Individual and Community-Related Barriers Influencing the Utilization of Cervical Cancer Treatment in Selected Hospitals in Abeokuta South, Ogun State, Nigeria

Adeaga, Olubukola O[1]. and Tijani, Adelani[2]
RN, Msc
1. Department of Nursing Science
Babcock University, Ilisan Nigeria
Bukola.ogunbona@yahoo.com
+2348060237305

2. Department of Nursing Science
Federal University, Oye-Ekiti
wakili.tijani@fuoye.edu.ng
|+23408033886537

Abstract

Cancer is one of the most dreadful diseases, especially in poor countries of the world. This study sought to identify perceived barriers influencing the utilization of cervical cancer treatment in some selected hospitals in Abeokuta South, Ogun State Nigeria. This research study adopted a survey research design to explain the barriers affecting the utilization of cervical cancer treatment among women in some selected hospitals in Abeokuta, Ogun State, Nigeria. Purposive sampling technique was used to gather data from 79 participants comprising 40 patients and 39 carers from 3 health facilities in Abeokuta South Local Government Area of Ogun State. The instrument used for this study was a structured validated questionnaire. The research instrument was divided into three (3) sections, each

comprising the perceived individual and community barriers. Data gathered were analysed using descriptive statistics including frequency, percentages, mean and standard deviation. There was composite influence of individual, community, institutional and policy perceived barriers on utilization of cervical cancer treatment ($F_{4,74}$=9.973; $p<0.01$). 31.5% of variance in cervical cancer treatment utilization was significantly jointly attributable to individual, community, institutional and policy perceived barriers (r^2=.315; $F_{4, 74}$=9.973; $p<0.01$).

From the results gathered, the study vividly agreed to the individual and community barriers influencing cervical cancer treatment utilization. Individual and community barriers limiting access to cervical cancer treatment measures are the major factors to be considered if people should shift from vague and risky traditional disease treatment approach to orthodoxy with well-known scientific proof and minimal risk. Ministries of Health, Donor Agencies and all stakeholders should as a matter of urgency invest more in educating the public as well as carers on the workings, effectiveness and new development on the treatment of cervical cancer.

Keyword: Barriers, Cervical Cancer, Community, Individual, Treatment Utilisation.

Introduction

Particularly in developing nations, cancer is one of the most terrifying disease conditions. According to the International Agency for Research on Cancer (IARC), Cervical Cancer is the second leading cause of death among women in both Africa and Nigeria. However, if discovered early and treated well, cervical cancer mortality is preventable (Burkiwa et al., 2015). Treatment strategies and outcomes for patients with cervical cancer vary greatly depending on the stage of the disease at diagnosis, with survival rates ranging from 90% in early and benign stage diagnoses to as low as 20% in late or metastatic phase diagnoses (American Cancer Society, 2020). In the light of this, the World Health Organization recommends a "comprehensive cervical cancer control approach" (WHO, 2014) to treat cervical cancer, which includes reducing human papillomavirus (HPV) infections, early detection and treatment of cervical pre-cancerous lesions, and prompt curative and palliative treatment of invasive cancer. Despite these long-standing choices, cervical cancer has extremely low uptake, resulting in high morbidity and death rates and poor survival rates (Twinomujuni et al., 2022; Omowhara et al., 2022).

Despite the obvious underutilization of available comprehensive cervical cancer control options as evidenced in the low uptake of cervical cancer treatments (Omowhara, et al., 2022), new therapeutic options for cervical cancer patients are desperately needed to address the low cure rates for advanced disease and reduce negative side effects of current therapies (Wang, et al., 2019).

Cervical cancer that has spread to other parts of the body can now be treated with surgery, chemotherapy, radiation, and systemic medicines (Stelze et al., 2021). The use of immunotherapy as a therapeutic measure for cervical cancer is a promising new area of research. Cervical cancer immunotherapy options are limited at the moment (Cohen et al., 2020).

The aforementioned strategies are all parts of the WHO-recognized strategy for complete prevention and control of cervical cancer. Programmatic treatments over the lifespan include primary, secondary, and tertiary channels to reduce mortality from HPV infection and cervical cancer. Primary prevention focuses on vaccinating boys and girls between the ages

of 9 and 13 against HPV, providing health education and warnings about tobacco use, providing sexuality education that is age and culture-appropriate, as well as promoting and providing condoms to people who are sexually active. Women over the age of 30 should be "screened and treated" with low-cost technologies such as VIA followed by cryotherapy, HPV testing for high-risk HPV types (that is, types 16 and 18 and also types 31, 33, 45, and 58) as part of secondary prevention. Tertiary prevention focuses on women over the age of 30 who should have invasive cancer treatment at any age, such as ablative surgery, radiation, chemotherapy, and palliative care.

Research has shown that there are not enough cervical cancer treatment choices for the amount of people who need it. Services for the treatment of cervical cancer lesions have been found to be woefully inadequate, as reported by Richard and Offiong (2019). Only a small number of institutes offer cutting-edge therapies such electrosurgical excision treatments, cold coagulation, and cryotherapy; none of these are located in Ogun State (Onyenwenyi & Mchunu, 2019). In addition, just 10 hospitals offer radiation, and only two of those hospitals' devices are operational at any one moment (Ramirez et al., 2018). There aren't many places to get therapy for cervical cancer, and even fewer gynecologic-oncologists who can conduct drastic surgery (WHO, 2014) to cure the disease.

In spite of these shortcomings, evidence of limited uptake of cervical cancer therapy suggests that further hurdles to uptake persist (Teng et al., 2014). Patients' likelihood of receiving treatment for cervical cancer has long been correlated with factors such as ease of getting to and from medical facilities, the friendliness of staff, the reasonableness of pricing, and the expertise of doctors and nurses (Agurto et al., 2004). Knowledge gaps due to health illiteracy, a dearth of information, and cultural variables manifest in attitudes and stigmatization all have a role in influencing the rate at which cervical therapy is utilized, according to research by Parajuli et al. (2020). Inadequate health system factors such as under-resourced treatment centres, resource disparities, lack of health worker expertise in rural areas, and insufficient coverage by the National Health Insurance Scheme (NHIS), are also listed as deterrents to the use of cervical cancer treatment options in the work by Teng et al. (2022).

Individually perceived obstacles include lack of awareness and knowledge of cervical cancer, screening, and treatment; lack of knowledge about cervical cancer screening and treatment; and negative attitudes towards cervical cancer screening and treatment; and community-related obstacles include lack of access to screening services; modesty; stigma and shame associated with disease; misconceptions about disease and screening; fear of the screening process and its possible outcomes; and a lack of awareness and knowledge of cancer and its treatment.

Ezeokoli et al., (2021), Owoeye & Ibrahim (2013), and Eze, & Ebu (2018) all confirmed low knowledge and uptake of cervical cancer screening and treatment in significant sections of the nation, including Owerri, the Niger Delta, Onitsha, and Ibadan. There is a link between an individual's decision to seek cervical therapy and their level of awareness about the service's worth or benefit, according to the available evidence (Compaore et al., 2016). Individuals are more likely to use cancer treatment services if they believe such treatments would improve their quality of life and reduce their risk of death if they have cervical cancer (Denny & Anorlu, 2012).

According to Ekine & West (2015), Four hundred and sixteen (48.5%) of the 900 women surveyed in a cross-sectional research on cervical cancer treatment uptake and related variables in rural Uganda were not aware of the condition. Healthcare providers should have

conversations with patients regarding cervical cancer screening and treatment, according to the study. Women of childbearing age in Nigeria show a high level of knowledge about cervical cancer screening and treatment, according to a recent research. Media such as television and radio served as the primary information conduit (Ekine & West, 2015).

Women in underdeveloped nations were found to have inadequate understanding about cervical cancer prevention and treatment, according to research by Shrestha et al. (2013). Studies have shown that womens' knowledge and attitude about cervical cancer and its prevention is directly related to whether or not they seek treatment for the disease (Mengesha, et al, 2020).

Elmore et al., (2021) found that in poor and middle-income countries, screening for and treatment of cervical cancer are extremely rare. Women in Nigeria have poor cervical cancer awareness, and when it comes to treating the disease in its earliest stages, they are more likely to turn to traditional treatments, according to a study on the health-seeking behaviour of patients with cervical cancer. Lack of knowledge and access to appropriate health care were shown to be the most significant impediments to treatment seeking in this study. It also revealed that women who were diagnosed with cervical cancer faced social stigma and lacked enough emotional support (Oledikwa & Fasasi, 2017).

According to Mengesha et al.'s (2020) survey of women of reproductive age in Gondar town, North West Ethiopia, 78% of respondents held the view that cervical cancer is preventable, while only 237 (47.3%) held the view that cervical cancer could be cured. According to the results of a qualitative study conducted among women in Uganda to assess the motives and hurdles to cervical cancer prevention and treatment (Bukirwa et al., 2015), a lack of awareness is one of the most significant barriers to cervical cancer prevention and related treatments. While there has been some progress in raising awareness of cervical cancer and its prevention, a recent study conducted in India found that more work has to be done. To fill in the knowledge gaps, nurses should continue their education (Sharma et al., 2021).

Even among people who were aware of cervical cancer screening, the vast majority did not know how often it should be performed, as revealed by Mengesha et al. (2020). As a whole, only 153 individuals (19.87%) were deemed to have an adequate understanding of cervical cancer, its causes, prevention methods, and therapeutic options.

Women with a positive attitude towards cervical cancer prevention and treatment were sixty-eight times more likely to be screened and treated than women with a negative attitude, according to a study by Daka, et al. (2022) on knowledge, attitudes, and perceptions influencing cervical cancer prevention among women in Kitwe District, Copperbelt Province, Zambia.

Kabir et al. (2017) conducted a study in Nigeria to evaluate the knowledge, attitude, and practice of cervical cancer prevention among female health professionals in a secondary health facility in Kano, Nigeria. They found that 94.7% of respondents had a favorable attitude towards pap smears, while only 27.5% were willing to undergo treatment if they were positive.

Adekanbi (2022) study did not find evidence that women's attitudes were independently associated with cervical cancer treatment utilization, despite the fact that the level of screening uptake was higher than that found in comparable studies conducted within Africa, such as Ethiopia at 14.4% in 2016 (Mantula, 2022) and South Africa at 15% in 2014 (Hoque, et al., 2014).

Furthermore, researchers have documented major reasons for low uptake of cervical cancer treatment among women, including: not deeming the test necessary, not knowing where it could be done, not being at risk, fear of pain, and cost of the service (Lin et al., 2018).

Hospitals with the necessary diagnostic equipment and trained staff for screening and treatment were shown to be advantageous. Some women haven't used services because they don't know where to go or when (Fort et al., 2011; Ngugi et al., 2012) or because they have trouble figuring out how to get there once they get there.

Most African women are quite modest when it comes to revealing their privates, especially to men. As a result, most women are reluctant to undergo cervical cancer screening and treatment if the test will be administered by a male medical professional. (Mutyaba et al., 2017).

When it comes to cervical treatment services, women in sub-Saharan Africa are often met with shame and discrimination. Cervical screening has a negative connotation since it requires a pelvic examination and may be paired with treatment for reproductive or STIs (Fort et al., 2011). According to a 2013 study conducted by William et al., women's social networks may act as a barrier to screening participation. Some women may be wary of undergoing cervical screening due to stereotypes about promiscuity, poor hygiene, and evil spells (White et al., 2012).

Misconceptions regarding cervical cancer and cervical cancer screening were also linked to a lack of education and knowledge. Abortions, excessive sexual activity, poor dietary habits, environmental pollution, and spiritual affliction have all been incorrectly linked to an increased risk of cervical cancer (Fort el al., 2011; White et al., 2012; William et al., 2013). Some people in the community may have feared for their health since they heard that the therapy required the uterus to be removed and then replaced.

Participants in most research (Williams et al., 2013; Ngugi et al., 2012; Ndikom & Ofi, 2012; Teng et al., 2014; White et al., 2012) expressed concern that the process would be unpleasant. Participants in one research (Williams et al., 2013) thought that the technique required the uterus to be removed and re-inserted, which would be an extremely painful process. Some participants' worries about the procedure's potential negative outcomes, such as infertility or HIV transmission, were also cited in this study. Participants also reported apprehension about undergoing HIV testing as an impediment to service uptake (Williams et al., 2013).

This study sought to identify individual and community related barriers influencing the utilization of cervical cancer treatment in some selected hospitals in Abeokuta South, Ogun State. The objectives were to assess individual perceived barriers that may influence utilization of cervical cancer treatment among women in some selected hospitals in Abeokuta South, Ogun State; and to identify community-related barriers to the treatment of cervical cancer in Abeokuta, Ogun State.

Methodology

This research study adopted a descriptive survey research design to explain perceived barriers influencing the utilization of cervical cancer treatment in selected hospitals in Abeokuta South, Ogun state, Nigeria. The target populations are women attending oncology department of Federal Medical Centre, State Hospital and Oba Ademola Maternity Hospital, Abeokuta and healthcare providers (Doctors and Nurses) providing care for these women in the selected

hospitals. The first category consisted of the cervical cancer patients at the three selected hospitals for this study while the second category included the health workers- specifically nurses and doctors at the selected hospitals. Female cancer patients who were attending the oncology clinic in the selected hospitals and are willing to participate in the study were included in deciding the sample of the study. Health workers– nurses and doctors working in the selected hospital who were willing to participate were also included in selecting the sample for the study. Any patients or healthcare provider in the selected hospital that is not willing to participate in the study were excluded. Through the use of Yamani formula, a sample of 79 was selected

Table 1: Proportional allocation of sample size to the hospitals

Hospitals	Population	Population distribution
FMC	82	$\dfrac{82 \times 79}{99} = 65$
Ijaye	10	$\dfrac{10 \times 79}{99} = 8$
Oba Ademola	7	$\dfrac{7 \times 79}{99} = 6$
Total	**99**	**79**

Therefore, questionnaires were administered to a total number of 79 participants.

Purposive sampling technique was used to capture all the patients in the three study centers. This was because the chosen health facilities are secondary and tertiary facilities that treat and care for cervical cancer patients across the community.

The instrument used for this study was a structured questionnaire. The research instrument was divided into three (3) sections. Section A elicited responses on demographic variables of respondents. Section B elicited information on the individual perceived barriers that may influence utilization of cervical cancer treatment among women. Section C elicited information on the patient's community perceived barriers influencing the access to cervical cancer treatment by the respondents. The items were measured on continuum scale of 4 ranging from 1 to 4 (SA =4, A=3, D=2 and SD = 1 while the order was reversed for negative items).

The validity of the instruments was first established by carefully reviewing of the relevant literatures. Then, construct of questionnaire and interviewer guide to cover the area of study. These instruments were assessed by epidemiologist and were subjected for correction, appropriate opinion, clarity and all-conclusiveness of the constructs by other experts in the field. The instruments were made to pass through the face and content validity.

The questionnaire was trial-tested among breast cancer patient receiving treatment in Lagos state, Nigeria based on the assumption that breast cancer patients face similar barriers while receiving treatment. The goal of trial-testing was to assess the acceptability and ease of

answering the questions, as well as tendency to elicit appropriate answers. The questionnaire was then modified, incorporating suggestions arising from the findings of the trial test. Appropriate reliability tests using the alpha Cronbach test was conducted.

The data collected were sorted, coded and entered using Statistical Packaging for Scientific Solution (SPSS version 23). The data were subjected to descriptive statistical analysis.

Results

Objective One: to identify individual perceived barriers that may influence utilization of cervical cancer treatment among women in some selected hospitals in Abeokuta South.

Table 2: Individual Perceived Barriers on Utilization of Cervical Cancer Treatment among Women in Abeokuta South

			Frequency	Percentage
1.	Cervical cancer is incurable.	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	18	22.8
		Strongly agree	46	58.2
		Total	79	100.0
2.	There is no need for screening without clear symptoms of cervical cancer.	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	18	22.8
		Strongly agree	46	58.2
		Total	79	100.0
3.	Cervical cancer is infectious.	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	28	35.4
		Strongly agree	36	45.6
		Total	79	100.0
4.	Cervical cancer treatment is ineffective.	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	28	35.4
		Strongly agree	36	45.6
		Total	79	100.0
5.	Cervical cancer treatment is cost-prohibitive.	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	28	35.4
		Strongly agree	36	45.6
		Total	79	100.0

S/N	Item		Frequency	Percentage
6.	Cervical cancer treatment options are not more than two	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	18	22.8
		Strongly agree	46	58.2
		Total	79	100.0
7.	Cervical cancer is death sentence.	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	18	22.8
		Strongly agree	46	58.2
		Total	79	100.0
8.	Being screened for cancer is a stigma.	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	18	22.8
		Strongly agree	46	58.2
		Total	79	100.0
9.	Screening does very little about cervical cancer survival.	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	18	22.8
		Strongly agree	46	58.2
		Total	79	100.0
10.	Cervical cancer treatment is too painful to bear.	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	18	22.8
		Strongly agree	46	58.2
		Total	79	100.0

Table 2 showed that, majority of the 79 respondents, not less than 64 (81%) of the respondents agreed that, with each of the statements on individual barriers to cancer treatment utilization while only 15 (19%) disagreed. Agreement of a larger number of the respondents with each of the barrier-prone statements like cervical cancer treatment is ineffective, cervical cancer treatment is cost-prohibitive, cervical cancer treatment options are not more than two, cervical cancer is death sentence, being screened for cancer is a stigma, screening does very little about cervical cancer survival and cervical cancer treatment is too painful to bear is an affirmation of barriers to cervical cancer treatment utilization at the individual level.

Objective Two: To assess patients' community barriers to the treatment of cervical cancer in Abeokuta, Ogun State

Table 3 Patients' Community Barriers to the Treatment of Cervical Cancer in Abeokuta, Ogun State

S/N	Item		Frequency	Percentage
1.	Cervical cancer screening centre is too	Strongly disagree	14	17.7

	far from me.	Disagree	1	1.3
		Agree	18	22.8
		Strongly agree	46	58.2
		Total	79	100.0
2.	Culture prohibits regular screening.	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	18	22.8
		Strongly agree	46	58.2
		Total	79	100.0
3.	It is immodest to be treated on cervical cancer by an opposite sex.	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	18	22.8
		Strongly agree	46	58.2
		Total	79	100.0
4.	Losing friend is an important reason cancer patients do not get treatment.	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	18	22.8
		Strongly agree	46	58.2
		Total	79	100.0
5.	It is reasonable if people avoid cervical cancer patients.	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	18	22.8
		Strongly agree	46	58.2
		Total	79	100.0
6.	Adequate information on cervical cancer eludes some people	Strongly disagree	22	27.8
		Disagree	2	2.5
		Agree	10	12.7
		Strongly agree	45	57.0
		Total	79	100.0
7.	Most people in rural communities know about cervical cancer disease	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	20	25.3
		Strongly agree	44	55.7
		Total	79	100.0
8.	Cervical cancer screening centres only exist in urban areas	Strongly disagree	13	16.5
		Disagree	2	2.5
		Agree	20	25.3
		Strongly agree	44	55.7
		Total	79	100.0
9.	There is genuine reason to fear the	Strongly disagree	14	17.7

	procedure for cervical cancer screening	Disagree	1	1.3
		Agree	20	25.3
		Strongly agree	44	55.7
		Total	79	100.0
10.	Patients of cervical cancer know little about the disease.	Strongly disagree	14	17.7
		Disagree	1	1.3
		Agree	20	25.3
		Strongly agree	44	55.7
		Total	79	100.0

Table 3 showed that majority of the respondents, not less than 55 (69.62%) of the 79 participants community factors act as barriers to cervical cancer treatment utilization. Not less than 64 (81%) of the total of 79 respondents who took part in the study vividly agreed to the community barriers exemplified by the statements in the community barrier scale like patients of cervical cancer know little about the disease, there is genuine reason to fear the procedure for cervical cancer screening, cervical cancer screening centers only exist in urban areas and it is reasonable if people avoid cervical cancer patients. This implies that, the barriers are mostly correct and believed by majority of the respondents.

Table 4: Individual and Community Barriers

	Mean	Std. Deviation	N
Individual barrier	31.77	11.06	79
Community barrier	30.86	9.19	79

Table 4 corroborated this finding as out of the maximum obtainable score of 40 on individual barrier scale, respondents obtained the high mean score of 31.77 with a high standard deviation of 8.41, portraying high level of disparity amongst participants as to their perception of individual barriers. Table 3 also substantiates this as the mean of the 79 respondents on a scale of 40 on community barriers was very high (30.86) with the standard deviation of 9.19 signifying lack of homogeneity among respondents' scores.

Discussion

First, an important finding has concurred to most previous studies by observing that individual barriers like inadequate knowledge, erroneous beliefs, stereotypic ideas, vague assumptions and unstable personal assumptions exist in both carers and patients of cervical cancers which make them, on the part of patients, underutilize available cervical cancer treatment options or on the part of carers, develop attitudes and practices inimical to provision of effective and efficient care services to patients. This finding is synonymous to the earlier positions held in the studies of Dhillon, et al (2020), Binka et al (2019) and Akubue et al (2021) which all advanced individual that may prohibit effective use of cervical cancer management or treatment options.

Another finding of this study which observed that, factors relating to the socio-cultural beliefs or locations of patients may act as barrier to their consumption of available cervical cancer

treatment options has been able to shed light on how the location and sociocultural or economic advantages or disadvantages imposed of a community can limit the access to cervical cancer treatment. Earlier studies like Mantula (2022), Kayser, et al (2022) and Getachew et al. (2019) have all pointed out how community-related barriers can create barrier to consumption of cervical cancer treatment measures, and hence, give credence to the current outcome.

From the outcomes which documented higher number of the respondents agreeing to individual and community barriers limiting access to cervical cancer treatment measures, it can be concluded that these factors are the major factors to be considered if people should shift from vague and risky traditional disease treatment approach to orthodoxy with well-known scientific proof and minimal risk. It is also imperative to note from the foregoing that, the problem of low uptake of cervical cancer screening and treatment is not only multidimensional but it involves and revolves around all stakeholders.

Based on the findings of this study, it was recommended that government, medical directors of government hospitals, Federal Ministry and State Ministries of Health, donor agencies and all stakeholders should as a matter of urgency invest more in educating the public as well as carers on the workings, effectiveness and new development on the treatment of cervical cancer. Also, communities and relevant institutions should be fully guided by government and properly incorporated into government efforts at providing cervical cancer screening, treatment and support in order to motivate the uptake of such. There is also a need for mass education and awareness on individual and community perceived barriers to uptake of cervical cancer treatment.

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