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*Patient Educ Couns.* 2017 January ; 100(1): 167–173. doi:10.1016/j.pec.2016.08.012.**A framework for improving early detection of breast cancer in sub-Saharan Africa: a qualitative study of help-seeking behaviors among Malawian women****Racquel E. Kohler, PhD<sup>a,b</sup>, Satish Gopal, MD, MPH<sup>b,c</sup>, Anna R. Miller, MPH<sup>d</sup>, Clara N. Lee, MD, MPP<sup>c</sup>, Bryce B. Reeve, PhD<sup>a</sup>, Bryan J. Weiner, PhD<sup>a,c</sup>, and Stephanie B. Wheeler, PhD, MPH<sup>a,c</sup>**<sup>a</sup>Department of Health Policy and Management, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, Chapel Hill, USA<sup>b</sup>UNC Project-Malawi, Lilongwe, Malawi<sup>c</sup>Lineberger Comprehensive Cancer Center, University of North Carolina at Chapel Hill, Chapel Hill, USA<sup>d</sup>Department of Health Behavior, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, Chapel Hill, USA**Abstract**

**Objective**—Many women in Africa are diagnosed with advanced breast cancer. We explored Malawian breast cancer patients' perspectives about their diagnosis and ability to access care to identify help-seeking behaviors and to describe factors influencing delay.

**Methods**—We purposively sampled 20 Malawian breast cancer patients to conduct in-depth interviews. Transcripts were double coded to identify major themes of breast cancer help-seeking behaviors and what delayed or facilitated access to care.

**Results**—We outlined a breast cancer help-seeking pathway describing decisions, behaviors, and interactions from symptom presentation to receipt of cancer care. Patients were largely unaware of breast cancer and did not immediately notice or interpret symptoms. As symptoms progressed, women inferred illness and sought help from social networks, traditional remedies, and medical care. Economic hardship, distance to the facility, provider knowledge, health system factors, and social norms often delayed reaching the facility, referrals, diagnosis, and receipt of care.

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**Conclusions**—Social-contextual factors at the individual, interpersonal, and health system, and societal level delay decisions, behaviors, and access to breast cancer detection and appropriate care.

**Practice Implications**—A comprehensive approach to improving breast cancer early detection must address public awareness and misconceptions, provider knowledge and communication, and cancer care delivery.

### Keywords

breast cancer; breast symptoms; help-seeking behavior; early detection; delay; Malawi; sub-Saharan Africa

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## 1. Introduction

Breast cancer is the most common cancer in Africa (134,000 cases in 2012), and incidence is expected to continue to increase. It is also the leading cause of cancer death; the mortality to incidence ratio in Africa is 47%, compared to 19% in the US [1]. High mortality rates are likely due to low awareness, many women being diagnosed with advanced disease, and lack of screening and diagnostic services [1–3], all of which underscore the need to explore factors affecting early detection and treatment initiation.

A woman's decisions and ability to access cancer care may be influenced by individual psychosocial factors and lived experiences as well as broader social-contextual influences and interactions with her environment [4, 5]. Systematic reviews of quantitative and qualitative breast cancer studies found that delays greater than three months affect breast cancer survival [6–9]. Common risk factors for delay include low socioeconomic position (SEP), lack of cancer knowledge, embarrassment of being examined, and distance to the health facility [10, 11]. However, few studies from Africa, where health resources are scarce, cancer awareness is low, and screening is uncommon, have been conducted or included in such reviews. Previous qualitative studies are largely descriptive, and few developed conceptual models to understand the complex factors influencing delayed and early detection [10, 12, 13]. Additionally, few delay models have explored the influence of alternative treatments and traditional medicine, which are commonly used among cancer patients across Africa [14].

Therefore, the objective of this study was to explore how Malawian women accessed breast cancer care and what influenced their decisions and ability to seek help. This paper proposes a framework, grounded in findings from in-depth interviews, to understand delay and improve early detection and treatment initiation in sub-Saharan Africa (SSA). We describe potential breakdowns at specific stages, transitions between stages, and how different factors can cause delays along the breast cancer help-seeking pathway.

## 2. Methods

### 2.1 Study setting

The study was conducted in Lilongwe, Malawi, as part of a larger project investigating breast cancer knowledge and preferences. Malawi is a small, densely populated country in SSA. Over 80% of the population lives in rural areas and relies on subsistence farming [15]. The public health system provides free basic services through local health centers, small district hospitals, and referral tertiary care hospitals. Cancer is an increasingly important problem for the resource-limited health system [16–18].

### 2.2 Study design

We conducted in-depth interviews because they are well-suited for exploring how people give meaning to their lived experiences [19] and can provide insight into how people interpret and act on symptoms while considering the local environment and cultural context. We recruited breast cancer patients from Kamuzu Central Hospital, one of two teaching hospitals where breast cancer treatment is available. Local fieldworkers trained in social science research and oncology clinic staff identified patients 18 years of age with confirmed pathologic diagnosis of breast cancer. We used purposive sampling to incorporate a range of perspectives including differences in age, residence, and educational attainment; we recruited women with different backgrounds to ensure representation across groups and until we reached saturation. Eligible patients provided written and verbal informed consent. The authors' institutional review board and the Malawi National Health Services Research Committee approved this study.

### 2.3 Data collection

Interviews were conducted in a private room between April and August 2014. The fieldworkers and principal investigator met regularly to discuss the responses and revise the semi-structured interview guide as additional topics emerged. Broad topics in the interview guide included help-seeking behaviors, breast cancer knowledge, symptom experiences, and diagnosis and treatment barriers. Interviews lasted 48 minutes on average.

All interviews were conducted in Chichewa, recorded, transcribed verbatim, and translated into English. Translation consultations occurred regularly to review problematic words. Multiple pages of four transcripts were back translated to ensure the meanings of the interviews were not lost.

### 2.4 Data analysis

Transcripts were analyzed in Atlas.ti 7 (Atlas.ti Scientific Software Development, Berlin, Germany). We used an inductive coding approach initially and then grouped codes to create a codebook based on the social contextual model [4] and the preliminary interpretation of participants' responses. Through an iterative approach, two readers independently coded transcripts, discussed divergent applications, revised definitions, and added new codes until consensus was reached. We identified overarching themes and compared code frequencies and co-occurrence patterns across groups. We also used Strauss and Corbin's paradigm approach to organize and conceptualize the conditions, actions/interactions, and

consequences within transcripts [19], diagramming various trajectories women narrated to represent help-seeking patterns.

### 3. Results

#### 3.1 Sample characteristics

We recruited 20 patients with varied levels of education, employment status, age, and residence (Table 1). Women were at different phases of cancer care, including recently diagnosed, receiving neoadjuvant chemotherapy, receiving adjuvant chemotherapy, under surveillance care, and receiving palliative care for metastatic disease. The median age was 47 years. All women were symptomatic when they were diagnosed. Their experiences illustrated a complex set of factors that influenced help-seeking behaviors and led to delays between symptom onset, diagnosis, and treatment initiation ranging from a few weeks to a few years.

#### 3.2 The breast cancer help-seeking pathway

The pathway comprises six stages that emerged from the interviews (Figure 1). It is displayed with sequential stages, but represents a complex decision-making process with different trajectories such as moving quickly, getting stuck, skipping steps, or looping back to earlier stages. This patient's description exemplifies the process:

“At first, [the] top of the breast became very hard. But it was not painful. So I was just saying, maybe that is what happens after menopause. But the other one was ok. I stayed like that for a year. But still I was not feeling well no matter how much medication I took. Then I noticed that the breast had started swelling. That was when I asked my friends, ‘Look at my breast, is this what happens after menopause?’ The lump confused me...the breast felt hot at times, but most of the time it was not painful [...] People said, ‘Go to the hospital. This may be cancer... my husband's niece had the same symptoms. She was late. She died. When a person is diagnosed early, she gets cured. So go.’ That was how I started going to the hospital.”

Early detection depends on the decisions of patients and their interactions with social and contextual factors, and in Malawi this pathway is complicated by extreme poverty, cultural beliefs and practices, and an overburdened health system. We describe themes from multiple levels of influence affecting each stage below. In short, these findings suggest a framework (Table 2) that connects social determinants, individual, interpersonal, health system, and social norms to delayed receipt of care. Illustrative quotes of these factors are highlighted in Table 3.

**3.2.1 Stage 1: Notice and interpret the initial symptom**—Given the lack of screening services, the first stage is that a woman discovers “something strange” on her body. As many health theories suggest, a woman's knowledge, beliefs, experiences, and risk perceptions influence how she interprets symptoms [20–22]. Most participants in this study did not have preconceived ideas about breast cancer signs to help give meaning to the symptom, and a majority of the patients did not consider the symptom to be very serious.

For them, it was more of a trivial ailment, which caused some women to dismiss the symptom.

**3.2.2 Stage 2: Monitor changes and infer illness**—Before attributing potential causes to their symptoms, women monitored symptom development and reappraised changes over time. Participants delayed for several months or years waiting for it to “go away,” which was especially common when a woman did not “feel sick.” Because of their lack of symptom knowledge, most participants did not attribute their symptoms to cancer. Instead they thought the unfamiliar changes were due to other pre-existing conditions, aging, trauma, or common ailments. For example, three women attributed their symptoms to their pregnancy and delayed seeking help until after delivering the baby. Other women misinterpreted their symptoms as swelling from clogged milk or from difficulty breastfeeding.

**3.2.2.1 Knowledge and risk perception:** A few women who were aware of breast cancer recognized their symptoms as potential signs and acknowledged that something might be wrong; however, some delayed taking action because they were in denial - a common coping response to symptoms indicative of cancer [21, 23]. Conversely, a few women with increased risk perception sought help sooner. For example, two women worked in health care and their health education helped them infer illness quickly.

**3.2.3 Stage 3: Decide to seek help**—The transition from monitoring symptoms to seeking help is crucial, because as symptoms progress with noticeable changes, the disease becomes more advanced [6]. Though some women’s awareness was enough to motivate them to seek help, other women needed additional cues.

**3.2.3.1 Nature of the symptom - seeing is believing:** Women often experienced multiple symptoms, and the nature of the symptom affected their behaviors. Delay was especially common when women did not experience pain. Even women who knew about breast cancer were confused by symptoms: “It felt hard when I touched it...but the breast was not painful...it was difficult for me to notice that it was cancer because the breast was ok.” However, as their symptoms progressed women decided to seek help. Patients frequently mentioned increased pain, bloody discharge, and wounds “bursting” as triggers to seek help. Experiencing visible symptoms, seeing a lump grow, or an additional lump form also motivated them. As symptoms escalated, the disease threat led to fear, often prompting women to consult their social networks or changing their intention to seek medical care.

**3.2.3.2 Attitudes toward medical interventions and trust in providers:** Most women had positive attitudes about medical interventions and were pragmatic about treatment; they trusted doctors to give them the “right medication” to “get rid of the problem.” Despite these attitudes, social norms about waiting to seek medical care until one is very ill and not wasting providers’ time made some women delay. Many women also held paternalistic views toward providers, commonly saying things like, “anything that the doctor tells me, I will accept.” Because of these views, patients rarely questioned the providers’ recommended treatment, leading to delayed referrals from lower-level health facilities due to misdiagnoses.

**3.2.3.3 Cancer-related experiences among peers:** Some participants were more aware of cancer signs from peers' experiences (e.g., knew a cancer patient or saw a woman with one breast), which helped symptom interpretation and triggered the decision to seek medical care. Additionally, family members and neighbors often relayed stories about others who had cancer, prompting women to seek medical care.

**3.2.4 Stage 4: Intend to seek help—**The importance of behavioral intention, social influences, and reinforcements emerged as factors that affected women's intentions to seek help [24–26]. Although some women decided to seek help they did not immediately act or were unable to act on the decision for various reasons.

**3.2.4.1 Seeking help from social network:** Most patients disclosed their symptoms to a family member, neighbor, or friend. Women often told their husbands first, but also consulted peers or village elders. Although women's narratives described how their interactions with mothers, daughters, and friends often motivated them to “rush to the hospital,” sometimes seeking help from their networks caused additional delays. Some network members reinforced misconceptions, suggested alternative explanations for symptoms, or promoted traditional medicine.

**3.2.4.2 Seeking help through traditional remedies:** Many women were confused about what caused their symptoms, motivating some to try traditional remedies. Six women disclosed that they sought traditional healing; four were aware of breast cancer and still tried local remedies. The duration and types of remedies varied, and patients usually sought medical care after trying “many things to remove lumps.” Participants also spoke anecdotally about other breast cancer patients they knew from the hospital who went to herbalists; they described how women were “told they were bewitched” and their breasts had many “tattoos” (lesions and scars) from herbs. Traditional remedies caused delays before seeking medical care, but also when women were in between referrals, receiving chemotherapy, and after surgery.

**3.2.4.3 Seeking medical care:** Throughout the interviews women spoke about two concepts that instilled a sense of responsibility to be tested to know about one's health status and urgency to get treated early.

**3.2.4.4 Importance of testing – “knowing how your body is”:** Many women discussed how it is “good to know about your body” and they valued knowing whether they were healthy or sick. Women also recognized that they could only be “tested” at the hospital, which motivated some to seek care. Although some participants were told that they had cancer at lower level health facilities, most women said they were diagnosed at the referral hospital – where the biopsy was performed. This distinction was common; the results from the hospital were highly valued so a patient could “know what's wrong” and “get the real truth.” The confirmed diagnosis meant they could “get help” and receive the “right treatment.”

**3.2.4.5 “Rush to the hospital”:** Women believed that doctors could help them, that treatments were effective, and that early treatment was important “because when you go late

to the hospital it's difficult to be assisted." Though many women described waiting for months while monitoring symptoms, they still believed they came quickly to the hospital after realizing the severity of their symptoms. Only a few women acknowledged that they were late and had been "just staying" at home. Though most women understood the benefit of getting treatment "in time to be healed," their intentions did not align with their ability to act on their desired behaviors. Some wanted to go sooner, but competing priorities and structural barriers to care limited access and led to delays.

**3.2.4.6 Economic hardship and roles and responsibilities:** A majority of participants relied on husbands or families for financial support. However, some women were working when they noticed symptoms and delayed seeking medical attention due to responsibilities: "That time I did not go because I was harvesting maize in the village. I also did not have anyone to leave the house with."

**3.2.5 Stage 5: Reach the health care facility**—Reaching a health facility comprises two stages: reaching the facility for the first contact (usually a lower level facility) and then reaching the referral hospital (where a woman would be diagnosed through biopsy and receive treatment). As many of the themes of these stages are similar, they are described together.

**3.2.5.1 Health care connections:** Because of Malawi's tiered health care system patients are expected to follow referral channels before going to a tertiary care facility. A majority of the participants relied on referrals, seeking care at multiple health centers and small hospitals before getting to the central hospital. However, some women gained access more easily, skipping the usual process due to personal connections, such as a family member who worked in the health system. Others accessed private facilities because friends or family members provided financial support.

**3.2.5.2 Distance to facility and transportation costs:** Almost all participants described transportation problems due to the distance to the hospital and the costs to get there. More than half of the patients were from rural villages; they used a combination of walking, hiring a bicycle ride, or taking a minibus to reach health facilities. Although transportation was a hardship that affected both phases of reaching a facility, the cost of transportation was more commonly noted as a barrier to reaching the tertiary facility for diagnostic evaluation. The distance and transportation challenges also affected treatment. One woman described how it took three months to save enough money so she could return to the hospital for surgery. Financial assistance from family and friends frequently helped women reach the facility.

**3.2.5.3 Provider knowledge:** Many patients experienced delays in transitions of care due to poor provider knowledge and misdiagnosis. Multiple women were given pain killers for many months before receiving a referral. Misconceptions were reinforced at the local facilities when providers failed to recognize breast cancer symptoms. Indeed, women were told the symptoms were caused by a boil, rheumatism, or high blood pressure and sent home without referrals.

**3.2.6 Stage 6: Receive appropriate care**—The final stage is to receive adequate diagnostic workup and initiate treatment as early as possible. However, provider and health system challenges contributed to delays.

**3.2.6.1 Access to providers and services:** Diagnostic evaluations are not available at small health centers and can require multiple visits for X-rays, blood work, and obtaining a biopsy sample. Issues concerning the availability of these services came up in multiple interviews. For example, various hospital departments turned women away because a doctor was not available, the computer was broken, or the X-ray machine was not working. Patients were frustrated and discouraged after multiple visits back and forth. Many women also explained how they were scheduled for surgery, waited in the wards for a few weeks after the scheduled date, and eventually went home before having a mastectomy.

**3.2.6.2 Care delivery processes and communication:** Generally patients are responsible for collecting and keeping their medical records, which was problematic for some participants. Lack of provider communication about procedures, labs, and reports also led to misunderstandings. Two patients thought the biopsy procedure was treatment; believing they were cured after the biopsy, they did not return for many years until their symptoms became severe:

“I was admitted, I had a lump, they removed it...I thought that was the end of that...I thought that I had been cured [...] When days passed, two to three years, it’s when pain started again at the same place.”

Other women shared how the biopsy report took “many weeks” and were unsure about when to return to “hear the results.” Women described traveling to the hospital only to be sent home because results were not ready or samples were lost therefore additional biopsies were needed. For some women, these long periods without a confirmed diagnosis or treatment led to them trying traditional remedies.

**3.2.6.3 Chemotherapy shortages and medication costs:** Although treatment at the public hospital is free, multiple patients were told to purchase chemotherapy at private pharmacies because of drug shortages. One patient described a shortage lasting multiple months, but she could not afford the medication and did not receive the prescribed treatment. Others, however, gathered money from their social networks and expressed gratitude for the generosity of their family members, friends, and neighbors who contributed to their costs of care: “I was told that I should go and buy treatment [...] So had it been that I had no relatives, that means I could not receive treatment.”

## 4. Discussion and conclusions

### 4.1 Discussion

Breast cancer is a growing public health concern for many African nations, and effective interventions require identifying the underlying factors of late diagnosis. Our conceptual framework considers the complex conditions, beliefs, and relationships that influence breast cancer detection, diagnosis, and treatment initiation in Malawi. We outline how patient decisions and interactions with the social context – specifically social networks, providers,



and health system – influence help-seeking behaviors and the ability to access and receive care. To our knowledge this is the first framework providing a comprehensive picture of breast cancer help-seeking behaviors, delays, and access to care issues developed from empirical evidence from SSA.

Our pathway builds upon Andersen and Cacioppo’s model of delay which outlines various stages of perceiving, interpreting, and responding to symptoms [20]. Using aspects of the theory of reasoned action and Precaution Adoption Process Model (PAPM), we identified cognitive stages of decisions to take action [21, 24, 25, 27]. The PAPM emphasizes that people who are unaware of a health issue face different barriers than those who know and decide not to act, which is well-suited for our setting. Finally, we situated our framework within the social ecological model to explain how help-seeking behaviors and access to care are also influenced by social context and environmental factors[28].

Although a few patients were knowledgeable, the majority of interviews indicated that lack of awareness initially led to delays until the symptoms progressed. This is consistent with findings from a review of pathology reports that nearly half of Malawian breast cancer patients experienced multiple symptoms for over 1 year before being diagnosed [29]. Symptom appraisal and cancer knowledge have been cited as factors of delay and cancer behaviors in studies worldwide [8, 9, 13, 20]. Other studies from low- and middle-income countries outside of Africa support these findings, especially that perceiving symptoms as non-threatening can delay diagnosis [12, 30]. Similar to findings from Ghana and Ethiopia, we found that many women had never heard of breast cancer and did not know that a breast lump was a sign of cancer [31, 32].

Local misconceptions about symptoms led some women to try traditional medicine; cultural beliefs and traditional remedies have been reported in cancer studies across SSA [32–34]. Although religious beliefs and prayer led to delays among Nigerian patients [35], we did not observe the same effect - patients in our study relied on religious beliefs for acceptance and hope.

These results may inform an awareness campaign or education materials to promote breast cancer awareness and address misconceptions. Messages should be designed to focus on the symptoms, risk factors, and potential cure of breast cancer, but must not cause alarm or overload the health system. Awareness messages should be broadly disseminated to the public and health care providers due to the multiple levels of influence that affect early detection.

#### **4.2 Practice implications**

Ensuring providers at primary care facilities are trained on breast cancer symptoms and clinical breast exam may reduce misdiagnoses and speed up referrals for suspected cancers. Additionally, because health system factors such as distance to the facility and transportation costs were common barriers, expanding services at health centers would increase availability and accessibility. Health care delivery improvement at and coordination between district and central hospitals may address logistical delays patients faced between consultations, biopsy sampling, surgery, and chemotherapy. Interventions to improve patient-provider

communication are needed. Counseling and support services might help patients navigate the diagnosis process better, increase patient understanding, and improve treatment plan adherence. Finally, future research should explore the role of traditional healers and the potential to engage them to work with the health system to improve early detection and adherence to treatment.

Limitations of this research should be noted. We recognize that many Malawian women with breast cancer may never reach a referral hospital where patients were recruited. Additionally some women initially experienced symptoms or were diagnosed a few years prior to being interviewed, therefore their recollection of events may not be as sharp. However, we recruited women at different stages of cancer care and heard similar stories from women with recent and past experiences. Although the results of this study reflect Malawian breast cancer patients' experiences, key findings and our proposed framework may be generalizable to other common cancers in SSA, like cervical cancer, and used to improve cancer care more broadly for low SEP populations.

### 4.3 Conclusions

Breast cancer patients in Malawi experienced long delays between symptom onset, being diagnosed, and initiating treatment. Initially low awareness of the disease and symptoms delayed women's decisions to seek help, but interpersonal, health system, and social factors also greatly affected women's behaviors and access to care. Overall, this framework provides a more nuanced consideration of help-seeking behaviors and social-contextual factors affecting breast cancer delay. By identifying the ways in which poverty, cultural beliefs, social interactions, and health care delivery affect women's ability to access care, it is possible to design interventions to improve early detection in SSA.

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### Highlights

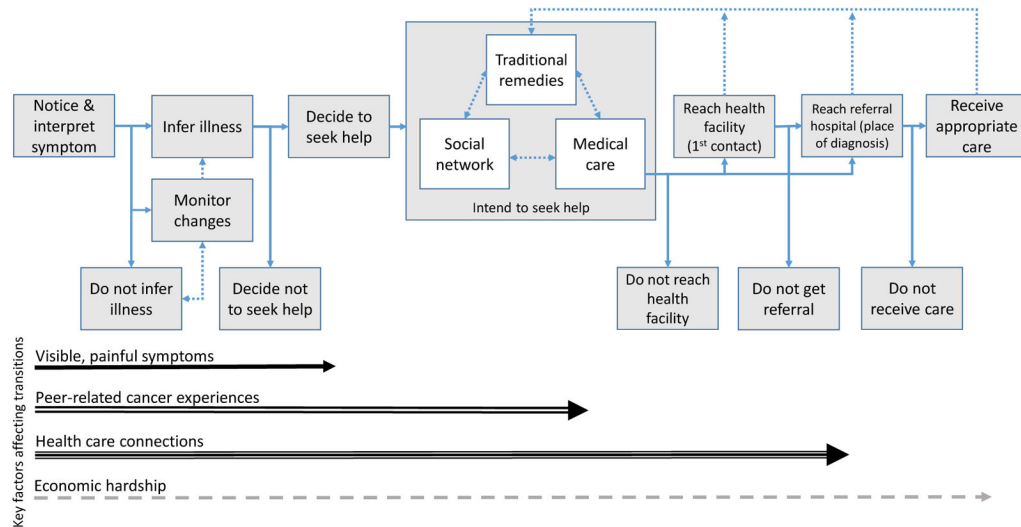
This is the first study to describe the breast cancer help-seeking pathway in Africa

Malawian patients were largely unaware of breast cancer, which led to long delays

Complex individual, interpersonal, health system, and social factors affected access

The proposed framework identifies areas for interventions to improve early detection

A multi-level approach to improve breast cancer early detection is needed



**Figure 1.** Dotted lines along the pathway indicate options trajectories (e.g., some women may seek help from social networks and medical care, but not traditional remedies). Among the key factors affecting the timing of transitions through phases, multiple, thick lines indicate faster movement and the lighter dashed line represents slower movement.

**Table 1**

## Characteristics of Malawian breast cancer patients

	N (%)
Age group	
25–40 years	9 (45)
41–55 years	4 (20)
56+ years	7 (35)
Marital status	
Married	15 (75)
Single/divorced	2 (10)
Widowed	3 (15)
Religion	
Christian	18 (90)
Muslim	2 (10)
Residence	
Lilongwe	12 (60)
Other district	8 (40)
Education	
No formal schooling	5 (25)
Some primary school	8 (40)
Some secondary school	7 (35)
Economic position	
Electricity in house	5 (25)
Regular source of income	8 (40)
Roof type	
Iron sheet roof	11 (55)
Grass thatched roof	9 (45)

**Table 2**

Factors affecting stages of the breast cancer help-seeking pathway

	Stage 1: Notice and interpret initial symptom	Stage 2: Monitor changes and infer illness	Stage 3: Decide to seek help	Stage 4: Intend to seek help through traditional remedies, social network, or medical care	Stage 5: Reach the health facility	Stage 6: Receive appropriate care
Individual	Nature of the symptom, breast cancer awareness	Knowledge about symptoms, misconceptions about causation, other health concerns	Visible symptom progression, emotional response, perceived risk	Beliefs in traditional medicine, religious beliefs, economic hardship		
Interpersonal			Cancer-related experiences among peers	Social support, cancer-related experiences among peers, experiences and perceptions of facility quality, family roles and responsibilities	Financial support, health care connections	
Health system					Distance to health facility, transportation, referral channels, provider knowledge of breast cancer	Misdiagnosis, access to providers, care delivery processes, medical equipment failure, medication availability, provider communication
Social norms			Health-seeking practices, attitudes about medical interventions	Cultural attitudes about medical testing and benefits of early treatment	Provider trust	

*Notes:* Social demographic characteristics (age, gender, marital status, education, residence, occupation, socioeconomic position) and culture are influential across all stages of the breast cancer help-seeking pathway



**Table 3**  
Occurrence of coded text units from key themes in interviews with Malawian breast cancer patients

Code/Concept	Total text units*	Illustrative quote
Lack of awareness	20	"Aah, I have never heard about breast cancer... I was just hearing that there is cervical cancer but I did not know about breast cancer or what it looks like. I am seeing it now that breast cancer looks like this."
Other explanation for symptom	37	"I just thought it was one of the boils which people have, they remove the puss from them... Then I started to suspect that maybe it was not just a boil because it felt hard... [and had] a type of pain that made me restless. I could not wear anything. I had no peace."
Symptom prompts action	37	"For me to know that I had a problem... whenever I felt the breast, inside the breast, there was something hard. Feeling the other one, it was ok. I saw that the thing was getting bigger. Yes, that was when I realized that my breast has a problem... that was when I went to the hospital."
Cancer-related experiences	39	"I heard that there is this problem... I saw a person in the village. Her breast was removed... I heard that it is a dangerous disease. And I saw my friend whose breast was removed. She is not alive. In the same year when her breast was removed, she died."
Consult social network	47	"In the same month my daughter came for Christmas, that was when I told her that I was examining my breasts on the bed and I felt something inside the breast. Because sometimes it was itchy because of the fluid that was coming out. It was itchy. I was scratching it. So when she felt it, pressing it, feeling the breast that was when she said it was cancer."
Traditional remedies, witchcraft	28	"The first thing I did was... one of my relatives told me that I should be heating a cooking stick and put the cooking stick on my breast... The fire was a part of treatment... I did not see any change. That was why I just decided to come to the hospital."
Early treatment benefit	42	"It is important to go quickly to the hospital when you see a strange thing. So that they should check you... Don't just stay at home because when you go late to the hospital it's difficult to be assisted."
Positive attitudes toward medical interventions	55	"Because it is the hospital that saves a person from the disease that they have. Because when they stay at home on their own they cannot be helped. So we do come here to the hospital for the diseases that we have, so that they can help us to get treatment"
Provider trust	21	"We listen to what the doctor says because the doctor knows, he was trained in many things. You don't know anything. So if he tells you to do something, you have to do it."
Referral delay	12	"When I went there [clinic] again and explained to them they just gave me medication... they said when there is no change I should come back. I went there three visits. I was just given drugs. Now on my fourth visit, I was given a referral."
Distance to facility	33	"I was worried about transport [...] If it was near, I could have been coming sooner."
Transportation costs	25	"Because we rely on farming in order to find money for transport... [we were] waiting until we sell tobacco to find money to use for transport to go."
Access to providers and services	35	"Because when I came in August, they did the biopsy, They said, 'You should come on the 27th.' I came on the 27th. They said, 'There is a strike.' So I went back. I did not receive treatment. I came back in January."
Medication availability	15	"When we came here for treatment sometimes, when we went to the pharmacy to receive medication, some medications were not available... that was the problem... But we just saw that after four months [...] they said that the medications were available."
Poor processes of care	44	"When they tested me after taking the sample... it took three years for me to know that it was cancer because they took it to Blantyre. In the first year, it got lost. They took another sample. It got lost again. During the third time, that was when they diagnosed cancer of the breast."

Notes: The total number of text units across all transcripts was 1159 with a mean of 58.