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Research Article

Exploring Barrier of Cervical Cancer Screening Uptake Among HIV-Positive Women Attending at Waliso General Hospital, South West, Ethiopia, Pure Qualitative Study

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Abstract

Introduction: Cervical cancer screening is used to find changes in the cells of the cervix that could lead to cancer. Despite, screening is one of the secondary preventive strategies, the case is still growing. Therefore, the study aimed to assess the uptake of cervical cancer screening services and associated factors among Women living with human immunodeficiency virus at Waliso General Hospitals in Southwest Shewa, Ethiopia, 2025. *Objectives:* To explore barrier of cervical cancer screening uptake among HIV-positive women attending at Waliso General Hospital, South West, Ethiopia, 2025. *Methods:* A pure qualitative study was conducted 17 HIV-positive women attending at Waliso General Hospital, South West Shewa Zone, Ethiopia. Purposive sampling technique was used to select study participants. Qualitative data was analyzed thematically. The results were presented using text and table. *Results:* Services interruption, poor awareness and rumor was identified as barrier of cervical cancer screening uptake among HIV-positive women attending Waliso General Hospitals. *Conclusion and Recommendation:* Greater than half of women were uptake cervical cancer screening. Health facilities managers and health care providers should work hard together to improve cervical cancer screening uptake among HIV-positive women attending at Waliso General Hospital.

Keywords

Uptake, Cervical Cancer, HIV-Positive Women, Southwest Shewa, Ethiopia

1. Introduction

Cervical cancer is a heterogeneous group of diseases characterized by autonomous and uncontrolled growth of cells originating from the uterine cervix, an anatomical structure connecting the lower uterus to the vagina [1]. It begins with aberrant cell alterations known as pre-cancerous (dysplasia), which can either regress or progress into cancer over time and differs from other cancers because it grows slowly [2].

The problem is worse for women living with human Im-

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mune Virus (HIV) who are at a six-fold greater risk of developing cervix cancer than non-HIV-positive women [3]. This elevated risk manifests itself during a person's lifetime, beginning with a greater risk of acquiring the human papillomavirus, especially Human Papilloma virus (HPV) 16 and 17 types which handle 70% of cervical carcinomas [3, 4].

Cervical cancer screening is a secondary prevention type used to find changes in the cells of the cervix that could lead to cancer [3]. Its efforts aim to reduce cervical cancer incidence and mortality by identifying and treating precancerous lesions in women [1]. The most frequent method for cervical cancer screening is cytology, and there are alternative methods, such as HPV DNA (Dextrose Nucleic acid) tests and visual inspection with acetic acid (VIA). In resource-limited countries, VIA is the preferred approach [5].

About 7,445 new cervical cancer cases are reported annually in Ethiopia, with 5,338 cervical-cancer deaths [4, 6-8]. Despite gains in life expectancy associated with access to HIV care and treatment in the countries the hardest hit by the epidemic, cervical-cancer in HIV-positive women has not gotten the attention or resources it deserves for prevention and treatment, and screening coverage is often low [9]. To reach vulnerable women at high risk of cervical-cancer and HIV infection, integrated human papillomavirus (HPV) vaccination, screening, and treatment services for both diseases must be prioritized to optimize efficiency and maximum effect [6].

In 2020, an estimated 604 000 women were diagnosed with cervical cancer and about 342 000 women died from the disease [5]. Of the 604 000 new cases of cervical cancer in 2020, 5% were attributable to HIV infection [5]. Its burdens vary greatly between countries, approximately 85% of women living with HIV occur in Africa Region, 7% in South-East Asia and 4% in the Americas [9-11]. In Ethiopia, it is the second most frequent and primary cause of cancer-related death in 2015 with an estimated 4648 new cases and 3,235 dying from it [7].

Regarding medical, nonmedical, and human terms, the worldwide cost of cancer as the primary cause of long-term mortality reflects a colossal waste of resources. E.g., inside the United States, the estimated cost management has risen from $124 billion in 2010 to $157 billion in 2020 [12].

Cervical cancer and HIV are intrinsically interlinked. Women living with HIV have higher rates of HPV infection and precancerous lesions, with a six-times higher risk of invasive cervical cancer compared to women without HIV [4]. The higher risk is manifested throughout the life cycle, starting with an increased risk of acquiring HPV infection, more rapid progression to cancer, and developing cervical cancer at a younger age [13].

As women living with HIV have a higher risk of cervical cancer, they require regular screening to ensure timely detection and successful treatment of precancerous lesions to prevent them from developing invasive cervical cancer [9]. Currently, coverage for cervical cancer screening is inadequate in LMICs [10]. In Ethiopia, the planned goal was to achieve 80 percent coverage for cervical cancer screening in 2016-2020 (14). Despite this, less than 10% of women had been screened in the last 5 years in 2021 [14, 15].

Even previously many researchers tried to rule out factors like socio-demographic characteristics [16], area of residence [17], the flow of information [18], and knowledge about the disease [19]. were contributed to low rates of screening uptake in the populations. Despite these efforts has done still uptake of cervical cancer was low. To date, insufficient attention has been given to the links between cervical cancer and HIV-positive women [9].

This prompted an investigation into why so few women follow recommended practices for cervical cancer screening by using qualitative study approach. Consequently, the aim of this study was to assess cervical cancer screening service uptake among HIV-positive women of SouthWest Shewa, Oromia. Ethiopia.

2. Methods and Materials

2.1. Study Area, Study Period and Study Design

The study was conducted at public hospitals in South West Shewa Zone, Oromia region, Ethiopia. Southwest Shewa Zone is found to the south of Addis Ababa. South West Shewa Zone is bordered on the south by the Southern nation and nationality people region, on the north by West Shewa Zone and Addis Ababa city, on the west-by-West Shewa Zone, and on the east-by-East Shewa Zone. Southwest Shewa Zone comprised five government hospitals named Tullu Bollo General Hospital, Waliso General Hospital, Ameya Primary Hospital, Bantu Primary Hospital, and Leman Primary Hospital, and one non-government hospital called Lukas Catholic Hospital which is found in Waliso, the capital city of the South West Shewa Zone. The study was conducted from April 15 - May 20, 2022. A qualitative phenomenological study design was used by using in-depth interviews (IDIs) to explore barrier of cervical cancer screening uptake among HIV-positive women attending at Waliso General Hospital.

2.2. Population

Women who came from married and unmarried, mothers who came from both urban and rural, and those who were, interviewed at the time of health care provider decide to discharge, but before leaving the hospital.

2.3. Eligibility Criteria

Inclusion Criteria: Women HIV-positive women attending at Waliso General Hospital included in study.

Exclusion Criteria: Women who were critically ill and unable to communicate in-depth interviews at the time of data collection were excluded from the study.

2.4. Sample Size Determination and Sampling Procedure

Sample size was determined after ideas of women were got saturated for IDI and 17 women were included in study.

Sample size was determined after ideas of women were got saturated, with guiding and propping question and 17 women who gave birth in four hospitals were included in the study. Purposive sampling technique was used to select moms for IDI based on mothers' willingness to participate in IDI.

2.5. Data Collection Instrument and Technique

Data was collected by using adapted and modified a semi-structured interview guide with probing questions linked to maternal satisfaction aspects previous studies [20-27]. During the in-depth interview, voice recorded and notes were taken. The questionnaires contain 4 guiding questions and 17 probing questions.

Face-to-face interviews were used to gather data, and three master's degree holders in health who are proficient in the local tongue conducted IDIs. An audio tape recorder, field notes, and an interview guide were used to gather data. The duration of the interviews varied from 25 to 45 minutes, depending on the participants' perceived levels of saturation. The responders were able to complete the IDIs and KII in a convenient, quiet, and private setting. The exact responses of every participant were captured on an audio cassette, and the data were transcribed and translated exactly from that recording. Four master's-level health workers who are proficient in the local languages.

2.6. Data Quality Control (Assurance)

To maintain uniformity, the semi-structured interview guide was first developed in English, translated into Afan-Oromo, the local tongue, and then back into English. Lastly, data was gathered using the Afan Oromo version of the interview guide. The data collectors received one days of training on the study's goal, data collection techniques, and ethical issues prior to beginning actual data collection. The interviewers employed tape recording and note taking regarding each guiding question and probing question during the interviews. The IDIs were conducted in a salient and private setting at the health facilities. Experts in qualitative research assessed and checked the interview instructions and questions and verified that the tools' content was valid.

2.7. Data Processing and Analysis

Qualitative data were analyzed thematically by transcribing recorded audio and notes taken during the Interviews. The recorded audio was first transcribed word by word into Afan Oromo, and then translated into English by the language translator. The transcribed data into English was coded manually (color-coded) with similar ideas with the same code. Then, the narrated qualitative information was organized and categorized according to their similar ideas to form sub-themes. Sub-themes emerged together to form the main themes. Then, the study participant's comment was written in quotes. Ideas related to the objective of the study and commonly indicated by study participants were taken and written in quotes. The result was presented using text.

3. Results

A total of 17 HIV-positive women who attending Waliso General Hospital in Southwest Shewa were participated in in-depth interviews. The results of the qualitative study showed that among 17 women, the age of women were ranged from 24-67 years old. Half of the women 9 (50%) who participated in IDI were living in urban areas.

The finding of the qualitative study revealed that the barrier of uptake of cervical cancer screening was identified by using interview guide questions with probing. Six sub-themes were formed based on similarities of women`s opinions. Then, the sub-theme was merged together, and three main themes were formed.

3.1. Services Interruption

Women who were faced services interruption were less likely to uptake cervical cancer screening. This was supported by the result from IDI*: "I came here from the Countryside for follow-up of HIV AIDs. I have started follow-up at this hospital. He told me to go there and get the service. I went to the cervical cancer screening room. Health care providers working there told me to keep a little until he brings material from the store. But, after some minutes he returned from the store and told me that the materials were not there and he gave me an appointment. Today I come for my second appointment" (Women participated in IDI 15).*

Women explained as*: "I was referred for a cervical screening from Fiche Health Center. However, service was not provided at that day. I came three times to receive cervical screening services since the healthcare provider who was supposed to administer the services was not there on the day of my appointment. I think it would be great if services were provided every day" (Women participated in IDI 10).*

Women narrated as: *"I visit for follow-up as well as cervical cancer screening services. However, on this particular day, I was not served. The medical staff in this room informed me that there isn't enough medical equipment to provide you this service" (Women participated in IDI 15).*

3.2. Poor Awareness

The finding of the present qualitative study showed that the respondents who were not awared on cervical Cancer Screening were no utilizing Cancer Screening services. The

following were some of the women`s ideas: *"I was transferred from other health center to this hospital. The health care giver at this hospital doesn`t inform me the benefits of cervical cancer screening he said for me simply you have to get cervical cancer screening. At that time I didn`t understand the advantage of cervical screening properly" (Women participated in IDI 05).*

Women explained as: *"I didn`t understands the advantage of cervical screening after infected with HIV AIDS. No one advices given for me on advantage of cervical cancer screening" (Women participated in IDI 11).*

3.3. Rumor

The rumor was also one of the barriers of utilizing cervical cancer screening services. This was explained by*: "I was grown up in rural area. After testing my blood when I went for my check-up, they informed me that I had HIV/AIDS and moved me to the ART department. Upon learning about cervical cancer screening services, I discussed with some friends, who informed me that cervical cancer doesn't affect people who are too elderly. They told me that you didn't need this particular service. Then, I instantly left the service" (Women participated in IDI 13).*

Women who participate in IDI explained: *"As I heard from community lived with them. Person who was once contracted HIV AIDS disease no need of cervical cancer screening" (Women participated in IDI 05).*

4. Discussion

This study aimed to assess the uptake of cervical cancer screening and associated factors among HIV-positive women at a public hospital in Southwest Shewa Zone, Oromia, Ethiopia, 2025.

The result of this study found that women aged 40-49 years were positively associated with cervical cancer screening when compared to women aged ≤ 29 years old. It is concurrent with studies in Taiwan [28], and Côte d'Ivoire [29]. This was explained as women's age increases, the probability of getting information about cervical cancer and its screening will be increased, which leads them to use cervical cancer screening services and the chance to have more contact with health facilities increases as age increases.

Similarly, the finding of this study showed that the odds of cervical screening service uptake among those having an educational level of college and above were positively associated with cervical screening service uptake. This study finding is concurrent with studies done in Ghana [30]; Côte d'Ivoire [29]. This is explained by the education enhances the knowledge of screening services and access to communicable disease and reproductive health information that might help women to uptake screening to the recommended time. Education might lead to an increased focus on preventative care and a decrease in health-risk behaviors.

According to the findings of this study revealed that, there is a sizable difference between rural and urban women's rates of cervical cancer screening uptake. Women who lived in urban areas were positively associated to receive cervical cancer screening services uptake as compared to those who lived in rural areas. This is supported by a study done in the United States of America [17], in Ethiopia [31]. This is explained by women of urban dwellers were more accessible to information and might have more knowledge about the need to be screened.

Furthermore, the finding of this study showed that knowledge about cervical cancer screening was another significant factor in the uptake of cervical cancer screening among HIV-positive women. This study found that women who had good knowledge about cervical cancer were positively associated with cervical cancer screening as compared to those who had poor knowledge about cervical cancer. Women who had less awareness on cervical cancer screening were less likely to uptake cancer screening. This is supported by research done in Northern Tanzania [19], Ethiopia [32], Hawassa town, Ethiopia [33], and Addis Ababa city [34]. The possible explanation might be being aware of disease-associated risk behaviors may promote prevention strategies, sustain healthy lifestyles and positive choices for seeking screening services.

5. Limitation

Since the data were collected from patients only attending hospitals where a cervical cancer screening program is available, the findings of this study might not be generalized to all age-eligible women for cervical cancer screening receiving in public health institutions in the SouthWest Shewa, zone. Finally, during the interview, very few women had trouble remembering how they had previously been exposed to risk factors.

6. Conclusion

The finding of this study showed that nearly one in ten HIV-positive women was screened. The main factors that significantly associated with cervical cancer screening were: age, being an urban resident, having screening service information, and having good knowledge about cervical cancer. and poor knowledge, service interruption and rumor were barrier of uptake of cervical cancer screening. All age eligible women having ART follow-up should uptake for cervical cancer screening services, creating awareness on benefit of cervical cancer screening and advocacy for cervical cancer prevention. Health facility should decrease cervical cancer screening services interruption. Work hard to empower rural women with health education which enhances the uptake of recommended cervical cancer screening.

Abbreviations

ART	Anti-Retroviral Therapy
HPV	Human-Papilloma Virus
IARC	International Agency for Research on Cancer
STI	Sexually Transmitted Infection
WLHIV	Women Living with Human Immune Virus

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Author Contributions

Bacha Merga Chuko: Conceptualization, Data curation, Formal Analysis, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing - original draft, Writing - review & editing

Fikru Assefa Kibrat: Conceptualization, Investigation, Project administration, Resources, Validation

Mone Fikadu: Investigation, Resources, Validation

Nebiyu Taye: Conceptualization, Investigation, Resources

Consent

Informed consent was taken from every study participant before the actual data collection started.

Data Availability Statement

The corresponding author is willing to provide the dataset that was used in the study based upon reasonable request.

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There is no fund.

Conflicts of Interest

The authors declare no conflicts of interest.

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