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Experiences of women living with cervical cancer in Ghana: challenges and coping strategies

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Abstract

Background Cervical cancer is a leading cause of morbidity and mortality among women globally. The condition is both preventable and treatable yet remains a leading cause of cancer death in Ghana. This study aims to explore the unique experiences of women living with cervical cancer with a focus on the challenges and coping strategies.

Methods The study employed a qualitative approach with an exploratory, descriptive design. This study was conducted among women with cervical cancer aged 18 years and above who have been diagnosed with the disease for at least 3 months. A total of 16 participants were purposively sampled based on the eligibility criteria and individually interviewed using a semi-structured guide. The six-step technique for qualitative analysis by Braun and Clarke guided data analysis.

Results Most participants resorted to self-medication, over-the-counter drugs and herbal preparations as a first line of defense against the disease. The presence of cervical cancer affected participants' physical and mental well-being. Other challenges included financial burden and frequent equipment breakdowns which affected patients' treatment. Participants adopted different coping strategies such as taking blood tonic, increased rest and sleep, spiritual prayers and recreational activities. Family members, friends, the church and health workers provided support in the area of finance, advice, meal preparation and house chores, prayers and counseling to participants.

Conclusions Cervical cancer affects the quality of life of many women and their significant others. The condition puts a lot of financial burden on its victims and there is the need for a system to reduce the burden on patients. It is recommended that the treatment of cervical cancer should be covered by the National Health Insurance Scheme to ease the financial burden on patients. There is a need for expansion of access to cervical cancer treatment across the country to reduce patients' burden and relieve the pressure on the few pieces of equipment at the current treatment centres.

Keywords Problems, Cancer of the cervix, Adaptations, Ghana

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Background

Cervical cancer (CC) is one of the top causes of cancerrelated fatalities among women and the third most often diagnosed malignancy worldwide [1, 2]. More than 500,000 new cases are diagnosed across the globe annually, with one woman dying of cervical cancer every 2 min. The condition accounted for over 342,000 mortalities worldwide in 2020 [3]. Though preventable, CC is currently a major gynaecological disorder affecting many women within the sub-Saharan African region [4]. Evidence suggests that CC ranks as the second most common cancer among females in sub-Saharan Africa and accounts for a considerable proportion of the overall cancer burden worldwide [3, 5, 6]. The sub-Saharan region including Ghana reports some of the highest morbidity and mortality rates for CC across the globe, with over 80, 000 African women diagnosed with CC annually and 75% (60 000) mortality rate [7] Although data on the burden of cervical cancer is not available in Ghana, the HPV centre reports cervical cancer as the second most common cancer among women aged 15 to 44 years in the country [8].

The factors contributing to this increased burden include restricted access to preventive measures, lack of complete screening programmes, delayed reporting and diagnosis, and inadequate healthcare resources [9, 10]. The human papillomavirus (HPV) has been implicated in the etiology of CC and is characterised by the abnormal growth of cells in the cervix [1, 11, 12]. Cervical Cancer (CC) is highly preventable and treatable, particularly when detected and managed early through regular screenings and timely interventions [11]. In Ghana, due to the low uptake of screening services, most cases of CC are diagnosed late resulting in poor health outcomes [13] Due to late diagnosis, treatment tends to be prolonged and impact negatively on the quality of life of the women [14]. Understanding patients' perspectives of their experiences and perceived challenges is essential for providing holistic, patient-centered care. However, literature on cervical cancer in sub-Saharan Africa has mainly focused on challenges to accessibility and the use of preventive services [15-17] In Ghana, most studies conducted on CC have focused on awareness, knowledge, CC screening, diagnosis and HPV genotype distribution [14, 18-20] as well as the sexual health experiences of women living with CC [14, 21-23]. This study, therefore, seeks to explore the experiences of patients living with cervical cancer concentrating on the challenges and the coping strategies employed.

Methods

Study design

This study employed a descriptive qualitative design based on the interpretivist philosophy to explore the experiences encountered by patients living with CC who were receiving treatment at a tertiary-level hospital in Ghana [24]. The interpretivist philosophy aligns with the aim of the study because it emphasises the importance of exploring the individuals' perspectives in their social and cultural contexts. The descriptive qualitative design was chosen by the researchers because it allowed participants to share in-depth views of their experiences on the condition, treatment, challenges and coping strategies. The design was appropriate for gathering rich data to gain deeper insight and understanding of the experiences of women with cervical cancer. *phenomenon under investigation* [25], thereby, achieving the objectives of the study.

Reflexivity

In line with the interpretivist approach, reflexivity played a crucial aspect of this study. It enabled the researchers to recognize and critically assess how their backgrounds and assumptions could influence the research process and outcomes. The research team comprised individuals with diverse professional and cultural backgrounds, including expertise in nursing, oncology, and qualitative research. While these varied perspectives provided valuable insights, they also carried the risk of biases, particularly due to some team members' clinical experience in Ghana, which could influence their understanding of the healthcare context.

The researchers acknowledged their assumptions about the challenges faced by women with cervical cancer, especially regarding treatment access and support systems. To address these biases, the team engaged in regular discussions and peer debriefing sessions to reflect on emerging themes and interpretations. This fostered awareness of how personal beliefs could impact their analysis. Through these reflexive practices, the researchers aimed to uphold the authenticity of the participants' experiences while mitigating the influence of personal biases. This approach ensured that the findings truly represented the perspectives of women with cervical cancer.

Study setting

The study was conducted at the Komfo Anokye Teaching Hospital (KATH), one of Ghana's major tertiary referral hospitals. The hospital is located in Kumasi, the capital of the Ashanti Region with a total population of 5,432,485 [26]. KATH has a bed capacity of 1200 and receives cases from 14 out of the 16 administrative regions of Ghana such as Central, Bono, Bono East, Ahafo, Eastern, Western, and Northern parts of the country due to the unique services it offers and specialist care available in the hospital. The facility offers 24-hour service delivery to clients and has an Oncology Unit where most cancer cases are managed with the help of a multidisciplinary team. However, the CC clinic is organized mainly on Tuesdays and

Wednesdays. Also, complicated cases from the periphery are referred to this facility for specialised care and management.

Sampling and participants

Participants were recruited using a purposive sampling technique. The attendance register at the Oncology Unit was useful in selecting patients who met the eligibility criteria for inclusion in the study. The potential participants were contacted and informed about the study scope. They were also informed about their rights to volunteer or withdraw from the study at any point without any penalty. This was done either by phone call or face-to-face during clinic attendance after which the participants provided their informed consent. The study included adult patients diagnosed with CC 18 years and above who were seeking treatment at KATH during the period of data collection. Also, the study included patients who had lived with the condition for at least 3 months and were fluent Twi or English speakers.

The study excluded the following: patients with mental disorders, unconscious and seriously ill CC patients with comorbidities.

An interview schedule based on an agreed date, venue and time was conducted at a private room within the Oncology Department of the Komfo Anokye Teaching Hospital in Kumasi with the eligible participants who consented to participate in the study. With the aid of a semi-structured interview guide, the researchers collected data to meet the study's objectives.

The number of participants for the study was 16 which was determined by data saturation [27]. Saturation is a concept applied in the determination of the number of participants in qualitative research where no new information is generated by the participants. Dat conducted. However, to be sure of saturation, two extra interviews

Table 1 Steps and data analysis processes employed

Thematic analy-	Data analysis processes employed		
sis steps			
1. Familiarizing	Immersion in the data		
with the Data	Reading and rereading		
	Noting initial impressions		
2. Generating Initial Codes	Identifying and labelling codes with colours		
	Attaching labels to relevant portions of the data		
3. Searching for Themes	Sorting and grouping codes		
	Identifying overarching patterns and connections		
	Searching for potential themes across the dataset		
4. Reviewing	Assessing the coherence and relevance of themes		
Themes	Refining and adjusting themes as needed		
5. Defining and Naming Themes	Developing clear definitions for each theme		
	Assigning appropriate names to represent content		
6. Producing the	Creating a comprehensive narrative of the analysis		
Report	Presenting findings in a clear and organized manner		

were conducted for confirmation, resulting in a total number of 16 participants.

Data collection lasted for 2 months (31st May -31st July, 2023). A semi-structured interview guide was the tool used for the data collection. The tool was developed by authors considering the objectives of the study and literature on the phenomenon under study. It consisted of open-ended questions and probes to acquire in-depth information for enhanced understanding. The interview guide focused on participants' socio-demographic characteristics (such as age, marital status, number of children, and residence), background information about the disease (duration, stage) and treatment (type and duration), reaction to initial clinical manifestation and CC diagnosis, experience with care provision by the health system, social support, challenges and coping strategies (refer to appendix File A.1 attached). The interview guide was piloted at Kwame Nkrumah University of Technology Hospital with three participants after which the demographic information was modified to include the number of children of the participants. This was done to ensure clarity of the questions and resolve any ambiguities.

The data which were audio recordings of the interview sessions were transcribed verbatim concurrently during the collection and analysed using a thematic analysis framework [28]. This framework by Braun and Clarke is a six-step technique for qualitative data analysis. Details of the steps and the processes employed in the data can be found in Table 1. The audio recordings of the interviews and the transcripts were stored on a password-protected laptop.

Data analysis

The themes were reviewed in relation to the extract for consistency in the pattern. Trustworthiness was maintained in line with Lincoln and Guba's (1985) criteria which include credibility, dependability, confirmability and transferability.

Reliability was ensured through a weekly discussion among the authors during the process of analysis in order to reduce personal biases. Two authors with expertise in qualitative research (NIEE and AKD) facilitated these sessions, playing a critical role in resolving discrepancies and upholding the rigour of the analysis. To enhance the credibility of the findings, key strategies were implemented. For example, the coding was done independently by three authors (JA, HA and GA), member checking and peer debriefing were also used to validate the data. Additionally, an audit trail was maintained for dependability [29]. Triangulation of data sources (in-depth interviews, audit trial and field notes) also contributed to confirmability [30]. (Motulsky, [31]). Confirmability was ensured in this study through member checking as

well as capturing both verbal and non-verbal cues in field notes. Transferability was also ensured by keeping an audit trail and ensuring transparency in the selection of the participants.

Results

Participants' socio-demographic characteristics

The 16 participants comprised middle-aged and older women whose ages ranged from 43 to 84 years. As illustrated in Table 2, five of them were married and were living with their husbands, children or siblings; three were divorced and were living alone or with their children; eight were widowed and living with their family (children, grandchildren, or in-law). All the participating women had children ranging from one to eight.

Themes

Four themes were actively generated from the collected data namely: "participants' healthcare journey", "illness and treatment challenges", "coping strategies", and "support". Figure 1 shows the themes and the sub-themes generated from the analysis.

Participants' healthcare journey

This theme described the initial processes that the participants went through prior to seeking medical consultation for their condition at the healthcare facility. Three sub-themes emerged under this theme and they include;

Table 2 Participants' socio-demographic characteristics (n = 16)

ID	Age (years)	Marital status	Num- ber of children	Residential status
P1	56	Widow	5	Living with children
P2	50	Divorce	3	Living alone
P3	56	Divorce	3	Living with child
P4	68	Widow	4	Living with child and in-law
P5	80	Widow	2	Living with child and grandchildren
P6	43	Married	5	Living with children
P7	47	Divorce	1	Living alone
P8	77	Widow	8	Living with child
Р9	47	Widow	3	Living with her family
P10	53	Married	2	Living with her sister
P11	53	Married	4	Living with the youngest child
P12	70	Widow	8	Living with her children
P13	63	Married	5	Living with husband and children
P14	84	Widow	7	Living children and grandchildren
P15	77	Widow	8	Living with her child
P16	51	Married	2	Living with husband and child

Note ID – Participants' Identification Number

response to symptoms, decision to seek medical care and reactions to diagnosis.

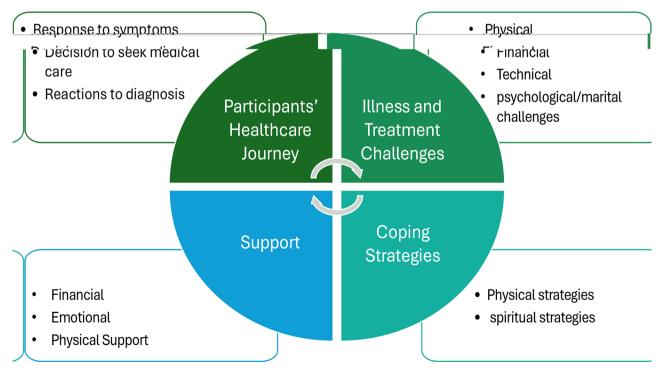


Fig. 1 Themes and sub-themes

Response to symptoms

This sub-theme describes what the participants did in response to the symptoms they experienced. Upon experiencing symptoms such as intermittent vaginal bleeding, itching, and watery discharge, participants turned to self-medication, relying on over-the-counter (OTC) drugs and herbal preparations as a first line of defense against the perceived ailment. The following excerpts are from some participants:

"At first, I thought it was candidiasis (white) so I went to get herbal medicines for candidiasis to use but to no avail ... For the watery discharges, I excessively thought about it because I did not understand why I have done a lot of herbal treatments but it did not heal and unless I did not hear of a particular medicine, or my siblings and friends hear of a particular medicine, they buy and bring it to me" (P2) "When it started, I felt itchy around there and [there was] some watery discharges, but I took it as normal and that it could be some infection ... It was later that I found out I was bleeding. Initially, I thought it was a normal menstrual disorder... I tried some traditional infection medications" (P9)

Decision to seek medical care

The decision to seek medical care as sub-theme captures the actions taken by the participants after experiencing the symptoms. In the context of this study, most participants did not seek medical care on the first account of the occurrence of the symptoms. The persistence or recurrence of symptoms despite the use of the OTC drugs and herbal preparations made them seek for professional medical care at primary and secondary health facilities. At the healthcare facilities, participants underwent a series of laboratory investigations and examinations which led to the diagnosis of their condition and subsequent treatments (surgeries, radiotherapy and chemotherapy).

"When I saw the bleeding, then I went to the hospital where I complained to them ... so, the doctor ordered for some lab investigations. Within two months, the results came in and the doctor told me that I have cervical cancer ... They put me on a machine for 23 days [radiotherapy] and after that I took four injections of chemo drugs ... Everyday, I took an injection and after that I started with the radiotherapy again" (P7)

"The discharge was coming continuously I couldn't sleep that time ... Later the bleeding was coming in large quantities, I couldn't withstand it, so I sent it to a clinic nearby. They admitted and hydrated me

with a lot of fluids. They gave me drugs too ... When I came, they took a [ultrasound] scan and made me sleep on two different machines [for radiation therapy]" (P12)

"I have done surgery ... after the surgery any time I am there, I begin to see discharges coming out from my vagina. Whenever I go to the hospital and they give me drugs, it stops and so, for the past 2 years, discharges coming out from my vagina started and whenever they give me drugs it does not stop. That period is when they did an investigation which brought me here and I found out that it is that disease (cervical cancer)" (P2)

Reaction to diagnosis

For the interviewed participants, the diagnosis of cervical cancer elicited a range of responses. The diagnosis of cervical cancer rendered a significant portion of them emotionally broken. Thoughts of death, sadness, fear and anxiety were the topmost of them all. Some participants reported these:

"The way they talked about this disease, I thought that when you get it, you are eventually going to die" (P1)

"When they confirmed that is cervical cancer I was afraid ... I really feared and was saddened by the news" (P10)

"Hmm, I was very afraid, I was afraid because I never thought I will reach such a stage. The time it came and how it was, I thought I wouldn't get life again. I was very frightened by it" (P15)

On the other hand, others remained calm and well-adapted when the news was broken to them that their medical condition was cervical cancer. This made participants embrace a holistic approach to care which involved both physical and spiritual dimensions with the aim of getting treated. The physical dimension involved regular visits to hospitals whiles the spiritual dimension was addressed through engagement with religious personalities like pastors. The following are some of the narrations from participants:

"At the hospital, the doctor told me I should obey and accept everything they tell me ... I understood what they told me. That didn't make me panic that I can die from it or something of that sort. ... because of the advice from the hospital, I didn't overreact or overthink of it ... I did a lot of labs and scans before being referred to Oncology. When I came there was a fair lady doctor, she informed me what I'm going to do and also told me I will be well. I didn't panic that

I was getting somewhere dangerous because of what I was told. That didn't give me stress. All I saw and knew was that I will be fine after everything" (P11) "When I initially contracted this disease ... I was proactive enough to do something about it even if it is spiritual, I also did the physical which involved the hospital" P7

Illness and treatment challenges

This theme described the multifaceted challenges faced by participants throughout their healthcare journey with cervical cancer and its treatments. The sub-themes under this theme are four: physical, financial, technical, psychological/marital challenges.

Physical challenges

The presence of the disease introduced a host of bodily challenges which affect their physical well-being. These physical challenges include general body weakness, waist pains, sleeplessness and loss of appetites. Below are some extracts of the challenges described by the participants.

"I don't recall any problem aside general body weakness and frequent illness. Recently I got ill, general weakness and my waist. But I'm well now by the grace of God ... In terms of my sleep, is not always that I'm able to sleep. Sometimes when I sleep small and wake up, that is it all, I can't sleep again until daybreak ... (P15)

After I slept under the machine [radiotherapy], my lower abdomen, I felt something round there and sometimes I see blood in my stool ... After I slept on the machine, initially I wasn't able to eat well, I lost appetite. I wasn't feeling well at all ... I'm not strong most often, I get dizzy, I feel weakness all around me. Now that I've come for the session [radiotherapy], by tomorrow I will be feeling very weak, within my bones and everywhere ... because of these I'm not able to do every housework I want to do" (P13)

Psychological/marital challenge

This sub-theme describes the mental and spousal issues encountered by the participants as a result of CC. The impact of these challenges had far-reaching consequences on the lives of participants as some participants had disrupted marital and sexual lives. The following are some excerpts from the participants:

...sometimes, these problems can lead you to overthink and you become mentally disturbed..." (P15) "My husband was the one who brought me to his house after our marriage and when he sacked me out of the house, I had no place to stay ... and so, I lodged often at some of my friend's house for about a week or two then I move to another person's house. When I decide to stay with someone either than my friends the way the person will treat you, you will not like it" (P7)

"For my husband, when it happened like that, I was in pain when I had [sexual] intercourse with him. I couldn't take it ... He also said he can't have a sexless marriage, so I told him to do whatever he wants to do ... Everything started from there ... Nowadays he doesn't bring the women in the house, but he rather goes. He went yesterday and came this dawn ... It hasn't been easy". (P16)

Financial challenge

The lack of financial support compelled some to resort to borrowing, while others experienced delays in receiving treatment. Transportation further strained the participants, adding another layer of difficulty in their health-care journey.

"Even yesterday that I came, it was hard for me to get money to come to the hospital yesterday. It was my sister who got me some money to come, around 500 [Ghana] cedis before I was able to come" (P10) "It hasn't been easy. Even with my last treatment I went for loan for that procedure. Yeah. My in and out fares, treatments, hasn't been a small issue" (P16)

Due to the financial constraints, missed appointments became a common occurrence as many were unable to engage with healthcare providers. Aside that, several factors such as machine breakdowns and absence of specific cures, contributed to treatment challenges.

"Finance became an issue ... because myself, I had no money, so unless little help from others that I use ..., even sometimes, I had to borrow somewhere ... because if you fail your appointment date, you have to go there and take a different date and where I stay is very far. That really worries me" (P13)

"In the past we knew that this disease had no cure ... when you look at the money you will have to pay and knowing that I have to come from far place to the hospital. When I am coming, I have to pay huge amounts for the transport fare ... this made me think about the finances a lot because I don't have a husband. Again, when I look at the family, there is no help coming from someone so I have to rely on my friends" (P5)

Technical challenge

This sub-theme captures the challenge in technology that complicates the access to quality care and effective treatment by the participant. This is significant because some participants could afford the treatment but were hindered due to infrastructural limitations.

"For machine break down, hmm... sometime ago when we came here, the machine broke down and we were made to return home and later come back for the treatment" (P8)

Coping strategies

This theme described the coping mechanisms displayed by participants, reflecting their resilience in the face of the challenges posed by cervical cancer. These coping mechanisms showcased strategies adopted by participants in their quest to battle their condition. Two subthemes arose from the analysis: Physical and spiritual strategies.

Physical strategies

In dealing with the CC, some participants resorted the use of physical methods including blood tonics to address their physical problems while others coped by reducing their workload in order to manage the demands of daily life.

"For food, I am able to eat small. I will buy blood tonic so that I will have a good appetite to eat." (P6) "...they have even let me stop any work. I used to work in the farm and I have stopped." (P8)

Also, others incorporated increased resting and sleeping to address the fatigue and distorted sleep patterns. The following were reported by some participants:

"For the sleep, when you can't sleep at night, you can do that during the day" (P14)

"... because I cannot sleep for long, I will be on the bed for some time till dusk" (P10)

Spiritual strategies

Some participants engaged in prayers with their "maker" to deal with their condition whiles others engaged in activities such as watching television, making calls which provided them with temporary respite from the challenges posed by their health condition.

"All my hope and assurance has been in God. So, I go to church every day." (P15)

"I get people to converse with too when I come to the store [workplace]. Sometimes I make calls, I call some of my friends, I agree it divert my mind from the pain and weakness sometimes" (P16)

Support

Support was the fourth theme that was generated and it described the unwavering help shown to participants living with cervical cancer. As part of efforts to improve health outcomes, participants received diverse contributions from various people to assist them build resilience to go through the challenges posed by their condition. Three sub-themes were generated, and they include financial, emotional and physical support.

Financial support

Under this sub-theme, the monetary assistance and the sources the participants received it from are captured. This went a long way to alleviating some of the fiscal burden on the participants as a result of the condition. Many of them received financial assistance from their children to alleviate the burden imposed by their condition while that of assistance from church, family and friends varied among participants.

"My children help me in everything, I don't really do anything. They do everything for me together with my grandchildren. ...finance wasn't a problem, my children did well. The moment I came and informed them what has happened, the little help each could, they gathered it for me to come to the hospital. Money issues wasn't that a problem for me because the children encouraged me that they will take care of me. That helped me." (P14)

"When I was operated on, my church brought about GHS [Ghana cedis] 500 to support me" (P6)

Emotional support

Some of the participants also received invaluable support from their friends and churches such as advice, prayers and teachings to boost their faith whiles seeking healthcare. Furthermore, some participants acknowledged the support provided by healthcare providers (which took the form of advice and guidance) which helped them cope with the difficulties of their condition and its treatment. Some participants had these to say:

"But with counselling and other consultations, I was able to overcome them. The hospital doctors also did very well. I came to meet one doctor [name withheld], he really counseled me. I was able to overcome it all" (P9)

"They said most people do not survive it, that is what I've heard. But the doctors talked to me and explained things to me" (P15)

Physical support

Under this sub-theme, the physical assistance received by some of the participants from their families and friends has been captured. The diseases rendered some of the participants too weak to engage in activities like meal preparation and house chores.

"Concerning household chores, where I rent my apartment there is a woman who normally helps me when I ask her" (P7)

Discussion

This study sought to explore the unique challenges women living with cervical cancer go through and their coping strategies. The study revealed that initial symptoms which are also manifestations of CC included vaginal bleeding, itching, and discharge, which supports similar studies [32, 33]. This study also found that participants initially resorted to self-medication with over the counter (OTC) drugs and herbal preparations [14], which underscores a common trend in health-seeking behaviour among women in Ghana [34]. This agrees with the notion that women within the sub-region often attempt to manage symptoms independently before seeking professional help. In this current study, it was noticed that some participants continued to use over-the-counter drugs alongside the medical treatment when symptoms persisted. This contradicts the known assumption that individuals promptly seek professional medical care when symptoms persist [35]. Possible explanations for this behaviour could be poor access to healthcare, financial constraints, or a lack of awareness regarding the severity of symptoms.

Participants in this study expressed varied emotional responses to CC diagnosis. While some participants had thoughts of death, fear, and anxiety, others demonstrated a surprising calm and acceptance, and this is similar to earlier studies [36, 37]. Given the emotions expressed by participants in this study, there is a need to make provision for counselling by a clinical psychologist and support to patients before disclosing their CC diagnosis to maintain their mental well-being. The differences in the emotional responses could be a result of several factors like the support available to the women, coping strategies and their perception of the severity of the disease (Katowa Mukwato et al., 2015; Mcbride et al., 2020). Studies have shown that individuals with positive coping strategies and support report lower levels of anxiety

and fear (Çelik et al., 2022). The differing level of anxiety can also significantly affect the health-seeking behaviour of women with cervical cancer (Azizi et al., 2023). This is because women who more anxious are more likely to avoid seeking care due to the possibility of receiving bad news.

Participants in this study encountered substantial physical and mental challenges associated with CC. The disease presented with several challenges that extended beyond the physical level, impacting participants' overall well-being. This aligns with the broader understanding that cancers, including CC, often have profound effects on both physical and psychological health [5]. The issue of sustainable physical and psychological support for women living with CC requires further investigation.

Financial constraints emerged as a pervasive challenge in this study leading some participants to resort to borrowing for treatment expenses. This echoes findings in [38] and [39], which highlight the financial burden associated with cancer care and the socio-economic implications for patients. This calls for some financial support for such patients. Stakeholders can look at including CC in the NHIS package to reduce the financial burden on the patients.

Transportation also emerged as a challenge that aggravated the difficulties in the healthcare journey of the patients. This was similar to a study conducted by [40], which recognizes transportation barriers as a significant impediment to cancer care, particularly for individuals residing in remote or underserved areas. Missed appointments, attributed to financial constraints, were also a common occurrence among participants which was consistent with Biddell et al.'s [41] findings emphasizing the relationship between financial barriers and missed healthcare appointments. Stakeholders may look at expanding treatment centres to improve access for such patients to deal with the transportation issues.

Participants interviewed in this study identified frequent breakdown of radiotherapy machine and absence of specific drugs as major challenges to their health outcomes. This finding presents a unique insight into the challenges CC patients face as they strife to battle the disease. The challenges encountered significantly impacted on various aspects of participants' lives, including disruptions in marital, work, family, and personal lives. This reflects a holistic impact consistent with [14]. Health facility managers will have to look at holistic maintenance of such equipment and adhere to planning preventive maintenance to prevent the frequent breakdown of the equipment. Drugs for CC patients must be on the essential drug list to make sure they are always stocked.

Various forms of coping strategies were employed by the participants in this study. The coping mechanisms identified included physical, psychological and spiritual [42, 43]. Physically, some participants resorted to the use of blood tonics and pain medication as a coping strategy while others narrated reduced workload, increased resting and sleeping period to address fatigue and distorted sleep patterns associated with CC respectively. This finding aligns with Rosenbaum et al. [44], which indicated that adequate rest and quality sleep improves fatigue management and the overall well-being of cancer patients.

Participants in this study demonstrated a high level of spirituality in coping with the disease. Most participants engaged in prayers and consulted pastors to address the spiritual dimension which adds a unique approach to the coping process. This finding correlates with [45], which discusses the role of spirituality and religious practices in influencing health behaviours and outcomes. Prayer, as a source of relief and emotional support, reflects a dimension of coping that extends beyond the physical. This is in line with [46] which acknowledges the diverse ways individuals draw on spiritual and religious practices to navigate health challenges.

Another strategy participants interviewed used was recreational activities such as watching television for temporal respite from health challenges. While this may be considered a form of distraction, it was beneficial to patients psychologically and aligns with [47] which emphasizes the significance of recreational activities in promoting psychological well-being among cancer patients. The diverse range of coping mechanisms individuals employed, reflect a broader trend in seeking alternative remedies for symptom relief.

Another important finding of this study was about participant support. Most participants received financial aid from their children and other family members, showing the importance of family support network. This supports exiting literature highlighting the significant role families play in providing financial assistance to individuals dealing with chronic illnesses, including cancer [48].

In some cases, participants received direct and indirect support from friends and religious affiliates in the form of advice, meal preparation, assistance with house chores, financial aid, teaching and prayers. This is consistent with [49] that friends often serve as a vital pillar of support, contributing not only emotionally but also assisting with practical aspects of daily life as well as the role of the church as a significant source of support which aligns with [50]. This emphasizes the importance of religious communities in providing various forms of assistance to individuals facing health challenges.

Healthcare providers also added to the support systems of participants by providing counseling, guidance, and physical relief of symptoms. This finding is confirmed by [51]. The healthcare system is recognized as a pivotal source of support, not only through medical

interventions but also through the provision of information and guidance. It is evident that, participant in this study received variety of support from diverse sources in dealing with the challenges encountered living with CC. The interplay of support from family, friends, churches, and healthcare system immensely insulated participants in this study.

Limitations

This study recognises limitations, including possible selection bias due to purposive sampling and the likelihood of social desirability bias in participants' responses since the condition affects the female reproductive system. The authors sought to mitigate these by clearly stating the eligibility criteria and assuring the participants of anonymity. Also, due to the qualitative nature of the study, generalising the results of the study is limited.

Implications

Implications for research

Research on women living with cervical cancer in Ghana should prioritize understanding the multiple challenges related to accessing healthcare services. Future studies should also consider investigating these challenges using a quantitative approach to find out how generalised these challenges may be. Examining the impact of healthcare infrastructure and CC management will enable researchers to provide insights into areas requiring improvement. This research implication aims to inform targeted interventions and policy changes that enhance accessibility, ensuring that women across diverse backgrounds have equitable access to timely and effective CC treatment.

Implications for practice

Clinical care of patients with CC requires a more holistic approach to address unmet needs. Hence, health professional needs to be trained adequately to be able to provide culturally sensitive care to patients diagnosed with CC.

Conclusions

This study revealed key challenges that women living with CC faces, the coping strategies use and support systems from the perspective of the patients in Ghana. The use of a qualitative approach allowed the researchers to explore in details the perspectives of patients on the nature of the challenges that women encounter when they are diagnosed of CC. Critically appraising the major problems encountered by the women in the current study, it is recommended that some intentional measures put in place to reduce the problems of women living with CC in Ghana. Some of the recommended measures are; government should provide some form of financial support through the National Health Insurance Scheme, expand

access to CC treatment across the country, improve the equipment capacity of existing centres and health professionals provision of counselling services before and after giving information on diagnosis of CC to patients. Also, healthcare professionals creating awareness of CC in the communities using local media outlets like radio stations and local information centres is recommended. Moreover, the Ghana Health Service should provide mobile clinics to improve access to cervical cancer screening, diagnostic and follow-up services These insights could guide stakeholders in developing sustainable interventions to enhance the management of CC and improve patient care outcomes.

Abbreviations

CC Cervical Cancer

KATH Komfo Anokye Teaching Hospital NHIS National Health Insurance Scheme

OTC Over the Counter

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Author contributions

JA contributed to the conceptualization, data collection and analysis, data interpretation, and manuscript drafting for publication. AKD contributed to the conceptualization, data collection and analysis, data interpretation, and manuscript drafting for publication. SAA contributed to data collection and analysis, data interpretation, and manuscript drafting. HA contributed data collection and analysis, data interpretation, and manuscript drafting for publication. GA contributed data collection and analysis, data interpretation, and manuscript drafting for publication. DY contributed data collection and analysis, data interpretation, and manuscript drafting for publication. AED contributed to the reviewing, editing, analysing, and drafting of the manuscript for publication. FD contributed to the reviewing, editing, analyzing, and drafting of the manuscript for publication. NIEE contributed to the conceptualization, data collection and analysis, data interpretation, and manuscript drafting for publication. All authors read and approved the final manuscript.

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Data availability

The data that support the findings of this study may be available from the corresponding author upon reasonable request.

Declarations

Ethical approval

Ethical approval was obtained from the KATH Institutional Review Board (KATHIRB/AP/072/23) and written informed consent was obtained from each participant before inclusion in the study. Participants were assured of confidentiality and their right to withdraw from the study at any point without consequence. The privacy of the participants was ensured during the data collection stage of the research. Additionally, no personal identifying information was used and pseudonyms were used in describing the participants' responses. The participants were also given a detailed explanation of the study, its methodology, data analysis, and procedural guidelines.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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