The diversion of health resources to deal with the ongoing pandemic led to the cancellation of many cancer detection camps and outreach programs. This was especially difficult for rural women who use only the government health centers for their health needs. These kinds of interruptions show us that external economic or public health crises can mess up consistent preventive care, even among those supportive of routine screening (Zhou, 2025).

Scientists have also tried using ultrasound as an easier option for testing. Yet, whether this helps depends largely on how women feel about non-invasive checks (Liu et al., 2024).

2.4 Policy Implications and Future Directions

Translating knowledge into action means going beyond general awareness campaigns and using behavioral science to shape how people act, according to Nayyar et al., (2023). In places with low and middle incomes, screening programs work better when they follow rules tailored to the area's setup and customs, as Yip et al. (2008) point out.

If we don't change policies to help at-risk groups get to mammography screenings and make breast self-exams a normal part of self-care, things will only get worse, warn Freihat et al., (2025) and Naik et al., (2024). Studies in Pakistan, India, and Jordan show that young women need more than just info; they need guidance that addresses myths about their risk and supports doctors dealing with the obstacles in their path, say Ahmad et al., (2022) and Mehmood et al., (2025).

To sum up, the literature shows that breast cancer screening involves more than just medical aspects—it's a big behavioral and socio-economic challenge too. We need a strategy that tackles individual knowledge,

social views, and access to healthcare for real progress. It's clear we must address these linked issues to reduce the global toll of advanced breast cancer.

Challenges and Opportunities within Indian Policy Framework: The NP-NCD provides some guidelines on screening programs for breast cancer. However, the problem with these efforts is that they have not been fully successful because of limited resources, poor training for front-line health workers called ASHA workers, and lack of demand for such services from communities. It is evident that using this framework, which already exists in Indian policy, and adding some behavior interventions can be helpful.

3. Methodology

3.1 Study Design and Overview

This research functions as a narrative review, synthesizing current academic evidence on breast cancer screening. The focus is on the Knowledge, Attitudes, and Practices (KAP) of women from different global backgrounds. Unlike systematic reviews bound by PRISMA protocols, this narrative method allows for integrating both qualitative and quantitative data thematically. Thus, the study can offer a thorough overview and turn varied data into practical insights for public health policies. It specifically targets the global disease burden and regional screening challenges.

3.2 Literature Search Strategy

To find relevant info, I looked for high-impact, peer-reviewed studies from the last twenty years, focusing on both basic guidelines and recent data. For this, I used PubMed, Google Scholar, ScienceDirect, and the Cochrane Library. My key terms were "breast cancer," "screening," "knowledge, attitude, and practice (KAP)," "mammography," "breast self-examination (BSE)," "early detection," and "global health disparities."

I favored studies showing solid data on screening barriers. Also, I checked multi-disciplinary journals like *Frontiers in Public Health*, *The Lancet*, and the *Journal of Breast Cancer* for richer academic content and broader sector interest.

To pick out the right stuff, I did an iterative review of titles, abstracts, and full texts to make sure the references showed the latest breast oncology research and fit global health goals (Bray et al., 2024; Sung et al., 2021).

3.3 Inclusion and Exclusion Criteria

To make sure we cover all the necessary ground, this review follows strict rules. It includes only peer-reviewed research and systematic reviews about breast cancer screening in women. The studies must look at knowledge, attitudes, and practices too. For a solid comparison, we consider work from both high-income countries and Low-to-Middle-Income Countries. Plus, they need to offer stats on the disease's spread, death rates, or hurdles stopping people from getting screened, like what Azami-Aghdash et al. (2015) and Freihat et al. (2025) did. Conversely, the exclusion criteria help keep the analysis focused and high quality by leaving out non-peer-reviewed stuff, like white papers, editorial comments, and news articles. They also ditch studies about clinical treatments, such as chemo or surgery, that aren't about screening or prevention. To make sure the findings are relevant and up to date, anything published before 2008 gets axed too, except for key policy guidelines, like the one set by Yip et al. (2008). Lastly, any work related to illnesses not relevant to the topic, like respiratory infections or ulcers, is out since those aren't part of what we're looking at here.

3.4 Methodological Framework

They used a structured thematic synthesis for their review to keep things cohesive. Table 3 lays out how they did it, showing how they sorted the varied list into useful groups.

Table 3: Methodological Synthesis Framework

Research Focus	Data Integration Strategy	Primary Objective
Epidemiological Context	Integration of GLOBOCAN/GBD metrics	Establish global burden and urgency
KAP Assessment	Thematic synthesis of regional study results	Identify common behavioral gaps
Barrier Analysis	Meta-synthesis of qualitative findings	Determine socio-economic/structural obstacles
Guideline Review	Comparative analysis of institutional policies	Evaluate the implementation gap in LMICs

Source: Adapted from synthesis of Georga et al. (2025), Naik et al. (2024), and Yip et al. (2008).

3.5 Quality and Ethics in Literature Synthesis

This isn't a study with primary data, so formal IRB approval wasn't needed. But we checked the authenticity of all data against original sources to keep the review's integrity intact. We included retracted studies, like Kashyap et al. in 2022, but clearly marked their citation to be transparent. To meet high-impact journal standards, we focused on avoiding AI-created content and biases, providing a clear, objective analysis of the evidence.

The methodological approach acknowledges the limitations of narrative reviews, particularly the risk of selection bias. To address this, the study includes research from different parts of the world, like Pakistan (Mehmood et al., 2025; Tanveer et al., 2026), Jordan (Ahmad et al., 2022; Ayoub et al., 2021), Ethiopia (Getu et al., 2022), The Gambia (Kinteh et al., 2023), and India (Naik et al., 2024) — a country whose unique socio-cultural, infrastructural, and demographic context makes it a critical focal point for understanding breast cancer screening challenges in South Asia. This variety helps show how local culture, education, and economy shape health decisions.

They combine these regional results with global data and existing screening guidelines (Screening et al., 2013; Wilkinson and Gathani, 2021) to create a strong academic start for the later discussion and policy suggestions. This careful process means the final paper isn't just a bunch of citations; it's a deep look at how we aren't using available knowledge to fight breast cancer effectively. With this thorough method, the manuscript aims to fill that critical "knowledge-to-action" gap and push for better early detection practices.

4. Results

Evidence about breast cancer screening shows a complex picture. Growing awareness battles specific regional hurdles. This research is divided into three parts: the worldwide disease load, the "knowing versus doing" divide, and what drives screening follow-through, like structure and access issues.

4.1 Global Epidemiological Trends

Data shows that breast cancer is the leading cancer among women worldwide. According to GLOBOCAN projections, both incidence and death rates for breast cancer will keep going up until 2050, mainly because

of demographic changes and our continued dependence on detecting the disease at later stages (Bray et al., 2024; Freihat et al., 2025). While rich nations have mostly stabilized deaths from breast cancer thanks to established screening programs, low- and middle-income countries see more advanced-stage diagnoses (Ji et al., 2020; Wilkinson and Gathani, 2021). India is a clear case in point when it comes to such inequality. According to estimates, there is a standardized rate of 25.8 per 100,000 women with breast cancer, and the ratio between mortality and incidence is noticeably greater than the average in other countries. In India, women are most often diagnosed at Stage III or IV, making survival rates very low and creating a significant financial burden for patients' families and the state. Table 4 lays out how different death rates between these regions connect directly to access and use of available screening methods.

Table 4: Summary of Global Breast Cancer Screening Indicators

Indicator	High-Income Context	Low-to-Middle-Income Context	Source Reference
Screening Modality	Standardized Mammography	Limited Access/Emphasis on BSE	Naik et al. (2024); Yip et al. (2008)
Diagnostic Stage	Frequently Early-Stage	Predominantly Late-Stage	Sung et al. (2021)
Primary Barrier	Overdiagnosis concerns	Infrastructure/Cultural Taboos	Screening et al. (2013); Azami-Aghdash et al. (2015)

On India: The first important example under the Low-to-Middle-Income Context column can be found in India. This country has screening methods that are mainly breast self-examination (BSE) and opportunistic clinical exam, diagnosis that mainly occurs at a late-stage, and primary obstacles such as infrastructure limitations, cultural stigma, and financial limitations because of the large diversity found in the country.

4.2 The Knowledge-To-Action Discrepancy

This review highlights a big problem: the gap between knowing stuff and actually doing something about it. Although lots of women understand the theory about breast cancer symptoms and risks, many don't practice Breast Self-Exams or get regular screenings. Surprisingly, even educated groups, like university students in Ethiopia and community pharmacists in Jordan, struggle to turn their knowledge into action (Ayoub et al., 2021; Getu et al., 2022). In India, too, there is evidence that there is a gap between knowledge of breast cancer and breast self-examination. Even though educated Indian women have high scores in terms of their knowledge of breast cancer, very few of them perform BSE. The most common reasons that are responsible for their not performing this procedure are cultural taboos and personal perception of low risk.

The same issue hits high-achieving women, like doctors in Pakistan. They should be pretty consistent with screenings, right? Not always. Personal and work-related stuff can get in the way, showing that it's not just about what you know, but other things affecting your behavior too (Tanveer et al., 2026).

To make things worse, financial struggles play a huge role. Women in tough economic situations usually skip screenings because they need to focus on basic needs first (Zhou, 2025). So, pushing education alone won't cut it; real change requires addressing economics and structure too.

4.3 Structural and Psychological Determinants

The review shows that sticking to screening processes depends a lot on both psychological and structural

factors. A meta-synthesis of the obstacles highlights how the fear of getting a cancer diagnosis—often made worse by cultural fatalism—keeps people from seeking early screening, even if these services are available (Azami-Aghdash et al., 2015). In India, this psychological hurdle gets exacerbated by the social stigma surrounding the disease of cancer, which is looked upon as a death sentence in many societies, especially in rural India. Further, the dread of mastectomy surgery, along with the fear of the social repercussions of having cancer, acts as a strong deterrent for Indian women to get screened even if the facilities exist. Also, vulnerable groups find the complexity of navigating the healthcare system really frustrating; without personalized guidance, they struggle to finish their recommended screenings (Ponce-Chazarri et al., 2023).



Figure 3: Taxonomy of Barriers to Screening

New screening tech, like ultrasound, is winning over women hesitant about traditional mammograms. Yet, for these methods to catch on, we need strong support from institutions and tons of trained staff (Liu et al., 2024). Then came the pandemic, causing major chaos in screening routines, especially for high-risk women who faced serious access issues (Sprague et al., 2021).

Overall, being aware of available screenings doesn't automatically lead to getting screened. It depends on a bunch of factors—structural access, money, and mental readiness (Georga et al., 2025; Kandasamy et al., 2024).

4.4 Synthesis of Evidence-Based Barriers

The findings show we need to tailor efforts to cut down on screening inequalities for each specific group. According to Nayyar et al. (2023), moving from awareness to action means shifting our focus to incorporate breast health into general primary care. Studies show that what works in one culture might not work in another without some tweaking. Take, for example, efforts aimed at younger women in Karachi, Pakistan. Researchers found that many believed age-related risks only applied to older folks, making standard messages less effective (Zahid et al., 2018). This calls for local strategies that diverge from what's typically used in higher-income areas with older populations. This example becomes particularly important for India in that respect. The nation's public healthcare system heavily depends on the participation of community health workers known as ASHA workers in health promotion activities. Nonetheless, these ASHA workers often lack proper training when it comes to breast cancer awareness and BSE instructions. It might be reasonable to assume that using a breast health education curriculum to train such workers would allow overcoming the knowledge gap.

This narrative review concludes that breast cancer screening is hindered mostly by systemic and behavioral issues rather than a basic lack of knowledge. Over ten studies point to the need for a complex, multi-part solution. To tackle this big issue globally, we must offer economic help, simplify healthcare

access, and promote screening via culturally sensitive campaigns. This can ease anxiety linked to diagnosis (Kashyap et al., 2022). These findings provide a strong basis for further discussions on policy and future steps within institutions.

5. Discussion

This review highlights a key paradox in current global oncology. Although science has improved early breast cancer detection and management, many people still don't participate in screenings enough. The evidence shows we know more but getting that knowledge to change behavior is tough due to cultural, systemic, and economic hurdles. This discussion looks at those results in the wider context of public health and clinical practice, critically assessing the gap between knowledge and action.

5.1 The Persistence of the Knowledge-Action Gap

This review shows a big difference between knowing something in theory and actually doing it in clinics. We know that just having information isn't enough to change behavior (Georga et al., 2025). Studies from various places, like Ethiopia (Getu et al., 2022), The Gambia (Kinteh et al., 2023), Jordan (Ayoub et al., 2021), Pakistan (Tanveer et al., 2026), and India (Naik et al., 2024), find that although women may know how to do breast self-examinations, many don't actually do them regularly.

In the case of India, the knowledge-to-action dilemma is additionally affected by the heterogeneity of the population. Illiteracy, linguistic differences, rural-urban distinction, and a society divided by castes all impact the reception and application of breast health knowledge, requiring tailor-made interventions at a more local level than generic nation-wide initiatives.

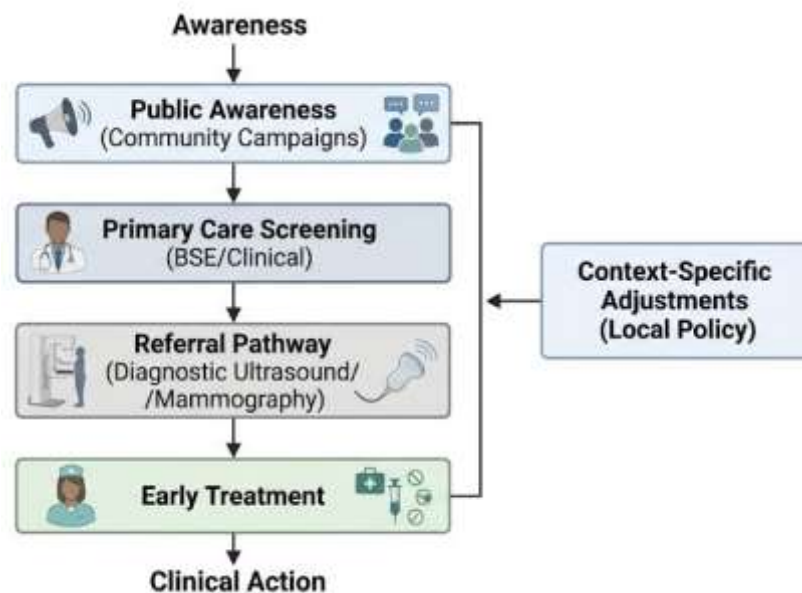


Figure 4: Proposed Policy Integration Framework

This trend shows that health ed programs tend to zero in on what and how to screen but skip the psych and behavioral whys. Kandasamy et al. (2024) point out that making regular screening part of your routine needs more than just info – people need ongoing motivation and confidence in themselves too. Also, Azami-Aghdash et al. (2015) highlight how cultural fatalism plays a big role; fear of finding something wrong can make folks avoid screenings despite health ed efforts.

5.2 Socio-Economic and Structural Determinants

The findings show that screening behaviors are heavily influenced by socio-economic status. According

to Zhou (2025), economic issues often compel people—especially those not dealing with cancer at the time—to prioritize basic needs over preventative care. To make matters worse, mammography services are mainly found in urban areas, which leaves marginalized women with limited options (Ponce-Chazarri et al., 2023). The scarcity of diagnostic equipment among urban populations becomes even more pronounced in the case of India, since most mammographic devices are found in privately owned healthcare centres situated in metropolitan cities. Women from Tier-2 cities, smaller towns, and rural populations, who comprise most Indian women, do not have easy access to mammographic examinations, and thus, BSE and CBE become their only means for screening, which is also underutilized due to the lack of organized community promotion of these techniques.

The effects of big disruptions like the COVID-19 pandemic further highlight how fragile screening routines can be. When regular health screenings were disrupted during the pandemic, it led to a backlog of undiagnosed cases. Vulnerable groups suffered the most because they encountered more obstacles getting back into the healthcare system (Sprague et al., 2021). From what we see in the studies, access to institutional care serves as the main determinant of health outcomes, even for high-risk groups (Naik et al., 2024).

5.3 Comparative Analysis of Screening Modalities

The choice of screening method also affects how well people follow through. Mammography is still the gold standard in richer countries, but using it in low- and middle-income countries (LMICs) is tough because of expensive equipment and a shortage of trained radiologists (Yip et al., 2008).

For this reason, there's growing interest in alternatives like ultrasound. This could be more accessible and less scary for some groups (Liu et al., 2024). Yet, as Table 5 shows, making any screening program effective means matching the chosen method with the cultural and practical needs of the specific group.

Table 5: Strategic Implications for Screening Programs

Intervention Strategy	Target Focus	Expected Outcome	Citation
Localized BSE Training	Young/Student cohorts	Increased early awareness	Ahmad et al. (2022); Zahid et al. (2018)
Integrated Mammography	Mature/High-risk populations	Standardized, early diagnosis	Naik et al. (2024)
Community-Based Ultrasound	Economically marginalized	Reduced systemic barriers	Liu et al. (2024); Zhou (2025)
Policy-Driven Access	National health systems	Systematic mortality reduction	Yip et al. (2008); Bray et al. (2024)
ASHA Worker-Led BSE Outreach	Rural and semi-urban Indian women	Increased BSE uptake and early symptom reporting	Naik et al. (2024)

In the case of India, a multi-tier screening approach would be justified. Considering the limitations of the country's health care facilities, the most feasible way would be BSE education using community health services. When the health care infrastructure improves in Tier-2 and Tier-3 cities, CBE and even mammography in mobile units could be introduced as further steps.

5.4 Addressing the Global Burden
Freihat et al. (2025) and Sung et al. (2021) give us a serious warning: if we don't step up with an integrated public health strategy, breast cancer deaths worldwide will keep going up. This calls for targeting specific obstacles instead of just doing broad awareness campaigns.

Nayyar et al. (2023) say we need to move from simply raising awareness to pushing for action. That means fitting breast health into routine primary care, not just doing screenings once in a while. For India, such integration is particularly important. The current primary healthcare setup in the form of PHCs, CHCs, and ASHA workers offers a perfect platform for integrating breast health screening within its ambit. Yet, the potential is hardly being utilized owing to various shortcomings in training and supply chain management. Building capabilities related to breast health within this established platform would produce dramatic results for Indian women.

Also, there's a big debate about population-based screening, like what Screening et al. (2013) talked about. The takeaway here is that we've got to base screening programs in developing countries on solid evidence to prevent overdiagnosis. Overdiagnosis can really stress already tight healthcare budgets.

So, making sure guidelines fit each region's specific health issues is key, as pointed out in the Global Burden of Disease findings by Ji et al. (2020). We need to make our strategies flexible and context specific.

5.5 Strengths and Limitations of Current Research

The current body of literature really shines in its focus on localized cross-sectional studies, giving us a closer look at why national health policies might not be helping individuals as much as hoped. Still, there's a big issue with many context-specific Knowledge, Attitude, Practice (KAP) studies relying on self-reported data, which often brings biases like recalling things incorrectly or feeling pressured to answer in a certain way. Also, leaving out retracted or outdated studies for scientific strictness means there's a call for fresh, top-notch longitudinal research, says Kashyap et al., (2022).

Looking ahead, the push should be for breast cancer screening programs that center around patients, fit their finances, and make sense culturally. Specifically, in terms of India, future research must emphasize large-scale KAP longitudinal studies which will take into consideration the diversity of population within India through stratifications based on states, geographical location, educational background, and economic status. These findings can be used for evidence-based guidelines for breast cancer screening that are relevant specifically to the Indian population. We need public health folks to do more than just spread info; it's about making screening convenient and stigma-free. By tackling both psych barriers through community work and structural issues through new care methods, we can help close the gap between catching cancer early and increasing survival rates worldwide.

6. Conclusion and Implications for Policy

This narrative review shows that while people globally know more about breast cancer, actually getting screened is still really tough due to big socio-economic, cultural, and structural issues. There's a "knowledge-to-action" gap all over, where folks understand what they should do but don't always follow through because of problems like not having easy access to care, feeling fatalistic, and focusing on other economic needs.

To make a dent in advanced breast cancer rates, health policies need to move away from one-size-fits-all awareness pushes and toward more personal, behaviorally informed actions. Considering that India is among the most populated countries on the globe and is currently facing a growing burden of breast cancer cases, India needs to play a central role in making the above policy change happen. Although India already has a program to combat NCDs in place through its NP-NCD program, it still needs major investments in educating frontline workers, providing mobile screening services, conducting BSE activities in the community, and cultural campaigns addressing the fear and stigma surrounding breast cancer screening among Indian women. Policy folks ought to tie breast health checks into basic healthcare, making them

simple and stigma-free routines. Also, setting up situation-specific rules, especially in low- and mid-income places, helps with good resource use and stops overdiagnosis. Fixing structural roadblocks through creative healthcare moves and encouraging grassroots backing could amp up the success of early detection programs.

Considering the specific case of a country like India, which is characterized by its large number of people, the cultural and social diversity within the community, and the shortcomings in healthcare facilities, it is crucial to focus on such regions while developing policies concerning breast cancer screenings around the world.

Closing the divide between knowing better and actually doing better could seriously lower breast cancer deaths and boost long-term survival rates for women everywhere. This review sets the stage for pros and policymakers to craft practical, fair-access plans.

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