

Knowledge of Cervical Cancer among Zimbabwean Women on Anti Retro Viral Therapy 2012

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Abstract

Introduction: Cervical cancer is the second most common cancer in women worldwide. 80% of cases occur in low-income countries. In Zimbabwe 7000 women are diagnosed of cervical cancer annually and about 1300 of these are treated with radiotherapy. This study was conducted to assess knowledge of cervical cancer among ART patients in Mberengwa district 2012

Materials and methods: A descriptive study was conducted among female ART patients in Mberengwa District Zimbabwe. Simple random sampling was used to select participants using ART register as sampling frame. Sample size was calculated using the dopson formula. Ninety six participants were required. Knowledge of cervical cancer was assessed through knowledge of cardinal signs and symptoms of the cancer. A pre tested interviewer administered questionnaire was used. Observations were also used to assess availability of case definition for cervical cancer. Record reviews of health education session at health facilities was also done Epi info was used to analyse data. Written consent was sought from all participants. Permission to carry out study was granted from the Ministry of Health.

Results: Ninety six patients were recruited. (18.5%) did not attend primary school; none had been offered cervical cancer screening. (75%) did not know what is cervical cancer was, (97.9%) did not know prevention strategies for cervical cancer, (70%) reported that they were not susceptible to cervical cancer and (38.1%) reported that cervical cancer does not kill. Reported signs and symptoms of cervical cancer included; bleeding per vagina (8.6%), pain in lower abdomen (19.8%). Other causes of cervical cancer that were reported were; witchcraft (31.2%), or curse (37.5%). There were no cervical cancer case definitions in the health centres

Discussion and conclusion: Knowledge of cervical cancer among participants was low. There is need for health education, promotion and awareness on cervical cancer as well as provision of case definition for cervical cancer in all health institutions in the district.

Keywords: Cervical cancer; Human papilloma virus; Human immunodeficiency virus

Key points

None of the participants were offered cervical cancer screening.

Knowledge of cervical cancer among participants was low.

7000 women are diagnosed of cervical cancer annually in Zimbabwe.

Majority of the participants did not know cervical cancer preventive strategies.

All health centres in did not have cervical cancer case definitions.

There is need for increased awareness on cervical cancer and vaccination of girls.

Introduction

Cancer is a disease when cells in the body grow out of control. Cancer is named after the body part from which it started even if spreads to other body parts. When cancer starts in the cervix it is called cervical cancer (CC). The cervix is the lower narrow end of the uterus. It connects the vagina to the upper part of the uterus. Which is where the baby grows when a woman is pregnant? Cervical cancer is the easiest gynaecological cancer to prevent through regular screening and follow up test.

Cervical cancer is also easy to treat when detected early (Centers for Disease Control 2010).CC is caused by a virus called Human Papilloma Virus (HPV) which is passed on during sexual intercourse. At least half of the sexually active women are infected with HPV at some point in their lives but however very few develop CC [1] Other major risk factors

include tobacco use and lack of screening and adequate treatment of precancerous lesions. HPV and human immunodeficiency virus (HIV) co infection accelerates progression towards cancer [1].

All women are at risk of cervical cancer however women who are over the age of 30 are more at risk of CC than those below [1]. In Africa, HPV infection prevalence is estimated at 21.3%, with significant variations from region to region: 33.6% in East Africa, 21.5% in West Africa and 21% in Southern Africa. Cancer of the cervix is the second most common cancer in women worldwide, with about 500 000 new cases and 250 000 deaths each year. Almost 80% of cases occur in low-income countries, where cervical cancer is the second most common cancer in women. Virtually all cervical cancer cases (99%) are linked to genital infection with human papillomavirus (HPV), which is the most common viral infection of the reproductive tract [2].

In the United States in 2007, 202,964 women were diagnosed with breast cancer, and 40,598 women died from the disease [3]. In Zimbabwe 7000 women are diagnosed of CC annually and about 1300

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to 2000 of these are treated with radiotherapy [4]. This could be due to the high price of radiotherapy in Zimbabwe and also lack of oncologists and other critical health workers in the country [5]. Cervical cancer is yet to be recognised as an important public health problem in sub-Saharan Africa. In Sub Sahara Africa, priority is given to infectious diseases such as malaria, tuberculosis, leprosy, diarrheal diseases, acute respiratory infections and HIV/AIDS all of which have preventive and management strategies. Several studies have shown poor knowledge of cervical cancer in Africa, which cuts across different literacy levels. Among 500 attendees of a maternal and child health clinic in Lagos-Nigeria only 4.3% were found to be aware of cervical cancer [6]. In 2004, also in Lagos-Nigeria, 81.7% of 139 patients with advanced cervical cancer had never heard of cervical cancer before, and 20%, 30% and 10% respectively thought the symptoms they had were due to resumption of menses, lower genital infection and irregular menses. Almost all the women (98%) believed that their advanced disease was curable, 12% thought it was not a serious disease and only 9% understood that it was cancer and therefore serious [6]. Similar studies in Kenya and Tanzania also reported very poor knowledge of the disease in patients [7].

Epidemiologically there are three main prevention for CC. Primary prevention of CC is based essentially on healthy lifestyles and vaccination against HPV. Two types of vaccines against HPV infection are currently available on the market: one acts against HPV genotypes 6, 11, 16 and 18 (quadrivalent vaccine) and the other against genotypes 16 and 18 (bivalent vaccine). The vaccine is given in form of three doses to girls who are between 9 and 13 years in some cases up to 26 years. In Zimbabwe the vaccination of adolescent girls is still under trial.

Secondary prevention of cervical cancer is by screening for precancerous lesions and early diagnosis followed by adequate treatment usually through a pap smear where precancerous cell are detected [8]. The main techniques used are cytological screening of cervical cells and visual inspection of the cervix. Pilot projects initiated in six countries 5 of the African Region and coordinated by WHO have shown the efficacy, safety and effectiveness of visual inspection as a method of screening.

Tertiary prevention of cervical cancer involves the diagnosis and treatment of confirmed cases of cancer. Treatment is through surgery, radiotherapy and sometimes chemotherapy. Palliative care is provided to patients when the disease has already reached an incurable stage [9].

HIV and traditional practices relating to sex and sexuality are the main contributors to the spike in cervical cancer cases. The reasons for women's failure to identify cervical cancer early on vary with lack of awareness, low risk self perception and inadequate financial resources to seek help being some of the most common. However, general myths around promiscuity are also a major barrier [10].

This study was conducted to assess knowledge of CC among female ART patients in Mberengwa district. Female ART patients were targeted for this study because W.H.O states that HIV positive women are more susceptible to CC as compared to HIV negative women.

Materials and Methods

A descriptive cross-sectional study was conducted among female ART patients in Mberengwa district 2012. Participants were randomly selected with replacement so that each participant had an equal chance of being selected. The District ART register was used as a sampling frame where all female ART patients were listed and each female patient was given a number. The numbers were then put in a box and randomly picked using the lottery method until the sample size was reached.

Dopson formula was used to calculate sample size as follows; **formula** $n = z^2 pq/d^2$, where n was the required sample size, Z is a test statistic, p is expected prevalence in the population, q= 1- expected prevalence in the population, d is the desired precision. Assuming the prevalence of cervical cancer among female ART patients is 50%, a desired precision of 5% and a confidence level of 95% a minimum sample size of 96 was required. **Where Z is 1.96, P= 0.50, Q =1-0.50 =0.50, D=10%**

Data collection techniques

A pre-tested interviewer administered questionnaire was used to collect data from participants. The questionnaire was back translated into the local language (Shona). The questionnaire was administered to the selected participants when they come for their monthly ARV supply at Mnene Mission Hospital. The interview were done in a private consulting rooms in the out patients department. The questionnaire was administered by one of the researchers. All participants were told of the purpose of the study before being asked for their consent. Records review (minutes of health education sessions given at health facilities) was done this was done so as to objectively assess whether health education on CC was done and observations in health facilities was done so as to assess availability of CC case definitions in health facilities.

Data analysis

Epi info 3.2.1 was used to analyse quantitative data while qualitative data was analysed manually.

Assessment knowledge of cervical cancer

Participants were asked the signs and symptoms of cervical cancer like irregular bleeding per vagina, vaginal discharge that does not respond to anti biotics, lower abdominal pain. Participants were also asked risk factors of cervical cancer like not being vaccinated against HPV, HIV/AIDS, and multiple sexual partners. Screening techniques and prevention methods were also asked. Participants who could mention at least one symptom, screening technique and prevention strategy were regarded as knowledgeable of cervical cancer

Ethical considerations

Written informed consent was sought and granted from all participants. Confidentiality and respect was maintained. Questions were asked in shona local language. Health education and promotion on CC was done. Permission to carry out study was sought and granted from the Ministry of Health.

Results

A total of 96 female ART patients were recruited into the study.

Variable	Yes (%)	No(%)
Know what CC is	24(25)	72(75)
Know the preventive strategies of CC	2(2.1)	94(97.9)
Susceptible to CC	29(30)	67(70)
Ever offered CC screening	0	96(100)
Cc kills	59(62)	37(38)
All women at risk of CC	15(15.6)	85(84.6)
Herbs can be used to treat CC	10(10.4)	86(89.6)
Bleeding after sex is sign of CC	2(2.10)	94(97.9)
Excessive discharge is sign of CC	0(0)	96(100)
Pain in lower abdomen is sign of CC	19(19.8)	77(80.2)
CC could be a result of a curse	36(37.5)	60(62.5)
CC could be a result of witchcraft	30(31.2)	66(68.8)

Table 1: Responses of female ART Patients on ART in Mberengwa District 2012.

Sixty seven (69.8%) were unemployed, seventy (72.9%) were married, seventeen (18.5%) did not attend primary school, thirty six (36.1%) attained primary school education, thirty seven (40.2%) attained secondary school education and four (4.4%) attained tertiary education.

Eighty (80.64%) had monthly income less than 100 United States Dollars. Eighty seven (90%) did not have medical aid, Eighty seven (90%) paid for health services, the remaining 10% used medical aid. Sixty nine (75.8%) reported that they could not afford the hospital fees, sixty three (67%) reported that they are offered medical services even though they do not have money. Forty seven (48.9%) reported not using condoms, forty (41.6%) reported using condoms at times and nine (10.5%) reported using condoms.

Availability of cervical cancer definitions at the health facilities in the district and found out that there were no case definition in all the 34 facilities. Minutes of health education sessions and pre ART sessions were reviewed and found out that no lessons were held on cervical cancer. Thirty (88.2%) had speculums in stock. There was no funding for cervical cancer prevention and control neither was there a cervical cancer control program in the district.

Discussion

The study revealed that cervical cancer knowledge among ART patients was low in Mberengwa district. This could be attributed to lack of prioritisation of the diseases by health workers in the district as well as the ministry of health since all health centres did not provide case definitions for the disease but some case definitions for other communicable disease like tuberculosis, malaria, polio measles and many others were displayed at all health centres.

Lack of funding for cervical cancer prevention and control may lead to health workers ignoring the diseases and focus on other communicable disease and opportunistic infections that are funded by agencies like Global fund and World Health Organisation (W.H.O). This leaves the patients deprived of the knowledge and care they need as far as cervical cancer is concerned.

The implication of lack of prioritisation of cervical cancer as a public health problem in Mberengwa is that, many patients may not be screened and hence suffer from the disease or the disease will be detected at an advanced stage and the patients may die, this is also reported by W.H.O. None of the participants were offered cervical cancer screening by health workers. This may be due to lack of cervical cancer knowledge on the part of the health workers, when health workers have little knowledge on a health condition they may also have low index of suspicion and focus of sexually transmitted diseases like gonorrhoea, syphilis and pelvic inflammatory disease (PID). Early detection of cervical cancer may prevent the prognosis of the disease and leads to reduction in morbidity and mortality due to cervical cancer. Cancer screening programs led to reduction in incidences of cervical cancer in industrialised countries like United States of America [11].

Some of the women reported that cervical cancer could be as a result of which craft or curse. This could be attributed to lack of teaching by health workers in the district as evidenced by lack of cervical cancer lectures in the health education record books that were examined, hence these myths about cervical cancer. When patients believe that their condition may be due to witchcraft they resort to traditional healer who may not have effective treatment interventions like chemotherapy, radiotherapy and hysterectomy and this may lead to continued poor women health and mortality due to cervical cancer in the district. This

lack of knowledge among high risk group populations is detrimental to a country with high mortality rate due to cervical cancer like Zimbabwe.

Majority of the participants paid for health services from their pockets (no medical aid). This may lead to poor health seeking behaviour by the patients as they may be perceiving the user fees as expensive since majority of the participants were not employed. Poor health seeking behaviour may lead to late reporting to health centre and cervical cancer will be detected at a very late and advanced stage and it will be difficult to manage and the patients may die, hence high mortality due to CC and missed opportunity for CC health education.

In conclusion knowledge of CC among female ART patients in Mberengwa was low.

Recommendations

As a result of this study we therefore recommend;

1. Health education/ awareness on cervical cancer to be given to all patients and community.
2. The ministry of health to provide case definitions and IEC material in English and vernacular language to all health centres in Mberengwa district
3. The health managers in the district to source funding for cervical cancer prevention and control
4. Ministry to introduce HPV vaccine to all girls below 12 years.
5. ART patients to be treated free

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