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Perceptions of Women in Southern Ghana about Cervical Cancer: A Qualitative Exploration

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Abbreviations:

CC-cervical cancer; CCS-cervical cancer screening; GSS-Ghana Statistical Service; HIV- Human Immunodeficiency Virus; SOD- Shai Osudoku District

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1. Abstract

1.1. Background: Cervical cancer ranks fourth in cancers affecting women worldwide, and the most common gynaecological cancer in Ghana. Yet, knowledge and perceived susceptibility about cervical cancer is low in most African countries including Ghana. This study explored the knowledge and perceived susceptibility about cervical cancer among women in selected rural communities in Greater Accra Region of Ghana.

1.2. Method: A qualitative exploratory descriptive design was used. A total of seventeen participants were recruited through purposive sampling technique and a semi structured interview guide was used for all interviews. The recorded interviews were transcribed and analysed using content analysis.

1.3. Results: Findings revealed several perceptions of women about cervical cancer, suggesting that generally, these women have inadequate knowledge about cervical cancer. Understanding cervical cancer and cervical cancer screening among the women was low.

1.4. Conclusion: There is the need for health education on cervical cancer to strengthen the knowledge of women on cervical cancer and its screening.

2. Introduction

Cervical cancer ranks fourth in cancers affecting women worldwide [1, 2]. It is the most common gynaecological cancer and has caused more than 270,000 deaths annually worldwide [2, 3, 4].

In the United States, studies have shown that knowledge about cervical cancer and its screening among women is on the increase [5]. For instance, in Texas, it was found that only 3.2% of participants in a study had no knowledge about factors that make women susceptible to cervical cancer, which implied that the majority (96.8%) were knowledgeable about the predisposing factors of cervical cancer [6]. A little over 70% of these respondents were aware that women who engaged in sexual intercourse without condom, along with those infected with Sexually Transmitted Diseases (STDs) stand a greater chance of contracting cervical cancer. Furthermore, more than half (60.5%) were aware that women with multiple sexual partners are at a greater risk of getting cervical cancer. Despite the high knowledge about cervical cancer reported among women in developed countries, a study in Canada found that some women were engaged in the predisposing factors of cervical cancer such as sexual contact with different men and smoking [7].

Some studies have ascertained that the media and health workers serve as main sources from which participants receive information regarding cervical cancer and its screening [8]. In Nigeria, a study reported that the level of knowledge about cervical cancer and its screening among women is inadequate [9]. This was depicted by responses such as abdominal pain and back pain as clinical manifestations of cervical cancer.

Moreover, findings of research conducted among women diagnosed with HIV in Ethiopia disclosed that a few number of women have undergone cervical screening and happen to know about the causes and treatment of cervical cancer [10]. However, more than half (71%) of the respondents from that study had heard of cervical cancer but had not undergone any form of screening, with few participants (33%) being able to identify a treatment type for cervical cancer. Concerning the perception that women have in relation to their predisposition to cervical cancer, some authors in Jamaica established that respondents who were sexually active before 16 years (30%) viewed themselves as more likely to get cervical cancer, as well as those with multiple sexual partners [11]. It was added that there is a positive correlation between old age, lack of education, low socioeconomic status, smoking cigarette and cervical cancer risk [12]. The authors also established an association between giving birth severally, engaging in sexual intercourse before marriage, having sex with other men besides their husbands, using cloth as sanitary pads as risky behaviours for cervical cancer.

In Nigeria, cervical cancer is ranked first among all gynaecological cancers and second in terms of cancer frequency resulting in maternal mortality in Nigeria [13, 14]. Findings from those studies further revealed that most Nigerians had inadequate knowledge about the clinical manifestations and predisposing factors of cervical cancers. Due to this, they found that only a few of their respondents had the perception that they were susceptible to cervical cancer. In contrast to their findings, other researchers have ascertained that women in Nigeria are more knowledgeable about cervical cancer than cervical cancer screening [15, 16]. The results established that students had higher knowledge about cervical cancer and cervical cancer screening than the staff at Delta State University. Furthermore, still in Nigeria, another author uncovered that their participants had no idea about the fact that having a relative with cervical cancer, smoking, engaging in sexual intercourse with different men, malnutrition, and being infected with HIV virus puts a person at risk of getting cervical cancer [17]. This implies that these women might be engaging in some of these practices obliviously.

In Ghana, cervical cancer is the primary source of cancer mortality among women and the commonest gynaecological malignancy seen at the Korle Bu teaching hospital [18, 19, 20]. Nonetheless, little is known about Ghanaian women's perceptions regarding cervical cancer screening [18]. Statistics have shown that 7 to 8.57 million women above the age of 15 years are predisposed to cervical cancer in Ghana [21, 22, 23]. The perceptions of women about cervical cancer in Ghana has been found to greatly influence their decisions to or not to partake in cervical cancer screening (CCS) services [18]. For instance, some Ghanaians are of the perception that illnesses come as a result of a curse and hence will consider spiritual and traditional interventions for their healing as a priority, before resorting to medical interventions [24, 25]. These beliefs therefore lead to low participation of Ghanaian women in CCS services and late presentation of women with cervical cancer to the hospital. As a result, the true incidence of cervical cancer in most African countries of which Ghana is included has not been documented [15]. This insinuates that the true seriousness of cervical cancer will not be known for the necessary action to be taken towards cervical cancer prevention.

Ghana's female population from 1995 to date, as claimed by the World Population Review record in 2018, has always been higher than the male's population. Similarly, the Ghana Statistical Service GSS report has uncovered that the Shai Osodoku District (SOD) where this study was conducted has a population of 96,809 persons of which 46,550 (48.2%) are males and 50,259 (51.8%) are females [26]. It is therefore necessary that research involving the health of these women is considered, especially cervical cancer and its screening. This will ensure early detection of cancer cells in order to reduce the incidence of cervical cancer and preserve the lives of these women. Therefore, this study explored the knowledge, perceptions, and perceived susceptibility to cervical cancer among women in the Shai Osodoku district of the Accra Metropolis.

3. Methods & Procedures

3.1. Research Design

A qualitative exploratory research design using a purposive sampling technique was employed to select participants (N=17) for this study. A purposive sampling technique was selected because it allowed the researchers to select participants who possessed the appropriate qualities needed to achieve the required data [27].

3.2. Sample Size & Technique

The sample size for this study was based on data saturation, which was reached at the 17th participant because no new information was added to what had already been said by previous participants.

3.4. Data Collection Tool

A semi structured interview guide was developed by the researchers based on the study objectives and the literature reviewed. The interview guide was first pretested among four (4) women in one rural community in the Greater Accra region of Ghana which had similar characteristics to the communities used.

4. Methods and Procedure for Data Collection

A face-to-face in-depth interviews were conducted by the researchers within one month after ethical clearance was received from the Noguchi Memorial Institute for Medical Research Institutional Review Board (NMIMR-IRB) of the University of Ghana (NMIMR-IRB 036/18-19). Women who resided in the selected two communities in the Accra Metropolis, 18 years or older, could express themselves in Twi (Local dialect), English, or Ga-Adangbe, and were willing to participate were recruited. Each interviews lasted for 45-60 minutes.

4.1. Data Management and Analysis

The soft copies of the transcribed responses were saved on a personal password protected laptop. Also, the signed consent forms were kept under lock and key and separated from the transcripts in order to maintain confidentiality of the data collected. After each interview, the data recorded were transcribed verbatim before the next interview. Content analysis, the process described by Gheyle [28] and Stempel [29], whereby researchers make replicable and valid inferences from texts was used. According to these authors, content analysis has four main processes which include; selection of units of analysis, developing categories, sampling appropriate content, and checking reliability of coding [29]. Data recorded was transcribed verbatim and each transcript was assigned a pseudonym. The data were then categorized into similar meanings and codes were assigned to each category with similar meanings. This process was reviewed severally by the researchers until a consensus was reached about the themes and sub-themes. Data that were content appropriate or directly described the objectives were maintained and used for the verbatim quotes presented as findings.

5. Results

5.1. Socio-Demographic Characteristics of Participants

Seventeen females with no medical evidence of cervical cancer were interviewed for this study. Their ages ranged between 22-45 years. Most of the participants (n=11) were below the age of 30. These women were recruited from churches, schools and market places. Ten of the women were married whilst 7 were single. The languages spoken by these participants during the interview were English and Twi. Almost all the participants, sixteen (n=16) spoke English whilst one was interviewed in Twi. Fifteen (15) participants had some formal education with only one pursuing her masters. Details of the socio demographic characteristics of the participants are shown in table 1.

It is necessary for women to be informed about cervical cancer to increase their awareness on CC/CCS and to increase CCS uptake. Most of the participants in this study shared diverse views and beliefs on CC/CCS based on what they have heard from people, what they have seen people go through and what they had read or watched in the media. The women described their knowledge on CC and CCS in the following categories: meaning and description of CC/CSS, sources of knowledge about CCS/CC, causes of cervical cancer, signs and symptoms of CC, and prevention and management of cervical cancer.

VARIABLE	FREQUENCY (N= 17)	PERCENTAGE (%)
Age		
22-29	11	64.70%
30-39	4	23.50%
40 - 45	2	11.80%
Religion		
Christianity	16	94.10%
Muslim	1	5.90%
Others	0	
Marital Status		
Single	7	41.20%
Married	10	58.80%
Cohabitation	0	0
Divorced	0	0
Ethnic Group		
Akan	10	58.80%
Ewe	2	11.80%
Fante	1	5.90%
Ga/Ga-Adangbe	4	23.50%
Others	0	0.00%

5.2. Meaning and Description of Cervical Cancer and Cervical Cancer Screening

Understanding the meaning and description of CC/CCS adds up to the knowledge level of the individual on CC and CCS. The women had varied meanings and descriptions of CC and CCS yet they could not locate where CCS is done. This was revealed in the statement by Akua about the meaning of CCS:

> Hmm, errm, I think it is a screening being done to determine if someone has cervical cancer and I think is mostly done if you see some signs that are not normal. They do it to alert you the individual for you to know whether you are having CC or you are at risk of getting it. Even though I don't know how it is done, I think they will do it in the part that the woman gives birth (Akua, 24 years).

The following description about CCS was given by some participants as illustrated by a 25-year-old Adwoa:

> I have never gone for one before so I don't know, and I don't know if there are types unless you tell me but I think the screening....it is actually done for women to know if they have it or have contracted it but I can't specifically say where this screening is done. (Adwoa, 25 years)

Other participants shared that CCS is done using the blood and urine of a woman as portrayed by a 37-year-old woman.

I think the screening is done when blood or urine is taken from the lady to check on it. It is done to know if you have eeerm bacteria or that cancer. I think at the age of 12 years every woman should do it because you know at that age you are matured enough and you know what will make you sick (Ruth, 37 years).

Furthermore, other participants gave varied meanings and description about CC as depicted in the narrations below: I think it is cancer that affects the cervix of a female and the vagina. Age does not really matter, it could happen to a 15-year-old, it could happen to a 30-year-old and even a 50-year-old. (Akua, 24 years).

I don't know much about cervical cancer but what I know is that, it is cancer that affects the vagina or abdomen of females. It can sometimes affect males, even though is not very common. (Ramatu, 29 years).

5.3. Sources of Knowledge about CCS/CC

Being able to get information about a condition is very significant to the understanding of that condition. Sources about CC/CCS refer to where the individual retrieved their information about CC/ CCS. Almost all the participants listed some sources where they got to know about cervical cancer or cervical cancer screening. But the majority of the respondents verbalized that they were informed about cervical cancer and cervical cancer screening on the media, specifically, through television. This is illustrated in the statements below:

> I have heard about it but I don't have detailed knowledge about it. I heard about it on the media and that is the first time of hearing about CC. It just came briefly on the news when I was watching television so I didn't really understand it. (Akosua, 30 years)

> I heard about cervical cancer on the radio but because I was kind of busy, I didn't have time to listen to it. I also heard them discussed screening for cancer but I was not really concentrating. (Afia, 26 years)

Some participants indicated other sources apart from the media as:

I heard about cervical cancer from my father. He just made mention of some types of cancer that affect females and he also talked about cervical cancer and he said as far as we are ladies we should be careful of cervical cancer since it can occur in any of us and he also said there is a screening so we should go for it. (Ramatu, 29 years).

I heard about cervical cancer screening when I went to the hospital, and at the reception, one of the nurses was talking about it but there was noise so I couldn't really hear her well (Ama, 29 years).

5.4. Causes of Cervical Cancer

The majority of participants revealed different causes of CC. Few participants verbalised that sexual intercourse is a cause of cervical cancer. Interestingly, other participants mentioned other causative factors such as not changing pads during menstruation, excessive heat in the vagina, using soaps to wash the vagina, and intake of alcohol. Rebecca asserted that CC is caused by sexual intercourse;

> I think, maybe when you have multiple sexual partners also you can get CC. Maybe you have partners who have infections, and maybe you have unprotected sex with dif

ferent partners, you might end up having infections which might result to cervical cancer (Rebecca, 24 years).

A 24-year-old participant indicated that CC is caused by the size of a man's penis.

Like errrm it depends on the number of times you have sex and with different people, errrm everybody have their own size of their reproductive organ like big small and those things so I think sleeping with men with very big size of penis can lead to cervical cancer (Akua, age 24 years).

Few participants mentioned that cervical cancer is caused by a virus. This was evident in the narrations below:

I'm sure is caused by a virus, I'm sure, even though I don't know the type of the virus (Adwoa, 25 years).

Apart from sexual means, other causes of CC were listed by some other participants as portrayed by Rose:

I think it is caused by washing the vagina with soap, too much heat at the vagina and errmm not changing pads during menstruation. And also, I don't know if heat can also cause that? Because I learnt if you are a lady and you are going to bed... you have to sleep freely not even putting on under pant to prevent that heat since it can also cause cancer. (Rose, 28 years).

5.5. Signs and Symptoms of Cervical Cancer

Understanding the signs and symptoms about a condition can improve the knowledge on the condition among people. Participants shared different views with regards to the signs and symptoms of CC as painful sex, vaginal discharge with odour, heavy bleeding, bleeding in between menses, pelvic pain, abdominal pain, painful urination and frequent urination. This is depicted by the following narrations:

> I heard when you get CC you will have smelly vaginal discharges, pains when having sex, vaginal bleeding and in between menses and also swollen vagina. (Adwoa, 25 years)

> I learnt errmm the pre-signs of cervical cancer are bleeding vagina, severe pains after sex, and pelvic pains. (Akua, 24 years)

Other women reported that women with cervical cancer could present with painful urination, frequent urination and abdominal pains. This is illustrated in the quote made by Rejoice below:

> With the signs and symptoms, it is only the doctors that will know, but I think you will also have stuff over there ... (laughing)... stuff like maybe during the menstrual period, you will feel pains or maybe when you are passing out urine maybe you can feel pain or have abdominal pains or even severe headache. (Rejoice, 42 years)

5.6. Prevention of Cervical Cancer

According to participants, cervical cancer could be prevented by abstinence from sex, sticking to one partner, not engaging in douching, keeping the vagina neat and brushing the teeth. They, therefore, suggested the need to protect themselves from contracting cervical cancer which has no cure but can be prevented. Some participants expressed their views about CC prevention as illustrated in the statement below:

> I think as women, we can prevent this cancer by not having multiple sexual partners and also as ladies we have to try to abstain from pre-marital sex till you marry. Abstinence is the best so if you abstain now in future you won't have issues with cervical cancer. (Rebecca, 24 years).

A 28-year-old participant responded that creation of awareness can help to prevent this condition:

Why not? It can be prevented by letting the young ones know about the danger of it. What it is about, the causes and how they will end up if they get it. Like the way now people are afraid of HIV, the same way we can make them scared of CC (Rose, 28 years).

Some participants believed that keeping the vagina neat like shaving can protect women from cervical cancer and added that if cervical cancer is not treated it will cause complications:

> I think to prevent this cancer, every woman should keep her private part neat. Making sure you shave the place well and making sure that place smells good and doesn't have any odour and also not inserting things in the vagina. (Ramatu, 29 years).

Brushing of teeth and changing of clothes were suggested by some participants as strategies to prevent CC as proposed by Rosina:

Of course, cervical cancer can be prevented. Make sure you are neat like bathing, brushing of teeth, changing clothing and all that. (Rosina, 34 years)

5.7. Management of Cervical Cancer

The findings suggest that these women have a fair knowledge of the management of CC. Some of the management strategies reported by participants in this study for managing cervical cancer are drugs, undergoing surgery, and radiation therapy. This is how Rebecca described the management of cervical cancer;

> I think when you get it and you go to the hospital, you will be given some medicine for treatment so that even if you will die very soon it will prolong your death. (Rebecca, 24 years).

In addition to the drugs, some participants were of the view that surgery can be done to treat cervical cancer as revealed by Afia;

> I also think if a person has it, the person can have surgery for the cells that have been affected to be removed or

some drugs to reduce the pains. (Afia, 26 years)

Although caesarean section has nothing to do with the management of CC, some participants reported caesarean section as a management strategy.

> I know that with the prevention you can have a caesarean section to manage it, you have to visit the hospital, if it is that severe, the surgery will be done, but if it is not that severe there are medicines that can cure it (Abena, 25 years)

5.8. Theme 2: Perceived Susceptibility to Cervical Cancer

Perceived susceptibility refers to the likelihood of an individual to develop a condition/disease. Participants in this study asserted various ways concerning how they view themselves or other women as prone to CC. The women shared different views with regards to what increases their risk to cervical cancer or other women's risk to cervical cancer. Their perceived susceptibility to CC was categorized into perception about self-risk, perception about other women's risk and mixed perceptions.

5.9. Perception About Self-Risk

Self-risk has to do with the beliefs that one has with regard to her likelihood to contract a disease. Generally, the majority of the participants did not perceive themselves as being at risk of CC as reported below:

> I don't view myself as prone to CC no..no.no because it will be so strange because when it comes to the hereditary aspect, my family members don't have it. Also I try to eat healthily, I eat a lot of the healthy spices, and ginger. And I try to drink a lot of water even though sometimes I eat some of the unhealthy stuff. (Rita, 22years).

> I don't believe I will get that cancer you are talking about, it is a big No. I don't see myself to be getting it because there are certain women who keep on inserting things in their vagina and I'm not doing that and also I don't use contraceptives or public washrooms so I know I will never get it. (Ruth, 37 years).

A 29-year-old woman indicated that she is not prone because she trusts in God:

I don't think I will get this cancer because I believe in God. I will pray to God not to get the condition and I will also help myself. I am also a virgin, I maintain my personal hygiene like bathing, changing my undies and brushing my teeth (Ama, 29 years).

5.10. Perception About Other Women's Risk

This section explains the perception of participants regarding how they view other women as likely to get CC. Even though these women perceived themselves as not at risk, they view other women as prone to CC: The following expressions buttressed the notion that participants viewed some women as prone to CC:

I think it is only women who don't take good care of themselves that will get it. So, I think those women who take good care of themselves are not at risk but those who take their health for granted are at risk to cervical cancer. (Abena, 25 years).

I don't think it is all women that are likely to get cervical cancer. I think is only those who use contraceptives, those who are older, and those who don't keep the place neat. (Yaa, 28 years).

A 28-year-old woman shared that it is common among women above age 18 years.

It is only some women who are at risk. I think it depends on the person's age, it is more common from 18 years upwards. I also think nowadays certain foods that we eat and certain chemicals we use at the vagina can increase the likelihood for some women. (Rose, 28 years).

5.11. Mixed Perceptions

Few participants in the present study perceived that all women including themselves were at risk to CC because of certain common lifestyle practices among women. Below are some narrations to support mixed perceptions about perceived susceptibility:

> Yes, all women, as far as you are a woman, you know you have the cervix and also use of public toilet, it has become something that is part of us. So, I think everyone is prone to it (Rosina, 34 years)

> Of course, all women are at risk, you see as women definitely you will have your menstrual period and every woman will be in labour someday and you know how it is painful so I think every woman is can get it. (Afia, 26 years).

6. Discussion

The women in the present study defined and described cervical cancer in varied ways. The findings suggest that the participants have poor knowledge about cervical cancer and cervical cancer screening as reported in other parts of Africa [8, 30, 31]. For instance, only few of the participants were aware that cervical cancer affects the cervix of women which was inconsistent with other studies in which women were knowledgeable about cervical cancer [32, 33]. In the present study, only few participants were able to identify where cervical cancer screening is done, when to start the screening and the duration for CCS with none cognizant of the types of CCS. This finding is in consonance with other studies conducted in Africa [18, 30, 32, 34].

The present study established that the knowledge on cervical cancer and cervical cancer screening were retrieved from various sources. The media was identified as the main source with television being the highest among the media sources as found in previous studies [8]. Similarly, television was identified as the key source within the media types [35]. Few participants in the presents study acknowledged health workers as a medium through which women get to know about CC/CCS. Unlike the findings of the present study, some authors found gynaecologist (51.5%) to be key with regards to retrieving information about CC/CCS as compared to the media (13.4%) [36]. This may be attributed to the fact that in Ghana, most hospitals lack gynaecologists and most women in Ghana only visit the gynaecologist when they have reproductive issues.

It was discovered in the present study that the majority of participants had poor knowledge about the causes of cervical cancer as previously reported in Ghana, Nigeria, and South Africa [14, 18, 32]. The poor knowledge on the causes of CC was evidenced by responses such as not changing pads during menstruation, not washing the vagina, eating certain foods, and too much heat in the vagina.

Furthermore, the findings revealed that women had varied beliefs about the clinical manifestations of cervical cancer. Few participants (n=5) in the present study gave correct responses to signs and symptoms of cervical cancer including painful sex, vaginal discharge with odor, heavy bleeding, bleeding in between menses and pelvic pain. Participants in a previous study in Slovakia reported similar manifestations of CC [36]. Similarly, in Nigeria, abdominal pain and back pain were reported as manifestations of cervical cancer [9].

The present study indicated that almost all the participants believed cervical cancer can be prevented and managed. Unfortunately, few of the participants knew about the mode of prevention and various management techniques available as reported in the literature [34, 37, 38]. For instance, the present study revealed misconceptions about preventing cervical cancer such as changing clothes, keeping the vagina neat and brushing of teeth. Few participants in the current study described cervical cancer prevention as abstinence from sex, sticking to one partner, and creation of awareness which are consistent with literature [6, 7, 11, 17, 36]. However, the majority were unaware of the various treatment methods for cervical cancer [10, 36].

The finding that few women in the current study perceived themselves as susceptible to cervical cancer was congruent with literature [11, 39]. Surprisingly, even though the majority of participants in this study did not perceive themselves as prone, most of the participants were above the age of 20 years and were sexually active, yet only one participant had reported ever being screened for cervical cancer.

According to participants, factors that increase womens' risk are early sexual intercourse and multiple sex partners, which are consistent with the literature [6, 7, 11, 12, 33, 36]. However, factors such as advanced age, and having a relative with cervical cancer,

form a smaller percentage of the risk factors reported by women in the present study, which is an indication for health education on cervical cancer and its screening.

7. Conclusion

Generally, the knowledge of women in this district about CC/CSS was poor even though they had the perception that cervical cancer can be prevented and managed if detected early. Perceived susceptibility to CC with regards to self was poor even though the susceptibility about other women getting cancer was high. Therefore, there is the need to increase the knowledge on CC and its screening among women, and design strategies to mitigates the myths about cervical cancer and its screening in Ghana.

8. Declaration

8.1 Ethics Approval and Consent to Participate

Eth.ical clearance was sought from the Noguchi Memorial Institute for Medical Research Institutional Review Board (NMIMR-IRB) of the University of Ghana (NMIMR-IRB 036/18-19). Consent was sought from all women who participated in the study before engaging them in the study. Participants were allowed not to mention their names, or anything that would identify them during the interview process. Participants were told of their rights to stop participating in the study whenever they wanted.

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