Underprivileged Development Initiative (UPDI)-UGANDA

Understanding barriers to access and utilization of cervical cancer screening services among women living with HIV in Kyenjojo District, Western Uganda protocol

By

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A research proposal

3rd November 2017

Key Words: Cervical Cancer, access, Utilisations, Barriers, Grounded Theory, Screening, Women, HIV, Protocol, Kyenjojo Hospital, Western Uganda

Abbreviations/acronyms

CC Cervical Cancer

IEC Information Education Communication

WHO World Health Organisation

MOH Ministry of Health

HIV Human Immunodeficiency Virus

WHIV Women Living with HIV and AIDs

AIDs Acquired Immunodeficiency Syndrome

LMICs Low and Middle-Income Countries

ART Anti-Retroviral Therapy

FGDs Focussed Group Discussions

KI Key Informants

NGO None Governmental Organisation

PI Principal Investigator

VIA Visual Inspection with Acetic Acid

HCP Healthcare Providers

PMs Policymakers.

BCC Behaviour Change Communication

Declaration

I, ***Katwesige Wycliff*** hereby declare that this study titled: ***Understanding barriers to access and utilization of cervical cancer screening services among HIV/AIDs women in Kyenjojo District, Western Uganda*** is my own work except where it has been acknowledged or cited in the text. No section or part of the same work has been previously submitted for any degree or qualification in this or any other university. All information sources used in this work have been well acknowledged and referenced.

……

Katwesige Wycliff

3rd /11/2017

Acknowledgment

First, I would like to thank my Lord God for the life and power to do this work. The support of Abul Kalam in qualitative study design and questioner development is highly acknowledged. Special acknowledgment to my Wife Najiba Zulphar and my children for their emotional support and encouragement. Lastly to my Research guide Dr. Ebenezer Daniel.

Table of Contents

Abstract vi

Background vii

Rationale/Justification viii

Research Problem ix

Study goals and objectives x

The setting of Study and Population xiii

Study design xiii

Data collection method xiv

Data management and analysis xv

Dissemination of results and publication policy xvi

Ethics and dissemination xvi

Financing, implementation, and management xvi

Abstract

Introduction

Cervical Cancer is preventable and ranks as the second common cancer among women globally. Since 1981, the incidence of cervical cancer has been on the rise among women living with HIV/AIDS. Cervical cancer in Uganda is usually diagnosed late and the prognosis is very poor. There are gaps in general knowledge on cervical cancer (CC) screening and availability of screening services in the country. This study is intended to explore such barriers to access and utilization of cervical cancer screening services among WHIV in Kyenjojo District

Methodology

We will search publications and written articles on cervical cancer prevention especially screening among HIV women, from PubMed, Cochrane libraries, as well as the ministry of health unpublished reports. We will employ a qualitative study design using key informant (KI) purposively selected from Kyenjojo Hospital Reproductive Health and ART Clinics. This will permit us to achieve a detailed investigation using health belief model on individual perceptions while providing deeper insights into the factors that hinder access and utilization of cervical cancer screening services among HIV/AIDs women in Kyenjojo District.

Conclusion

This study is intended to explore such barriers to access and utilization of cervical cancer screening services among WHIV in Kyenjojo. The study will thus significantly contribute to improved programming, advocacy, and efforts to scale up CC services among rural populations in Uganda while contributing to overall maternal survival in line with 2030 Sustainable Development Goals country initiatives

Background

Cervical Cancer has been ranked as the second common cancer among women globally [1] over 500,000 new cases of cervical cancer (CC) are diagnosed annually of which 50% of these case die [2]. More than half of these deaths occur Low-income resource countries and burden of the disease in Sub Saharan Africa is estimated to be near twice the global one. CC is also the predominant female cancer in Eastern Africa where Uganda accounts for the highest burden in the region, with 22.6 % incidence compared to the top 20.1 % regional average rates [3]. Furthermore, The Sub Saharan Africa where Uganda is located, accounts for more than 70% of People Living with HIV/AIDs. Increased incidences of CC have been reported among HIV infected women as well [4].

The current burden of HIV, as well as cervical cancer (CC) for East Africa and Uganda, calls for an Urgent cause to prioritize and plan key public Health Interventions against the disease. According to the World Health Organization (WHO), only 5% of women have been screened for CC cancer in Low and Middle-income countries (LMICs) as opposed to nearly 50% percent in the developed countries [5]. However, in LMICs Public-private partnerships (PP-P) is said to have improved the availability of CC prevention services within HIV/AIDS care delivery platforms through screening [6]. Uganda also engendered a PP-P with the Non-Governmental organization (to support her health sector. In 2013 STRIDES for Family health (A national NGO in Uganda) supported CC screening programs in Kyenjojo District western Uganda through training of Health workers and provision of Cryotherapy equipment to two health facilities (Kyenjojo Hospital and Kyarusozi Health center IV). The two facilities have been conducting CC screening using Visual Inspection with Acetic Acid (VIA) and treatment with Cryotherapy for suspicious lesions up-to-date. The goal was to improve on early case detection, management, and referral of CC among all women in Kyenjojo District. This would mitigate the risk CC cases reporting late with advanced cancer that will have a poor prognosis and hence mortality [1].

Cervical cancer impacts on the wellbeing of women negatively. Even access to health care can improve the health of women in Uganda at all ages. Therefore, Improvement of access to health services such as CC screening in Women Living with HIV/AIDs (WHIV) and the elimination of various barriers to these services like financial or social barriers, can greatly improve the well-being of people in Kyenjojo district and Uganda at large, which is in line with global initiatives for overall wellbeing of women by year 2030.

This study is intended to explore such barriers to access and utilization of cervical cancer screening services among WHIV in Kyenjojo District. The results from the study will be analyzed to synthesize evidence that will inform policymakers and Ministry of Health (MOH) Program managers to design a comprehensive prevention framework that will eliminate such barriers, improve uptake and create a great impact on lives of WHIV in Kyenjojo District and Uganda at large.

Rationale/Justification

Comprehensive knowledge of the modes of HIV and HPV transmission in Uganda remains very low (UDHS 2011). Since 2008, there has been no reliable population survey on the Modes of Transmission Studies to analyse and document the drivers of cervical cancer and HIV incidences in the country [7] There are serious gaps that need to be addressed in terms of a nationally agreed functional M&E system for sexual and behavioural change prevention interventions including lack of national tools and indicators posing a serious challenge to improve the quality of CC screening programs in the country. A myriad of cultural, socio-economic, political factors and type of illness can influence patient health seeking behavior, the combination of same factors explain the rationale behind the choice and usage of a particular health care system [8].

By exploring the factors that impede access and utilization of CC screening services, this study will generate data on current knowledge gaps, while synthesizing evidence to inform the health sector to plan and implement effective and comprehensive behavior change prevention interventions against CC among WHIV in Uganda. The evidence gathered from this study will be used to advocate for better policy changes and support for improvement in CC screening programs as well development of effective M and E system for Behaviour change communications interventions against cervical cancer among WHIV in Kyenjojo and across the country.

The study will thus significantly contribute to improved programming, advocacy, and efforts to scale up CC services among rural populations in Uganda while contributing to overall maternal survival in line with 2030 SDGs country initiatives.

This study is justified by the dire need to achieve universal access to health services especially in the area of Cancer and HIV prevention, care, and support. Thus, we will investigate and determine areas of need in HIV prevention, care, and support. Furthermore, the study will generate useful data to inform health programmes in the district and country to overcome the obstacles to access and utilization of Cervical cancer screening services among these vulnerable populations, in particular, WHIV on obstacles such as poverty, sex, age, geography, sexual orientation, legal status, and others.

Research Problem

Although the results from recent 2016 Uganda Demographic Health Surveys (UDHS) indicates a reduction of HIV prevalence among adults aged 15 – 49 years in Uganda from 7.3 during UDHS 2011 survey to 6 [9]. Most notably, according to Uganda Annual Health Sector Strategic Plan Report 2016 (AHSPR), the prevalence of HIV among adults is higher in women at 7.5% compared to 4.3% among men (AHSPR 2016_17). Whereas the prevalence of HIV among women is highest and above 12% in the age groups of 35 to 49 years, the prevalence of Human Papilloma Virus (HPV) which causes over 70% of cervical cancer among women in Uganda is about 33.6%. Since 1981, an increasing incidence of cancer has been noticed among WHIV. Antiretroviral therapy (ART) among these patients decreases the risks and progression of opportunistic infections and promotes survival.

Cervical cancer is one of the leading and most frequent cancer among women aged 15-45 years in Uganda. Currently, there seems to be no data regarding coverage of cervical cancer screening among WHIV in Uganda [11]. According to ASPIRE project Uganda, 2500 out of the 3500 women diagnosed with CC die. The gap in general knowledge on cervical cancer screening, availability of screening services, psychosocial barriers, and health workforce is to increase [12].

In line with current evidence to increase the uptake of screening services, together with raising informed choice emphasized in disease prevention and control programming for early case detection, Uganda currently employs an approach of rolling down cervical cancer screening programs that use visual inspection with acetic acid (VIA) and treatment with Cryotherapy in rural settings like Kyenjojo Hospital that provide cervical cancer prevention services [13]. However, access and utilization of these services for women living with HIV/AIDs remain low and the need to scale up these services in the districts is dire

This study seeks to build on existing evidence of scaling up the uptake of screening services, as well as increasing informed choice in Disease control through prevention and early case detection. The study will thus, synthesize new evidence to address key factors that impede access and utilization of CC services among WHIV aged 20 to 50 years in Kyenjojo District Western Uganda. We will investigate the key barriers to access and utilization to CC screening in this age group and data collected will be analyzed to provide a basis for suggesting solutions to address these gaps. The results will, therefore, generate data to be used to inform policymakers and local government authorities in programming cancer prevention activities among WHIV in line with Sustainable Development Goals (SDGs) in an effort to reduce mortality due non-communicable diseases by the year 2030.

Study goals and objectives

Goal

To assess the factors that hinder access and utilization of cervical cancer screening services among HIV/AIDs women in Kyenjojo District

Research objectives

1. To identify the factors that impede access and utilization of cervical cancer screening services among HIV/AIDs women in Kyenjojo District

2. To examine relevant gaps in Behaviour Change Communication (BCC) activities and priorities of service providers that impede access and utilization of cervical cancer screening services among HIV/AIDs women in Kyenjojo District.

3. To assess the local perception of the health services that can prevent access and utilization of cervical cancer screening programs among HIV/AIDs women in Kyenjojo District

Research questions

1. What are the factors that negatively affect access and utilization of cervical cancer screening services among HIV/AIDs women in Kyenjojo District?

2. What are the current local perceptions regarding access and utilization of cervical cancer screening services among HIV/AIDs women in Kyenjojo District and how these perceptions are determining their health-seeking behaviors?

3. Are there appropriate mobilization activities and Information Education Communication (IEC) materials on BBC to facilitate uptake of cervical cancer screening services among HIV/AIDs women in Kyenjojo District?

Theoretical / Conceptual Framework

a. Theoretical Framework

We shall employ the Health Belief Model to investigate possible perceptions, beliefs, and barriers that can explain why some WHIV do not engage in behaviors to prevent Cancer of cervix like screening services at Kyenjojo Hospital [14]. This model is based on assumptions that peoples belief and attitudes are key determinants of preventive actions that related to their health [15]. The constructs based on constructivist grounded theory analysis will be limited to perceived barriers and perceived seriousness where we will examine values, perceptions, and opinions of individual women to what will hinder them from adapting to new behavior and their judgment as to the severity of the Cervical cancer.

b. Conceptual Framework

Scheme of concepts/variables: Fig 1 below illustrates the three key components of HBM (individual perception, modifying factors, Variables affecting the likelihood of action) in relation to perceptions on access and utilization of cervical cancer screening services at Kyenjojo Hospital**.**

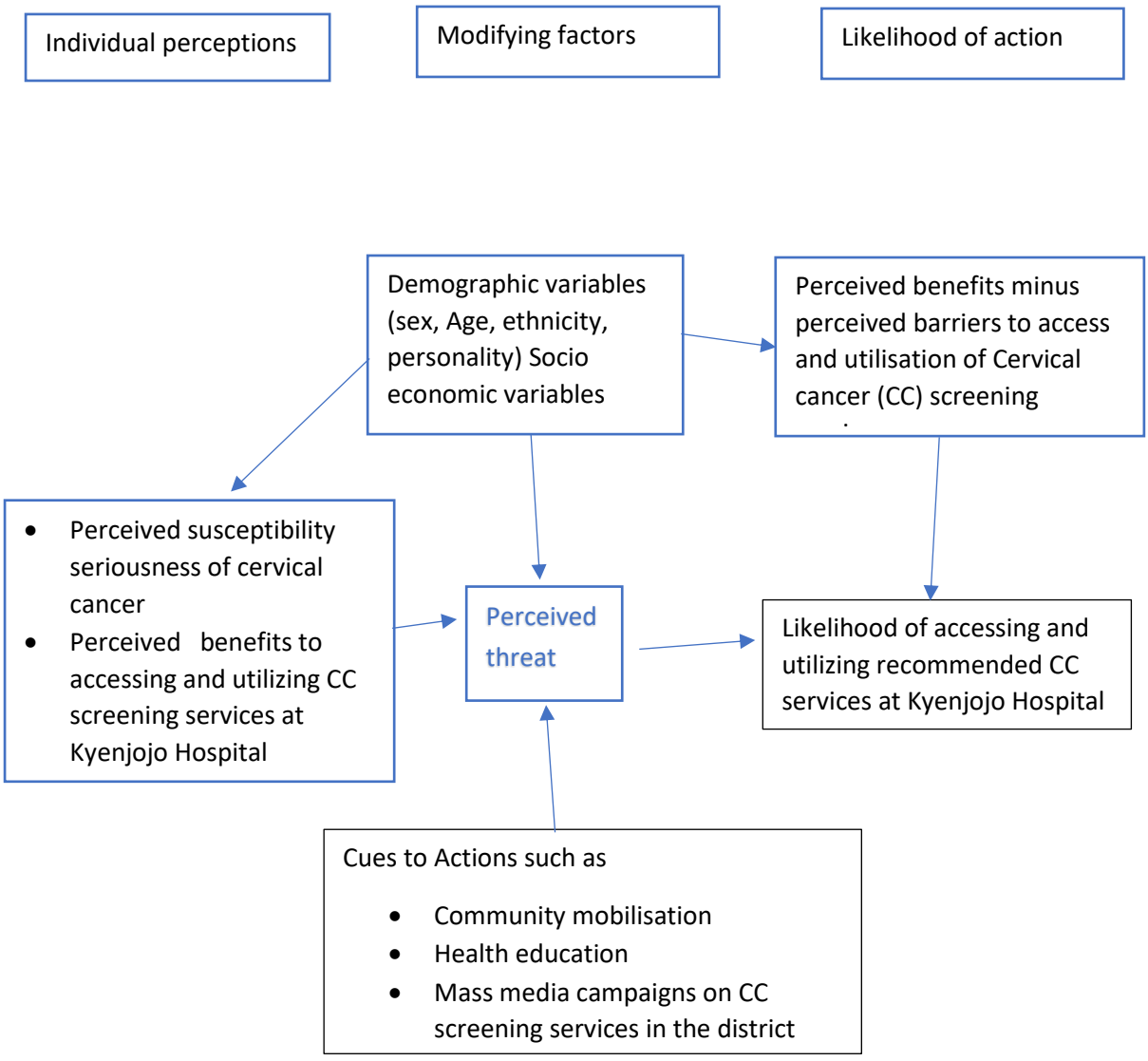

Fig 1 Adopted from Stanhope and Lancaster [14]

Literature Review

Cervical cancer (CC) is the second common cause of cancer worldwide with low and middle-income countries accounting for over 80% of cases [15]. CC is also the predominant female cancer in Eastern Africa where Uganda accounts for the highest burden in the region, with 22.6 % incidence compared to the top 20.1 % East African regional average rates [3]. Furthermore, The Sub Saharan Africa where Uganda has located an account for more than 70% of People Living with HIV/AIDs.

Even though Uganda has made considerable achievements in achieving SDGs by reducing Maternal Mortality Ratio from 438 per 100,000 (UDHS 2011) to 336 per 100,000 (UDHS 2016), Cervical cancer remains one of the leading and most frequent cancer among women aged 15-45 years in Uganda. Currently, there is no data regarding coverage of cervical cancer screening among WHIV in Uganda [11]. According to ASPIRE project Uganda, 2500 out of the 3500 women diagnosed with CC die since they report late in an advanced stage of CC. The gap in general knowledge on cervical cancer screening, availability of screening services, psychosocial barriers, and health workforce is observed to be on increase [12]. Inadequate infrastructure, limited access to preventive HPV vaccines in rural areas, staff training as well as screening and treatment opportunities further impede efforts to reduce CC incidence and mortality in developing countries like Uganda [16].

According to the Uganda HIV Impact Assessment (UPHIA 2016), the prevalence of HIV was approximately 6.0% a reduction from 7.3 % in 2011. The same report indicated that the number of people living with HIV in Uganda was approximately at 1,300,000 (AHSPR 2016). Since 1981, an increase in CC cases has been observed among WHIV. However, the use of antiretroviral therapy (ART) among these patients has helped decrease the risks and progression of opportunistic infections and promotes survival. Inadequate infrastructure, limited access to preventive HPV vaccines in rural areas, staff training as well as screening and treatment opportunities further impede efforts to reduce CC incidence and mortality in developing countries like Uganda [16].

In line with current evidence to increase the uptake of screening services, together with raising informed choice emphasized in disease prevention and control programming for early case detection, Uganda currently employs an approach of rolling down cervical cancer screening programs that use visual inspection with acetic acid (VIA) and treatment with Cryotherapy in rural settings like Kyenjojo Hospital that provide cervical cancer prevention services [13]. However, access and utilization of these services for Women living with HIV/AIDs remain low and the need to scale up these services in the rural districts is dire [17].

Even though there is no such evidence suggesting that any type of follow-up approach is superior or worse in relation to prolonged survival, improved quality of life among WHIV in Uganda, the need to establish practical follow-up protocols for WHIV who undergo Cryotherapy in Kyenjojo is quite substantial [18]. This is key in ensuring that recurrence of lesions is detected and treated early. Furthermore, there are serious gaps to address in programming CC screening services in terms of ensuring that women who are screened positive are followed up till completion of diagnosis especially in developing countries like Uganda [19].

Research Methodology

The setting of Study and Population

This study will be conducted amongst WHIV in Kyenjojo district. The participants in this study will be composed of women aged 20-50years. Our focus of the investigation will involve, mainly clients that attend ART Clinic and Reproductive health clinics in Kyenjojo Hospital. Healthcare workers in a Reproductive health clinic and policymakers in the district, None Governmental Organizations staff in Kyenjojo supporting the district hospital will also be included. The study will adhere to rights of vulnerable populations in line with the 2001 declaration on commitments on HIV/AIDs [20].

Study design

We will employ a grounded theory guided by Constructivist ideas informed by the school of Charmaz which builds on the original statements and strategies of Glaser and Strauss (1967). We chose this version because it addresses the structure of the participant's internal world (their values, beliefs, perceptions, thoughts, feelings, memories) rather than its social context from the inside world to the outside (Charmaz 1995). These Individual's beliefs and perceptions do generate particular emotions that later inform the individual's behavioral choices. Therefore, this approach will be based on interactions between the researcher and the research participants, we will simultaneously conduct data collection and analysis until saturation is achieved.

Sampling

This study will employ a purposive sampling strategy to select research informants as well as theoretical sampling to refine categories when key concepts have been discovered during data collection as opposed to population-based sampling. The sample size will depend on the extent of research project data collection approach, and saturation levels as discussed in the rules of thumb below. Thus, we will conduct all possible interviews until no new concepts are seen to emerge, that is to say, the themes and concepts begin to be redundant and nothing new to learn from the field.

Participants' selection procedure

The PI will visit Kyenjojo Hospital and consult with hospital administration and management to plan and recruit potential participants from relevant departments. Thus, we will employ very flexible and modifiable strategies to recruit members depending on the type and number of data collection activities. In case of an emergence of a new topic, or study questions, or when certain activities that are related to data collection amongst the populations fail to be useful in answering the set research questions, changes in the selection criteria will be done.

The respondents will be sampled purposively as follows; Snowballing sampling technique will be applied where, the PI will begin by identifying at least two (2) individuals that are relevant to this study, for instance, women living with HIV/AIDs attending ART clinic or Reproductive Health clinic VIA testing department and thereafter requesting them to locate other useful informants. Questions like who knows better about cervical cancer services in the hospital? will be asked. Eventually, there will be a few key names that will be mentioned repeatedly and will be selected.

For our Key Informants (KI), we will purposively select CC screening health professionals, support staff responsible for CC screening, district public health officials, Medical Education specialists, and activists. Whereas, women who are suffering from CC, Women Living with HIV/AIDs and at high risk of CC with their caregivers or family members will be purposively selected to participate in Focused Group Discussions (FGD). In order to explore more about

perceptions of these members to CC screening services at the hospital, we will conduct In-depth interviews with few individuals selected from the FGDs.

The rules of thumb based on data collection will be as follows; For key informants, at least five participants will be interviewed, while at least 5-10 people will be selected to form FGDs and to improve validity and allow triangulation, when the conclusions of these groups are not in agreement we will conduct more FGD until we reach saturation levels (World Health Organization, 1994). In order to explore personal experiences and individual perceptions of CC screening in Kyenjojo Hospital, In-depth interviews of at least 30 people will be conducted. Individuals will be voluntarily enrolled to participate in the above interviews and discussions.

A one-day classroom-based training will be done focussing on the description of the research methodology and its rationale. Extra more time on trainees will be provided in order to practice the techniques on each other as well as providing feedback to the group by PI. Before members are sent to the field, pre-testing of the tools to be used in the field will be performed to familiarize the research team with the different instruments through an interactive process of developing as in role-plays**.** Hence, Observation and systematic data collection methods training will be provided in the field sites just prior to their use as well.

Inclusion and exclusion criteria

Inclusion

All women Living HIV/AIDs aged 20-50years, Women living with cervical cancer and their caregivers, healthcare providers managing the cervical cancer screening, policymakers, and NGOs supporting the program will be included. The researcher will also interview the head of the cervical cancer screening clinic at Kyenjojo Hospital.

Exclusion

All women Living HIV/AIDs aged 20-50years and staff managing the cervical cancer screening who refuse to participate or decide to withdraw from the study and those policymakers who shall refrain from participating in the study will be excluded.

Search criteria for secondary data

Inclusion criterion; We intend to search publications and written articles on cervical cancer prevention especially screening among HIV women, from PubMed, Cochrane libraries, WHO Library, World Bank reports, with publication ranges between 2010 and 2017.

Exclusion criterion: All the non-English publications or publications before 2010 will not be included in our search.

Data collection method

We will collect data, compare this data, while we remain open-minded to every possible theoretical understanding of the same data. We will proceed to develop interpretations of these data through our coding and categories categorization processes and further return to the field and collect additional data to check and refine our categories. Thus, the collection of data will gradually be focused and informed by the emerging theory until we reach saturation levels, which is the stage when a further collection of evidence provides little in terms of further themes, insights, perspectives.

Primary data collection

Key informants (KI) will be selected purposively. They will include Reproductive health (RH) clinic staff, Hospital managers, NGOs partners, Expert clients and key district policymakers

Focused group discussions (FGDs), KIs as well as In-depth interviews, will be applied to collect the data. The researcher will collect data, explore it through initial open coding, three types of coding will be applied. The theoretical coding will involve merging of concepts into groups this will happen throughout the process (Bringer, Johnston and Brackenridge 2006), during data gathering process, we will adopt a situation of mutuality among ourselves and participants, which will require a rethinking of the grounded theorist's traditional role of objective observer.

Secondary data collection

This will consist of a summary of existing data on HIV and cervical cancer screening, previous research reports, books, journals, government and partner NGO statistics and online databases

Data management and analysis

Our Data analysis will involve three key strategies of coding, memo writing, and theoretical sampling. Coding will involve the use of the short-hand label to sort, synthesize, and conceptualize data.

We will simultaneously gather data and analysis until saturation is achieved. Data analysis process will include text coding, data comparison, categorization and memo writing to elaborate on the research data categories. Atlas-ti will be employed to code the collected qualitative data.

During the secondary data collection process, we will install a special research software such as Mendeley or Zotero on laptops. Articles that will meet our eligibility criteria for this study will be downloaded and imported into this software accordingly, thereafter, the PI will independently extract the details below;

1) The Journal, publication status, title, authors, and date of publications.

2) Categorization of screening methods, VIA, VILLI, PaP smears and setting developed or developing the country.

3) What target population is affected, their age group, HIV status.

Expected study outcomes

Expected primary outcomes

- Documentation and dissemination of data on access and level of utilization of cervical cancer screening services to WHIV in the district and country at large.
- Availability of information for use to address barriers to access and utilize CC screening service by WHIV in Kyenjojo.
- Documentation of information to improve programming of CC screening services among WHIV by program support partners in the district.

Secondary outcomes

- Documentation of theories on CC screening services among WHIV that can guide future research in the country and global stage.
- Improvements in quality of information and statistics that can inform policymakers in programming CC screening programs among WHIV in rural law resource settings.
- Improved advocacy for CC services in the Kyenjojo District.

Dissemination of results and publication policy

The principal investigator (PI) will take lead in the publication of the research findings. All contributors to this research project will be included in the publication as well as major funders.

Ethics and dissemination

Permission from a Ugandan based Ethics Committee for Research in Health will be sought. Informed consent from respondents will also be obtained. The identity of respondents including ART numbers will not be recorded on questionnaires

Selected participants will be enrolled on an entirely voluntary basis and will be permitted to freely respond to the questions. We will conduct Interviews outside the ART clinics away from other clients. Confidential information to interviewees will be avoided. Permission from the ethical committee to review and authorize this research will be sought. However, before the start of this study, a departmental meeting involving Reproductive Health and ART clinics will be conducted to ensure the privacy of clients are respected. The findings from this study will be published as per the decision of funders.

The principal investigator is updated professional in research ethics. He will ensure that the study avoids plagiarisms and violations of rights and conventions of vulnerable groups such and women with HIV/AIDs. Thus, we will abide by the core ethical principles such as beneficence, justice, and respect for the rights of the vulnerable populations especially those with HIV/AIDs as stipulated in Geneva conventions of human rights. The study will be subjected to a full ethical review by the local ethical review committee for authorization and monitoring. Authority to conduct the study in the hospital will be sought from the hospital administration which may evaluate direct benefits of this study for the WHIV who will participate in this study as well as expected benefits for the local communities in which the study will take place including overall potential benefits to science and the world at large.

Project duration and timelines (See details under Appendix 2)

Data will be collected between November-2017 to April-2018. The study will last for a period of 1 to 2 months depending on prevailing conditions including access to funds

Financing, implementation, and management

Funds will be wired to Underprivileged Development Initiative (UPDI), a Non-Governmental Organization (NGO) which has operated in the District for about 3years**.**

Declaration conflict of interest

The Author worked in the cervical screening clinic at Kyenjojo during its initial stages, he is no longer active in the same clinic. Therefore, there is no conflict of interest.

References

[1] E. Kumakech, S. Andersson, H. Wabinga, and V. Berggren, "Integration of HIV and cervical cancer screening perceptions of healthcare providers and policy makers in Uganda," *BMC Public Health*, vol. 14, no. 1, p. 810, 2014.

[2] M. Schiffman, N. Wentzensen, S. Wacholder, W. Kinney, J. C. Gage, and P. E. Castle, "Human Papillomavirus Testing in the Prevention of Cervical Cancer," vol. 103, no. 5, 2011.

[3] A. Bukirwa *et al.*, "Motivations and barriers to cervical cancer screening among HIV infected women in HIV care: a qualitative study," *BMC Womens. Health*, vol. 15, no. 1, p. 82, 2015.

[4] M. Olivia, N. J. Ramalivhana, N. P. N. Augustine, and M. Maxwell, "Knowledge, Attitudes, and Practices of HIV-Infected Women on Cervical Cancer Screening at a Church-affiliated Hospital," vol. 15, no. 4, pp. 119–126, 2016.

[5] E. Omenge, J. Wachira, and F. C. Asirwa, "Factors Associated with Uptake of Visual Inspection with Acetic Acid (VIA) for Cervical Cancer Screening in Western Kenya," pp. 1–12, 2016.

[6] A. Manuscript, "NIH Public Access," vol. 5, no. 1, pp. 11–17, 2013.

[7] UNAIDS, "The HIV And AIDS Uganda Country Progress Report 2014," p. 73, 2015.

[8] P. M. Amegbor, "Health seeking behaviour in asikuma-odoben- brakwa district: a pluralistic health perspective," vol. 1, no. May, pp. 1–142, 2014.

[9] H. Survey and K. Indicators, "Demographic and Health Survey," pp. 7–71, 2016.

[10] "AHSPR 2016_17 Final_25_9_2017." .

[11] G. C. Index, "Uganda Uganda," vol. 1, no. July, pp. 2011–2012, 2012.

[12] F. F. Teng *et al.*, "Understanding the role of embarrassment in gynaecological screening: a qualitative study from the ASPIRE cervical cancer screening project in Uganda," *BMJ Open*, vol. 4, no. 4, p. e004783, 2014.

[13] I. With and A. Acid, "Oncologist," pp. 1278–1284, 2013.

[14] V. Stretcher and I. M. Rosenstock, "The Health Belief Model," *Heal. Behav. Heal. Educ. Theory, Res. Pract.*, pp. 31–36, 1997.

[15] C. M. Ndikom and B. A. Ofi, "Awareness, perception and factors affecting utilization of cervical cancer screening services among women in Ibadan , Nigeria : a qualitative study," *Reprod. Health*, vol. 9, no. 1, p. 1, 2012.

[16] A. W. LaVigne, S. A. Triedman, T. C. Randall, E. L. Trimble, and A. N. Viswanathan, "Cervical cancer in low and middle income countries: Addressing barriers to radiotherapy delivery," *Gynecol. Oncol. Reports*, vol. 22, no. August, pp. 16–20, 2017.

[17] T. Everett, A. Bryant, M. F. Griffin, P. P. Martin-Hirsch, C. A. Forbes, and R. G. Jepson, "Interventions targeted at women to encourage the uptake of cervical screening," *Cochrane Database Syst. Rev.*, no. 5, pp. 2–4, 2011.

[18] A. Lanceley, A. Fiander, M. McCormack, and A. Bryant, "Follow-up protocols for women with cervical cancer after primary treatment," *Cochrane Database Syst. Rev.*,

no. 11, pp. 2–4, 2013.

[19] P. Basu, F. Meheus, Y. Chami, R. Hariprasad, F. Zhao, and R. Sankaranarayanan, “Management algorithms for cervical cancer screening and pre-cancer treatment for resource- - limited settings,” vol. 138, pp. 26–32, 2017.

[20] P. Declaration, G. Report, and P. Declaration, “U m a n,” no. June 2006, 2008.

[21] Who - World Health Organization, “Qualitative research for health programmes.” p. 99, 1994.

(Quick J, Jay J, Langer A (2014) Improving Women's Health through Universal Health Coverage. PLoS Med11 (1): e1001580. https://doi.org/10.1371/journal.pmed.10015)

Appendix 1: Budget

Activity	Quantity	Total Cost	Remarks

Hire Research Assistants	2	800,000	
Stationary		100,000	
Services (Internet, photocopying binding)		120,000	
Dissemination (Publishing, conferences)	1	3,800,000	
Travel (Supervision, field monitoring)	5	500,000	
Training (On data collection tools)	1	1,000,000	
Ethical review	1	2,000,000	
Equipment (Laptop)	1	2,400,000	
Total		9,720,000	2558 USD
Overhead	5%	486,000	128 USD
Grand Total		10,206,0000	2686 USD

Appendix 2: Research Project Timelines

ACTIVITIES	WK 1	WK2	WK3	WK4	WK5	WK6	WK7
Submission of a research proposal to University	xx						
Ethical Review Approvals	xx						
Training Research Assistants		xx					
Procure research tools		xx					
Data collection and Analysis			xx	xx	xx	xx	
Research Report							xx
Presenting research findings to University							xx
Initiation of Publications of research findings to the relevant journal.							xx

Note: WK= Week

Understanding barriers to access and utilization of cervical cancer screening services among WHIV at Kyenjojo Hospital Questioneer

Consent form

Informed Consent Form

Principal Investigators Name: Katwesige Wycliff

Affiliation: Masters of Public Health Texila American University and UPDI Uganda.

We are inviting you to take part in a one-month research study that we are conducting on Women Living with HIV/AIDs herein abbreviated as WHIV, if you are willing to participate in this study, we would like to obtain your consent.

We are requesting you to participate in the study because we intend to understand the barriers to access and utilization of cervical cancer screening services in order for the concerned partners to take action in improving the quality of these services at Kyenjojo Hospital. If you have decided to take part in our study, we would like to ask you to participate in an interview or in an informal group discussion with other members/clients in the hospital. We will meet you in a convenient place within Kyenjojo hospital or at your Office or any convenient place for you. The discussions will also be approximately 1-2 hours in length and will be scheduled at a time that suits you.

There are no risks to you or your family from your participation in this study and your participation will also remain completely confidential. We will assign a code to your name that only we know and store this information on a computer that is password protected so that no one will ever know your name. This means that no one except us will in particular know that the answers you give are from you. No reports or publications will use information that can identify you by names in any way. We may also get your permission to tape record the interviews so that they can be transcribed at a later date. After transcription, the recordings will be destroyed. Once we have completed the study we will work with Kyenjojo Hospital management and district leadership or mass media to give you feedback about this research.

It is important to realize now that you do not have to participate in the study if you are not ready and that your participation is completely voluntary. You are also free to decline any or all questions and withdraw from the study at any time that you wish. While some of these questions may seem embarrassing to you, we will do everything we can to ensure that you feel comfortable.

If you have any questions about this study, I would be happy to discuss this with you now. And if you have any questions or problems related to the study in the later course of time, you can contact us or our relevant partners in Kyenjojo on email: katnagaish@yahoo.com or Tel +256782091220.

Do you agree to participate in this research and understand that you are free to withdraw from the study at any time? (Interviewer circles respondent answer)

(1) Yes
(2) No

_____ _____

Signature of person who explained the study to the participant Date of consent