



Women's experiences with cervical cancer in Ghana

Gideon Dzando^{a,*}, Solomon Yabila^b, Augustine Kumah^c, Nelson Hukporti^d, Dennis Asante^e, Cynthia Nwokonna^f, Sherrif Kwame Awiagah^g

^a Research Centre for Public Health, Equity and Human Flourishing, Torrens University Australia, Adelaide, SA, Australia

^b Regional Institute for Population Studies, University of Ghana, Legon, Accra, Ghana

^c Department of Quality and Public Health, Nyaho Medical Centre, Accra, Ghana

^d The Dudley Group NHS Foundation Trust, Russells Hall Hospital, Dudley, United Kingdom

^e College of Medicine & Public Health, Poche SA+NT, Flinders University, Adelaide, SA, Australia

^f College of Nursing and Health Sciences, Flinders University, Adelaide, Australia

^g School of Health and Social Care, Edinburgh Napier University, Edinburgh, United Kingdom

ARTICLE INFO

Keywords:

Cervical Cancer
Experiences
Ghana
Perspectives
Health Policy

ABSTRACT

Cervical cancer remains a significant global public health concern, and its impact in low- and middle-income countries, including Ghana is profound. Existing policies in Ghana focus on early screening and diagnosis. While the primary step of diagnosis is important and widely represented in literature, the evidence on the experiences of women diagnosed with cervical cancer remain sparse. The aim of this scoping review, therefore, was to explore and map the available literature on the experiences of women diagnosed with cervical cancer in Ghana. This study was conducted according to the framework developed by Arksey and O'Malley and reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews. Five databases (Google Scholar, PubMed, SCOPUS, CINAHL, and Africa Journal online) were searched using key words and key terms. Two authors independently screened the titles and abstracts, and the full texts of the included studies. Out of the 463 studies identified through the database search, ten studies met the eligibility criteria and were included in the review. The findings reveal that, the experiences of Ghanaian women with cervical cancer are multifaceted. These experiences are influenced by physical, psychological, and socio-cultural factors with significant impact on their quality of life. The women expressed ongoing discomfort due to bleeding and chronic pain. Psychologically, the women expressed pervasive anxiety, due to the fear associated with the diagnosis, and the cost associated living with cervical cancer. The socio-cultural experiences varied among the women. While some of the women expressed receiving no support from their family members and friends, others reported receiving immense support. Policy makers must consider including the experiences of women with cervical cancer in policy to provide interventions that meet their specific needs.

1. Introduction

Cervical cancer remains a global public health concern that requires unwavering attention. Cervical cancer is the fourth most common cancer worldwide, with an estimated 570,000 reported cases and 311,000 deaths in 2018 [1]. In 2020, the number of new cases globally increased to about 604,000 with an estimated 342,000 deaths [2]. The prevalence and disease burden of cervical cancer in Low- and Middle-income Countries (LMIC) continue to rise and represent a major source of strain on individuals, societies, and healthcare systems. The World Health Organization (WHO) estimates that about 90% of all new

cervical cancer cases and mortality occur in LMIC [3]. More importantly, the increasing burden of cervical cancer in LMIC has been associated with limited resources, limited knowledge about cervical cancer, poor implementation of cervical cancer screening programs and limited access to specialist health services [4,5].

Cervical cancer is the most common cause of mortality among women in twenty-one of the forty-eight countries in Sub-Saharan Africa [6], anchoring its ongoing impact on healthcare systems across the continent. The increasing prevalence of cervical cancer in Sub-Saharan Africa has long been attributed to the high prevalence of Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome

* Corresponding author.

E-mail address: Gideon.Dzando@torrens.edu.au (G. Dzando).

<https://doi.org/10.1016/j.glmedi.2024.100076>

Received 26 December 2023; Received in revised form 22 February 2024; Accepted 22 February 2024

Available online 24 February 2024

2949-916X/© 2024 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

(HIV/AIDS), communicable diseases, and other socio-demographic factors such as the lack of access to healthcare services [7–9]. Despite the attention and the attempt to incorporate cervical cancer screening into the primary healthcare systems, only about one in seven women aged 30–49 in Sub-Saharan Africa have been screened for cervical cancer in 2020, with the lowest screening coverage in Western, Eastern and Central Africa [8]. Also, there are variations in the coverage of screening among countries within each region. These variations may be due to the differences in country-specific healthcare policies. The impact of policy differences has been reported across literature, and account for the differences in healthcare services, including accessibility, utilization, and outcome of care [10,11].

Ghana currently has a total population of approximately 34 million, with the number of young people expected to increase exponentially in the next decade. According to the 2021 census conducted by the Ghana Statistical Services, about 38% of the country's population is made up of young adults aged between 15 and 35 years [12]. In 2023, an estimated 10.6 million women were aged 15 years and above. This youthful demographic presents both opportunities and challenges for communities and public health, especially the risk of cervical cancer. More importantly, the number of newly diagnosed cervical cancer cases and cervical cancer-associated mortality in Ghana continues to rise, with an estimated 3151 new cases diagnosed, and about 2000 deaths reported each year [13].

The high prevalence of cervical and the increasing burden on society has ignited a paradigm shift towards ongoing research and policies that seek to promote cervical cancer prevention through early screening services for women. The Ghana Health Service (GHS), together with researchers and advocacy groups in Ghana recently intimated their plans to integrate the Human Papilloma Virus (HPV) Vaccine into the country's routine Expanded Program for Immunization (EPI) schedule [14]. It is therefore evident that, beyond the policy recommendations from the World Health Organization on cervical cancer prevention and treatment, Ghana is continuously developing and implementing country-specific policy initiatives on cervical cancer prevention and management. The healthcare system in Ghana is influenced by existing cultural and community dynamics, and therefore can benefit from policies that consider the social dynamics of Ghanaian societies [15–17].

The available evidence on the experiences of women with cervical cancers in Ghana remain scattered. To the best of our knowledge, there are no reviews that have explored the experiences of women with cervical cancer in Ghana. The aim of this scoping review, therefore, was to explore and map the available evidence in Ghana on the experiences of women with cervical cancer. Understanding these experiences can play a significant role in designing health promotion policies beyond disease prevention to include policies that focus on the care and support for women after diagnosis. Also, the compelling stories and positive survival experiences of these women can motivate individuals to take proactive steps for early screening and treatment to achieve a cervical cancer free society.

2. Methodology

This scoping review was conducted according to the framework proposed by Arksey and O'Malley, [18], modified by Levac et al. [19]. The framework involves a five-stage overlapping process, including identifying the research question, identifying the relevant literature, selecting the relevant studies, charting, and collating data, summarizing, and reporting findings. The review was reported according to Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist [20]. Scoping reviews provide an avenue for knowledge and evidence synthesis to provide an overview of available literature specific subjects [21,22]. We included all relevant studies (qualitative, quantitative, and mixed method) that report on the experiences of cervical cancer patients (newly diagnosed and survivors) in Ghana. The inclusion of studies of diverse

methodologies in scoping reviews can enhance the comprehensive exploration of the nature and extent of available literature.

2.1. Identification of research question

The research question for this study was developed using the Population, Concept and Context (PCC) framework as proposed by the Joanna Brigg's Institute [23] to link the purpose of the study with the research question (Table 1). The research question for this review is 'What are the experiences of women diagnosed with cervical cancer in Ghana?'.

2.2. Identifying relevant studies

We conducted an iterative search in five databases (Google scholar, PubMed, SCOPUS, CINAHL, and Africa Journal online) using keywords and key terms. The keywords and key terms were used either alone or in combination across the databases. Boolean operators, wildcats and truncations were applied in relevant databases to expand the scope of the search. The reference list of all the included studies was searched for additional studies. The examples of the keywords and terms applied for each concept are presented in Table 2. The eligibility criteria applied for study inclusion and exclusion in presented in Table 3.

2.3. Selection of studies

The studies identified through the database searches were uploaded to Zotero, a reference management software [24] and all duplicates were removed. The rest of the studies were uploaded to Rayaan a systematic review software [25] for further data management. The abstract and title screening was independently completed by two authors (AK and DA). Any discrepancies were resolved by a third author (GD). The next phase of full-text screening was independently completed by GD and KSA. Any discrepancies were resolved by DA. The database search and study selection process are represented in the PRISMA flow diagram [26].

2.4. Data charting

Data charting followed an iterative process. A priori data extraction and charting form was developed by one author (GD) and its content was discussed among all the authors. The form was modified during data extraction to include any new information relevant to the study. The data extraction was performed by two independent authors and monitored by the rest of the authors. The content of both data extraction forms from the independent authors were discussed and merged after an agreement was reached by all the authors.

3. Results

3.1. Summary characteristics of the included studies

The initial records from the databases produced 463 articles. After the abstract and title, and full text s screening, 10 studies met the inclusion criteria and were included in this review. Overall, 685 participants participated in the included studies. Diverse methodological approaches were identified. The qualitative approach was utilized in seven studies, two studies employed the quantitative approach, and one study utilized the mixed method approach. Themes were generated

Table 1
The Population, Concept and Context framework.

Population	Women diagnosed with cervical cancer in Ghana
Concept	Cervical cancer diagnoses and treatment
Context	The sixteen regions of Ghana

Table 2

Examples of key terms and key words for literature search.

Cervical cancer	"Cervical cancer" OR "cervical neoplasm" OR "cervical carcinoma"
Experiences	"Experiences" OR "Perceptions" OR "Attitudes" OR "Views" OR "Feelings" OR "Qualitative" OR "Perspective"
Ghana	"Ghana" OR "Ghanaian"

Table 3

Eligibility criteria for inclusion and exclusion.

Inclusion criteria	Exclusion criteria
Peer reviewed articles (Quantitative, Qualitative, Mixed method)	All forms of literature reviews and opinion pieces.
Studies conducted in Ghana	Studies conducted in countries other than Ghana
Studies that focus on women diagnosed with cervical cancers	Studies that report on women diagnosed with other forms of cancers
Articles published in English	Articles published in other languages other than English.

across the included studies and the findings are presented as a narrative synthesis. The results of the database search and screening process are presented in Fig. 1. The characteristics of the included studies are presented in Table 4.

3.2. Themes

3.2.1. Physical experiences

Women diagnosed with cervical cancer in Ghana reported varying degrees of changes to their physical wellbeing, including appearance

and adjustment with new chronic symptoms. Pain, bleeding, and sleep disturbances were characteristic and reported across many of the included studies [27,28,32]. Some of the physical symptoms were reported to exist prior to diagnosis, and often became worst post diagnosis. The severity of these physical symptoms impacted their quality of life of these women, making life unbearable [30,32].

I experienced pain in my waist and thighs. Whenever I was in pain, I shouted and cried. It was as if the waist was about to come off or I should cut my waist and throw it away. I was in too much pain (Hobenu & Naab, 2022 [32], page 5).

The women therefore continuously lived in fear of the unknown and bemoaned the drastic physical body changes such as weight loss and continuous bleeding [32,36]. The chronicity of bleeding often presented as a lasting challenge, and creates an immeasurable discomfort for these women:

I have not been able to eat well for about three weeks now, I am also feeling pain and discharging clots of blood from my vagina. In a day I can bleed about three hands full of blood. This is not my normal stature, have reduced weight (Osei Appiah et al., 2021 [36], page 17).

These physical symptoms were often complicated by the women's perceptions and health seeking behavior. Despite the increasing awareness and availability of cervical cancer services, some women presented late to the hospital due to the lack of trust and understanding of the causes of cervical cancer. They sometimes sought validation from their trusted associates before seeking treatment.

Yes, cancer is serious; those days when you hear that somebody has cancer, you are afraid...Because for cancer, there is no cure. The treatment (hospital) for it will even kill you...That is why I first went to my

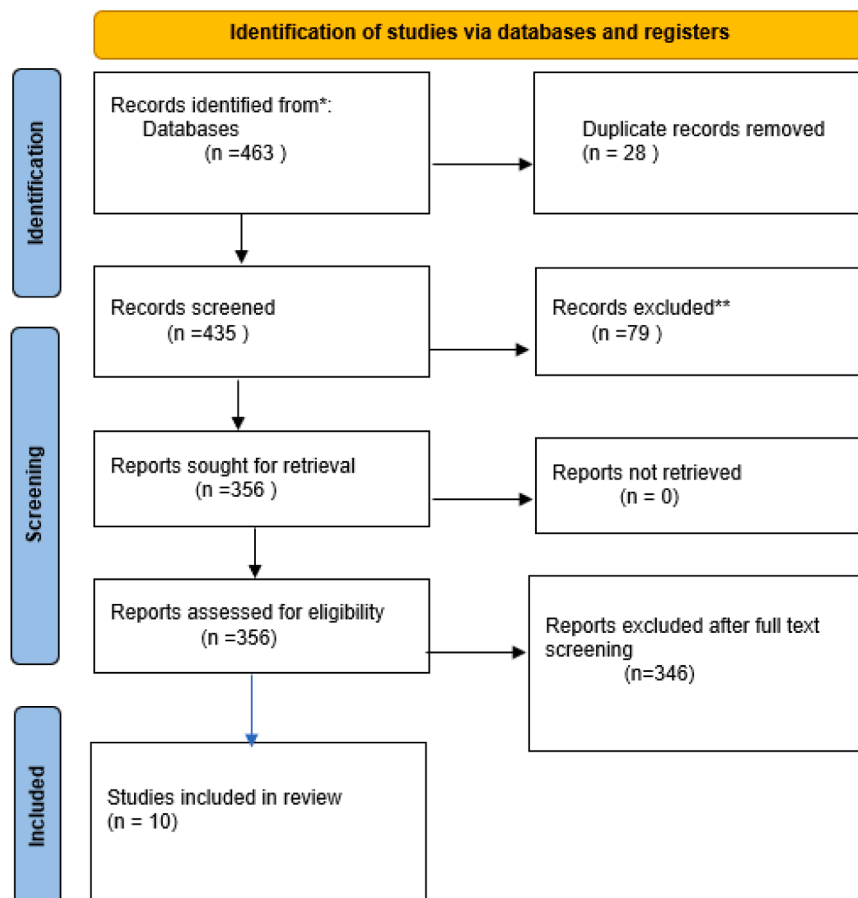


Fig. 1. PRISMA Flow chart for screening and study selection [26].

Table 4
Characteristics of the included studies.

Citation/ Sample size	Sample size	Study Objective	Methodology	Data analysis	Main findings
Amenuvor et al., (2023) [27]	12	To explore the experiences of sexual health among women with gynecological cancers.	Exploratory, descriptive study.	Thematic analysis.	Hemorrhage, reproductive organ changes, anxiety, decreased interest in sex, low-self-esteem, feeling of separation.
Amo-Antwi et al., (2022) [28]	153	To determine the post treatment quality of life among cervical cancer survivors.	Cross-sectional analytical study.	Multivariate logistic regression.	More than half (75%) of cancer survivors reported good quality of life post treatment. Peripheral neuropathy, pain, anxiety, body image disturbance, decreased sexual desire, poor appetite, financial challenges.
Asakitogum et al., (2023) [29]	12	To explore the influence of health beliefs on the treatment journeys of cervical cancer survivors.	Exploratory descriptive.	Thematic analysis.	Patients report late for treatment due to mistrust of orthodox treatment.
Binka et al., (2017) [30]	15	To explore the knowledge and experiences of cervical cancer patients before and after diagnosis.	Qualitative study.	Thematic analysis	The study participants had less knowledge on the causes, symptoms, treatment options and prevention prior to diagnosis. The study participants reported physical, economic, and psychological changes after diagnosis.
(Hobenu et al., 2023) [31]	15	To understand the experiences of cervical cancer among women in Ghana.	Qualitative exploratory descriptive.	Content analysis	Impact on physical appearance, socio-economic challenges, and overall quality of life
Hobenu & Naab, (2020) [32]	15	To examine the physical experiences of women with cervical cancer in Ghana.	Exploratory descriptive study.	Thematic analysis	The women experienced physical consequences (pain, weight loss, vaginal discharge) which adversely impacted their overall quality of life.
Hobenu & Amakpa, (2022) [33]	15	To explore women's experiences of treatment for advanced cervical cancer.	A phenomenological study.	Thematic analysis	Treatment was associated with loss of appetite, significant gynecologic changes, and pseudo- menopausal changes, skin changes and hair loss.
Kyei et al., (2020) [34]	120	To examine the influence of clinical and demographic characteristics on the quality of life of cervical cancer clients undergoing radiotherapy.	A cross sectional quantitative study.	Chi-square test	Differences in age significantly influence the changes associated with cervical cancer. Family members provided psychological and emotional support.
Okyerere Asante et al., (2023) [35]	298	To determine the psychosocial experiences of women seeking treatment for cervical cancers.	Mixed method study.	Thematic analysis/ Multivariate regression	Concerns about physical, emotional, and social wellbeing after diagnosis.
Osei Appiah et al., (2021) [36]	30	To assess the physical and sexual impact of cervical diagnosis on women with cervical cancer.	A qualitative study.	Thematic analysis	Chemotherapy and cervical cancer symptoms cause low libido and there were concerns about their inability to satisfy their partners sexually.

spiritual pastor before he contacted a professor and we went to the hospital for treatment (Asakitogum et al., 2023 [29], page 5).

These sentiments of fear about cervical cancer diagnosis and the perceptions associated with orthodox treatment modalities can potentially delay or hinder cervical cancer screening and treatment.

3.2.2. Psychological experiences

The psychological experiences of women with cervical cancer in Ghana are multifaceted and complex. These experiences emanate from fears associated with the diagnoses and perceptions about societal acceptance and re-integration into the community. At diagnosis, most of the women reported the expression of shock and denial. This shock and denial pre-empted thoughts about the essence of their existence, especially due to their perceptions about cervical cancer and the increasing cost of medical services in the country [27,29,30].

I kept thinking about the disease. Why should a young lady like me have this disease? What am I going to do now? Can I even pay?. Sometimes I do not even hear when people call my name (Binka et al., 2017 [30], page 7).

I get very anxious and depressed anytime my appointment date is getting close. How to get money for treatment is always a challenge, when you see that I am sitting quietly, it means I am in deep thought. Worry alone can even kill you. The cost of treatment is too huge for us (Okyerere Asante et al., 2023 [35], page 5).

The associated anxieties and the inability to engage in meaningful activities was noted to be compounded by existing psychological trauma

associated with cervical cancer diagnosis [27,28,35,36]. And while some of the women portrayed their partners as understanding and supportive, others appear to have lost hope and not perturbed if their husbands sought for pleasure and gratification outside their existing relationships.

I cannot engage in any sexual act at this stage. Am having discharges and feeling severe pain for about 3 weeks now and I have no desire to engage in sex. My husband can only bear with me at this difficult moment, if not he should find another alternative, it is up to him (Osei Appiah, 2021 [36], page 5).

3.2.3. Socio-cultural experiences

The socio-cultural experiences of women diagnosed with cervical cancer in Ghana are complex. The women reported feeling socially isolated, with little or no support from their family members and loved ones despite their social relevance in their communities prior to diagnosis [30,31,33]. This neglect was mainly associated with the chronicity and long-term care requirements of the disease.

None of my family members supported me. Even my own sibling who came after me did not mind me anymore. He said he had spent five times already so he would not spend money to take care of me again because my mother and my father did not leave him any inheritance to fall on (Binka et al., 2017 [30], page 9).

Some of the cervical cancer patients became subjects of conversation and objects of ridicule in their communities. They were therefore not willing to participate in social activities due to ongoing gossip and

misconceptions associated with living with cervical cancers. Despite these feelings of isolation and dejection, some of the women demonstrated unwavering hope that resonated a sense of positive feeling in their daily lives.

People gossip a lot; I don't want anybody to know my business. And when you have cancer, everybody thinks you are about to die but cancer can be treated. Do I look like someone about to die? (Hobenu & Naab, 2020 [32], page 9).

On the other hand, some of the women expressed their satisfaction about the bond and support they received from their families. Despite the limitations, they also continued to support their families in every little way they could [27–29,34,35]. This bonding often led to increased trust between the patients and their significant others, which often influenced their decision to seek healthcare.

I have full trust for my friend and that is why when she directed me to that woman who sells those things in the market, I had to look for the woman (herbalist) and bought the balm and the herbs (Asakitogum et al., 2023 [29], page 4).

This reflection underscores the power and essence of trust in shaping the actions and choices of women with cervical cancer in Ghana.

4. Discussion

This review aimed to explore the experiences of cervical cancer patients and survivors in Ghana. The findings demonstrate that the experiences of cancer patients and survivors are multifaceted and complex, cutting across several domains of life. These experiences shape how these women communicate and relate to the environment around them. Although many of the included studies focused on specific domains such as sexuality, physical and emotional experiences, it is important to note that, these experiences highlighted the intricate interplay of meeting their personal needs and engaging meaningfully with their communities. As reported in previous studies, the initial diagnosis of cervical cancer comes as a shock to many women, and they linger in disbelief over a long period of time [37,38]. The diagnosis and ensuing complexities associated with the treatment of cervical cancer is profound and adversely impacts the daily functioning and quality of life of individuals [39,40].

More importantly, women with cervical cancer experience physical symptoms that often develop into extreme psychosomatic symptoms. The pain, bleeding, and the associated discomfort ignites a sense of regret and frustration, thereby limiting their engagement in activities of daily living. Existing evidence suggests that women who test positive for the Human Papilloma Virus often become withdrawn and find it difficult to associate with members of their communities [41,42]. This phenomenon was reported by participants in this review, anchoring the need for broader community support and engagement. The existing health belief systems, traditional practices, and the increasing burden of other non-communicable diseases increase the burden of women diagnosed with cervical cancer [43–45]. Understanding the role and impact of these factors on existing policies can be a starting point to develop policy interventions that meet the specific needs of women with cervical cancer in Ghana.

As noted in this review, the experiences of women with cervical cancer transcend service availability and accessibility. In many Low- and Middle-income Countries, the presence of chronic diseases affects the family and community structure [46,47]. Individuals are more accountable to their families and communities and will therefore require community and family support during ill-health. Existing evidence, for instance suggest that high literacy of cervical cancer among men can improve the quality of support they provide to their spouses and family members accessing cervical cancer services [48,49]. As noted in this review, cultural stigma surrounding sexual and reproductive health topics play a significant role in women's decision to seek early

healthcare and treatment. Therefore, beyond health policy formulation, screening and patient centered care planning, health promotion programs must be expended to include follow-up on patients diagnosed with cervical cancer.

The findings in this review have implications for policy and research. There is the need for enhanced awareness and public education within the local communities. Policymakers must prioritize increasing public health campaigns in the communities regarding the risk factors and importance of early screening. Cervical cancer services should be integrated into the primary healthcare services to enhance early detection and follow-up care. Integrating these services into the primary health-care system will also improve community involvement which can ultimately improve the support for women with cervical cancer.

There is also the need for ongoing qualitative research to better understand the unique experiences of women diagnosed with cervical cancer. Longitudinal studies are also required to track the experiences of women with cervical cancer from diagnosis, through treatment to survivorship. Longitudinal studies can provide insight into the disease trajectory over time thereby informing healthcare planning and policy.

This study has some strengths and limitations. The search for literature was comprehensive and covered key databases. Articles were independently screened to avoid the biases associated with study selection. We followed an iterative process in analyzing and reporting our findings. This allowed for the inclusion of relevant information at every step of the study. Some limitations are also duly acknowledged. Firstly, the limited dearth of literature included in this review is a limitation. Most of the included studies were authored by similar or related authors, with participants also within similar population groups. Therefore, the findings may not be a true representation of the experiences of cervical cancer in Ghana. Additionally, this review reported on research findings from other primary studies. The methodological qualities and the conclusions drawn in the primary studies cannot be verified in this review.

4.1. Conclusion

The findings from this review suggest that women diagnosed with cervical cancer in Ghana experience challenges beyond the physical symptoms of the disease. The communal and social characteristics of Ghana play a significant role in the treatment journeys and resilience of women with cervical cancer. There is the need for ongoing research to understand how these experiences influence service utilization. Research into cervical cancer must also extend beyond women to include the role of men. The participation of men in the treatment journeys of women with cervical cancer can improve service utilization and enhance their reintegration into their societies.

Ethical approval

This study does not require ethical approval. No human subjects were involved in the study.

CRediT authorship contribution statement

GD: Conceptualization; Data curation; Formal analysis; Methodology; Project administration; Software; Validation; Writing - original draft; and Writing - review & editing. SY, AK, DA, CN: Software; Validation; Methodology; Writing - review & editing. NH, SKA: Formal analysis; Methodology; Project administration; Writing - review & editing; Validation.

Declaration of Competing Interest

The authors declare that they have no known competing interests.

Acknowledgement

We wish to acknowledge the oncology specialists in Ghana whose expertise guided this study.

References

- [1] F. Bray, J. Ferlay, I. Soerjomataram, R.L. Siegel, L.A. Torre, A. Jemal, Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries, *CA Cancer J. Clin.* 68 (2018) 394–424, <https://doi.org/10.3322/caac.21492>.
- [2] T.R. Martins, S.S. Witkin, M.C. Mendes-Corrêa, A.S. de Godoy, L. Cury, M. L. Balancin, A.M. Ab'Saber, S.V. Peres, S. Messias, T.R. Tozetto Mendoza, A. Longatto-Filho, Impact of the COVID-19 pandemic on cervical cancer screening in São Paulo State, Brazil, *Acta Cytol.* (2023) 1–7, <https://doi.org/10.1159/000529249>.
- [3] H. Sung, J. Ferlay, R.L. Siegel, M. Laversanne, I. Soerjomataram, A. Jemal, F. Bray, Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries, *CA Cancer J. Clin.* 71 (2021) 209–249, <https://doi.org/10.3322/caac.21660>.
- [4] R. Hull, M. Mbele, T. Makhafola, C. Hicks, S.-M. Wang, R.M. Reis, R. Mehrotra, Z. Mkhize-Kwitshana, G. Kibiki, D.O. Bates, Z. Dlamini, Cervical cancer in low and middle-income countries, *Oncol. Lett.* 20 (2020) 2058–2074, <https://doi.org/10.3892/ol.2020.11754>.
- [5] Z. Petersen, A. Jaca, T.G. Ginindza, G. Maseko, S. Takatshana, P. Ndlovu, N. Zondi, N. Zungu, C. Varghese, G. Hunting, G. Parham, P. Simelela, S. Moyo, Barriers to uptake of cervical cancer screening services in low-and-middle-income countries: a systematic review, *BMC Women's Health* 22 (2022) 486, <https://doi.org/10.1186/s12905-022-02043-y>.
- [6] T. Dzinamarira, E. Moyo, M. Dzobo, E. Mbunge, G. Murewanhema, Cervical cancer in sub-Saharan Africa: an urgent call for improving accessibility and use of preventive services, *Int. J. Gynecol. Cancer* 33 (2023), <https://doi.org/10.1136/ijgc-2022-003957>.
- [7] E. Jedy-Agba, W.Y. Joko, B. Liu, N.G. Buziba, M. Borok, A. Korir, L. Masamba, S. S. Manraj, A. Finess, H. Wabinga, N. Somdyala, D.M. Parkin, Trends in cervical cancer incidence in sub-Saharan Africa, *Br. J. Cancer* 123 (2020) 148–154, <https://doi.org/10.1038/s41416-020-0831-9>.
- [8] L. Yang, M.-C. Boily, M.M. Rönn, D. Obiri-Yeboah, I. Morhason-Bello, N. Meda, O. Lompo, P. Mayaud, M. Pickles, M. Brisson, C. Hodgins, S. Delany-Moretlwe, M. Maheu-Giroux, Regional and country-level trends in cervical cancer screening coverage in sub-Saharan Africa: A systematic analysis of population-based surveys (2000–2020), *PLoS Med* 20 (2023) e1004143, <https://doi.org/10.1371/journal.pmed.1004143>.
- [9] M. Ambroggi, C. Biasini, C. Del Giovane, F. Fornari, L. Cavanna, Distance as a barrier to cancer diagnosis and treatment: review of the literature, *Oncologist* 20 (2015) 1378–1385, <https://doi.org/10.1634/theoncologist.2015-0110>.
- [10] K. Thomson, F. Hillier-Brown, A. Todd, C. McNamara, T. Huijts, C. Bamba, The effects of public health policies on health inequalities in high-income countries: an umbrella review, *BMC Public Health* 18 (2018) 869, <https://doi.org/10.1186/s12889-018-5677-1>.
- [11] L. Unruh, S. Allin, G. Marchildon, S. Burke, S. Barry, R. Siersbaek, S. Thomas, S. Rajan, A. Koval, M. Alexander, S. Merkur, E. Webb, G.A. Williams, A comparison of 2020 health policy responses to the COVID-19 pandemic in Canada, Ireland, the United Kingdom and the United States of America, *Health Policy* 126 (2022) 427–437, <https://doi.org/10.1016/j.healthpol.2021.06.012>.
- [12] Ghana Statistical Service (2023), Population and Housing Census-Ghana 2021, Retrieved from (<https://census2021.statsghana.gov.gh/>).
- [13] Doris Dokua Sasu: Number of deaths from cervical cancer in Ghana, Statista. (n.d.). (<https://www.statista.com/statistics/1288413/number-of-deaths-from-cervical-cancer-in-ghana/>) (accessed December 27, 2023).
- [14] Badu P. GHS initiates cervical cancer prevention strategy. The Ghana Report. Published January 21, 2024. Accessed February 22, 2024. (<https://www.theghanareport.com/ghs-initiates-cervical-cancer-prevention-strategy/>).
- [15] E. Larson, J. Sharma, M.A. Bohren, Ö. Tunçalp, When the patient is the expert: measuring patient experience and satisfaction with care, *Bull. World Health Organ* 97 (2019) 563–569, <https://doi.org/10.2471/BLT.18.225201>.
- [16] K.H.K. Yeary, S.T. Ounpraseuth, D.Z. Kuo, K. Harris, M.K. Stewart, K. Bryant, T. Haynes, J. Turner, J. Smith, S. McCoy, G. Sullivan, To what extent do community members' personal health beliefs and experiences impact what they consider to be important for their community-at-large? *J. Public Health (Oxf.)* 38 (2016) 502–510, <https://doi.org/10.1093/pubmed/fdv118>.
- [17] P. Peprah, W. Agyemang-Duah, A.W. Arimiayaw, A.K. Morgan, S.U. Nachibi, Removing barriers to healthcare through an intercultural healthcare system: focus group evidence, *J. Integr. Med.* 19 (2021) 29–35, <https://doi.org/10.1016/j.joim.2020.08.008>.
- [18] H. Arksey, L. O'Malley, Scoping studies: towards a methodological framework, *Int. J. Soc. Res. Methodol.* 8 (2005) 19–32, <https://doi.org/10.1080/136457032000119616>.
- [19] D. Levac, H. Colquhoun, K.K. O'Brien, Scoping studies: advancing the methodology, *Implement. Sci.* 5 (2010) 69, <https://doi.org/10.1186/1748-5908-5-69>.
- [20] A.C. Tricco, E. Lillie, W. Zarin, K.K. O'Brien, H. Colquhoun, D. Levac, D. Moher, M. D.J. Peters, T. Horsley, L. Weeks, S. Hempel, E.A. Akl, C. Chang, J. McGowan, L. Stewart, L. Hartling, A. Aldcroft, M.G. Wilson, C. Garrity, S. Lewin, C. M. Godfrey, M.T. Macdonald, E.V. Langlois, K. Soares-Weiser, J. Moriarty, T. Clifford, Ö. Tunçalp, S.E. Straus, PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation, *Ann. Intern. Med.* 169 (2018) 467–473, <https://doi.org/10.7326/M18-0850>.
- [21] R. Armstrong, B.J. Hall, J. Doyle, E. Waters, Scoping the scope' of a cochrane review, *J. Public Health* 33 (2011) 147–150, <https://doi.org/10.1093/pubmed/fdr015>.
- [22] Z. Munn, D. Pollock, H. Khalil, L. Alexander, P. McInerney, C.M. Godfrey, M. Peters, A.C. Tricco, What are scoping reviews? Providing a formal definition of scoping reviews as a type of evidence synthesis, *JBI Evid. Synth.* 20 (2022) 950–952, <https://doi.org/10.11124/JBIES-21-00483>.
- [23] Micah D.J. Peters, Christina M. Godfrey, Hanan Khalil, Patricia McInerney, Deborah Parker, Cassia Baldini Soares, Guidance for conducting systematic scoping reviews, *Int. J. Evid. -Based Healthc.* 13.3 (2015). (https://journals.lww.com/ijebh/fulltext/2015/09000/guidance_for_conducting_systematic_scoping_reviews.5.aspx).
- [24] T.E. Vanhecke, Zoter, *J. Med. Libr. Assoc.* 96 (2008) 275–276, <https://doi.org/10.3163/1536-5050.96.3.022>.
- [25] M. Ouzzani, H. Hammady, Z. Fedorowicz, A. Elmagarmid, Rayyan—a web and mobile app for systematic reviews, *Syst. Rev.* 5 (2016) 210, <https://doi.org/10.1186/s13643-016-0384-4>.
- [26] D. Moher, A. Liberati, J. Tetzlaff, D.G. Altman, Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement, *BMJ* 339 (2009) b2535, <https://doi.org/10.1136/bmj.b2535>.
- [27] W.A.Y. Amenuvor, P.M. Wudagli, S. Amissh-Essel, N.I.E. Enyan, 'I don't feel good about myself and sex': sexual health experiences of women with gynaecological cancer in Ghana, *Afr. J. Midwifery Women's Health* 17 (2023) 1–10, <https://doi.org/10.12968/ajmw.2022.0034>.
- [28] K. Amo-Antwi, R. Agambire, T.O. Konney, S.B. Nguah, E.T. Dassah, Y. Nartey, A. Appiah-Kubi, A. Tawiah, E.K. Tannor, A. Peprah, M.B. Ansah, D. Sam, P. K. Akakpo, F. Ankobea, R.M. Djokoto, M.Y.K. Idun, H.S. Opere-Addo, B.K. Opoku, A.T. Odoi, C. Johnston, Health-related quality of life among cervical cancer survivors at a tertiary hospital in Ghana, *PLoS ONE* 17 (2022), <https://doi.org/10.1371/journal.pone.0268831>.
- [29] D.A. Asakitogum, L. Aziato, L.A. Ohene, Ghanaian women beliefs on the causes, prevention and treatment of cervical cancer: A qualitative study, *Int. J. Afr. Nurs. Sci.* 18 (2023), <https://doi.org/10.1016/j.ijans.2023.100538>.
- [30] C. Binka, D.T. Doku, K. Awusabo-Asare, Experiences of cervical cancer patients in rural Ghana: an exploratory study, *PLoS ONE* 12 (2017), <https://doi.org/10.1371/journal.pone.0185829>.
- [31] K.A. Hobenu, F. Naab, E. Amakpa, "I want us to divorce so that I will stay alone and be free": the social experiences of women living with advanced cervical cancer in Ghana, *Afr. J. Midwifery Women's Health* 17 (2023) 1–15, <https://doi.org/10.12968/ajmw.2022.0012>.
- [32] K.A. Hobenu, F. Naab, A qualitative study of the physical consequences experienced by women with cervical cancer in Accra, Ghana. *Afr. J. Midwifery Women's Health* 14 (2020) 2–12, <https://doi.org/10.12968/ajmw.2019.0006>.
- [33] K.A. Hobenu, E. Amakpa, "What makes me a woman has been taken away": exploring women's experiences of treatment for cervical cancer in Ghana, *Afr. J. Midwifery Women's Health* 16 (2022) 1–11, <https://doi.org/10.12968/ajmw.2021.0003>.
- [34] K.A. Kyei, F. Yakanu, A. Donkor, D. Kitson-Mills, S.Y. Opoku, J. Yarney, S.N. Tagoe, M.K. Addo, K.K. Anarfi, E. Abakuri, K. Agyri, Quality of life among cervical cancer patients undergoing radiotherapy, *Pan Afr. Med. J.* 35 (2020) 1–8, <https://doi.org/10.11604/pamj.2020.35.125.18245>.
- [35] P.G. Okyere Asante, A.Y. Owusu, J.R. Oppong, K.E. Amegah, E. Nketiah-Amponsah, The psychosocial burden of women seeking treatment for breast and cervical cancers in Ghana's major cancer hospitals, *PLoS One* 18 (2023) e0289055, <https://doi.org/10.1371/journal.pone.0289055>.
- [36] E. Osei Appiah, N.P. Amertil, E. Oti-Boadi Ezekiel, H. Lavoe, D.J. Siedu, Impact of cervical cancer on the sexual and physical health of women diagnosed with cervical cancer in Ghana: a qualitative phenomenological study, *Women's Health* 17 (2021), <https://doi.org/10.1177/17455065211066075>.
- [37] D. Kassaman, T. Mushani, P. Kiraithe, S. Brownie, M. Barton-Burke, Fear, faith and finances: health literacy experiences of English and Swahili speaking women newly diagnosed with breast and cervical cancer, *Ecancermedicalscience* 16 (2022) 1350, <https://doi.org/10.3332/ecancer.2022.1350>.
- [38] A.A. Nastiti, R. Pradanie, E. Susanti, R.D. Tristiana, Women experience with newly diagnosed cervical cancer in Indonesia, *Médecine Palliat.* 19 (2020) 160–167, <https://doi.org/10.1016/j.medpal.2019.08.012>.
- [39] A. Adedimeji, R. Ajeh, A. Pierz, R. Nkeng, J.Jr Ndenkeh, N. Fuhngwa, D. Nsame, M. Nji, A. Dzudie, K.M. Anastos, P.E. Castle, Challenges and opportunities associated with cervical cancer screening programs in a low income, high HIV prevalence context, *BMC Women's Health* 21 (2021) 74, <https://doi.org/10.1186/s12905-021-01211-w>.
- [40] T.C. Randall, R. Ghebre, Challenges in Prevention and Care Delivery for Women with Cervical Cancer in Sub-Saharan Africa, *Front Oncol.* 6 (2016) 160, <https://doi.org/10.3389/fonc.2016.00160>.
- [41] V. Chadwick, K.F. Bennett, K.J. McCaffery, J.M.L. Brotherton, R.H. Dodd, Psychosocial impact of testing human papillomavirus positive in Australia's human papillomavirus-based cervical screening program: a cross-sectional survey, *Psychooncology* 31 (2022) 1110–1119, <https://doi.org/10.1002/pon.5897>.
- [42] S. Saraf, T.B. Singh, S. Khurana, Cervical Cancer Survivors: Meaning in Life, *Psychol. Stud.* 58 (2013) 144–152, <https://doi.org/10.1007/s12646-013-0186-x>.
- [43] R.I. Anorlu, Cervical cancer: the sub-Saharan African perspective, *Reprod. Health Matters* 16 (2008) 41–49, [https://doi.org/10.1016/S0968-8080\(08\)32415-X](https://doi.org/10.1016/S0968-8080(08)32415-X).

- [44] S. Bayo, F.X. Bosch, S. de Sanjosé, N. Muñoz, A.L. Combita, P. Coursaget, M. Diaz, A. Dolo, A.J.C. van den Brule, C.J.M. Meijer, Risk factors of invasive cervical cancer in Mali, *Int J. Epidemiol.* 31 (2002) 202–209, <https://doi.org/10.1093/ije/31.1.202>.
- [45] J. Kangmennaang, E.O. Onyango, I. Luginaah, S.J. Elliott, The next Sub Saharan African epidemic? A case study of the determinants of cervical cancer knowledge and screening in Kenya, *Soc. Sci. Med.* 197 (2018) 203–212, <https://doi.org/10.1016/j.socscimed.2017.12.013>.
- [46] C.J. Golics, M.K.A. Basra, A.Y. Finlay, S. Salek, The impact of disease on family members: a critical aspect of medical care, *J. R. Soc. Med.* 106 (2013) 399–407, <https://doi.org/10.1177/0141076812472616>.
- [47] R. Shah, F.M. Ali, A.Y. Finlay, M.S. Salek, Family reported outcomes, an unmet need in the management of a patient's disease: appraisal of the literature, *Health Qual. Life Outcomes* 19 (2021) 194, <https://doi.org/10.1186/s12955-021-01819-4>.
- [48] J.P. Dsouza, S. Van den Broucke, S. Pattanshetty, W. Dhoore, Factors explaining men's intentions to support their partner's participation in cervical cancer screening, *BMC Women's Health* 22 (2022) 443, <https://doi.org/10.1186/s12905-022-02019-y>.
- [49] M. de Fouw, Y. Stroeken, B. Niwagaba, M. Musheshe, J. Tusiime, I. Sadayo, R. Reis, A.A.W. Peters, J.J. Beltman, Involving men in cervical cancer prevention; a qualitative enquiry into male perspectives on screening and HPV vaccination in Mid-Western Uganda, *PLOS ONE* 18 (2023) e0280052, <https://doi.org/10.1371/journal.pone.0280052>.