

---

**Knowledge of Cervical Cancer Screening Among Women Attending Six Weeks Postnatal Care at Katter Health Centre, Windhoek: Thomas Region**

Petrus F.S\*<sup>1</sup>, Nghitanwa E.M<sup>2</sup>, Amukugo H. J<sup>3</sup>

University of Namibia, Faculty of Health Sciences, School of Nursing

\*Corresponding author

**Abstract**

The overall aim of this study was to explore and describe the knowledge of cervical cancer screening in women visiting Katter Health Centre during six weeks postnatal follow up. A qualitative, exploratory and descriptive study design was used. Data were collected through in depth interviews from 9 women attended six weeks postnatal care at Katter Health Centre. Participants were selected on purposive basis. Interview guide was used to collect the data .Data analysis were conducted using the Tech's method .The study revealed that women have poor knowledge on cervical cancer screening. Furthermore, participants indicated different factors which affect cervical cancer screening uptake such as poor understanding of the importance of cervical cancer screening, health care limitation and negative experiences during cervical cancer screening procedures. The study recommends that , health education programs should be initiated to women through different platforms to equip the women with sufficient knowledge about cervical cancer screening. In addition, there should not be a limited numbers of women for cervical cancer screening per day in all public health facilities.

**Keywords:** cancer, cervix, knowledge, postnatal care, screening, women

**INTRODUCTION**

According to World Health Organization cervical cancer is one of the leading causes of mortality and morbidity in women aged 25 to 60 years worldwide (Torre et al , 2015). According to (Parkin et al, 2002)84% of cervical cancer cases occurred in less developed countries with the highest in Africa. Although cervical cancer could be prevented ,most of the time cervical cancer is not being diagnosed earlier due to insufficient access to reproductive health care services, non effective screening and lack of early treatment which affects too many women in the Africa (World Health Organization ,2001).Nevertheless, the (World Health Organization ,2001)estimate that cervical cancer screening saves around 4500 lives in each year in economically developed countries.

John (2011) conducted a study to determine the knowledge, attitude, practice and the perceived barriers toward screening for cervical cancer among women aged 18 and above in single urban in Tanzania. The study revealed that there was poor knowledge and practice among participant towards cervical screening as only 14.2% participant had cervical cancer screening. However, in a similar study conducted among Gabonese women, 65% of participants had pap smear before

the study which indicated that their level of knowledge on cervical cancer screening was much better, (Assume et al, 2015). Some women reported being embarrassment about the test and fear of pain during the cancer screening procedure. Furthermore the study also found out that the main reason given by women who had never been screened for cervical cancer but have heard about it was due to neglect (Assume et al, 2015).

According to (Moyer, 2012) various screening tests have shown to be helpful in finding cancers early and in decreasing the chance of dying from cervical cancer. The World Health Organization (2011) states Pap smear test as the affordable, common test which was introduced in 1968 which resulted in 68% reduction in cervical cancer related deaths. Pap smear is a procedure to collect cells from the cervix and vagina whereby a piece of cotton, a brush or a small wooden stick is used to gently scrape from the cervix and vagina; and the cells are viewed under a micro scope to find out if they are abnormal (World Health Organization , 2011) . Another test used to detect cervical cancer is Human Papiloma Virus ( HPV) testing which is used to detect HPV , the most causes of cervical cancer(World Health Organization, 2001) .A study conducted by Modibbo *et al*(2017) titled ‘Barriers to utilisation of cervical cancer in the Sub-Saharan Region; Africa identified barriers to uptake cervical cancer screening such as ,the fear of the procedure and outcome, painful, wrong perception as they believe that the procedure involved removal and re-insertion of the uterus, lack of awareness and knowledge of cervical cancer and services and poor awareness of cervical cancer and preventive opportunities. In addition, other participants indicated that they felt that there is no need for screening when they don’t have any symptoms and believed screening is only for women who are sexually active. A study conducted in Uganda to assess the uptake of cervical cancer screening and associated factors among women shows that only very few participants (4.8%) had ever been screened for cervical cancer. Among the respondents who had not been screened, most (64.5%) stated personal perception related reasons such as having no signs and symptoms of the disease, not being at risk, lack of time and fear of test outcomes (Ndejjo , 2016).

Postnatal care provision in Namibia has been including free pap smear since its introduction through primary health care services in 1992 (Ministry of Health and Social Services of Namibia , 2003). In spite of efforts made to educate women on benefits of cervical cancer screening, the statistics revealed a low uptake of cervical cancer screening. The incidence of cervical cancer, being the second most common cancer among women in Namibia, remains high, as it represents 18.4% of all cancers among women in Namibia ([Izaaks](#) et al, 2016). However, there is a limited knowledge on cervical cancer among the community and only limited number of health care workers is trained on cervical cancer screening. Furthermore, the tracing of women who shows malignancies after cervical cancer screening is inadequate (Ministry of Health and Social Services, 2013). In spite of those challenges, there is a dearth of studies conducted on cervical cancer screening in Namibia.

## **PURPOSE**

The study purpose was to explore and describe the knowledge of cervical cancer screening among women attending six weeks postnatal care at Katter Health Centre in Namibia.

The objectives of this study were to:

- Explore and describe the knowledge regarding cervical cancer screening among woman attended six weeks postnatal care.
- Explore and describe the factors hindering cervical cancer screening uptake among women who attended six weeks postnatal care.

## **METHODS**

A qualitative, exploratory and descriptive design was used to gain insight and discover meaning regarding knowledge of cervical cancer screening among women who attended six weeks postnatal care at Katter Health Centre, Windhoek; Thomas region. The study population consisted of all women attended six weeks postnatal care at Katter Health Centre, regardless of age. Purposive sampling method was employed to conduct this study and to choose the sample from the population .A simple random sampling procedure was used to select women that were participating in the data collection until data saturation was reached. Data was saturated after interviewing 9 participants.

Interview guide with open ended questions was used to obtain information directly from the participants. The interview was conducted in one language, English. An interview guide was used to guide the researcher during the interview in terms of probing questions. Every interview was recorded with an audio recorder after the researchers obtained the consent from the participants. Field notes were used during the interview to ensure that all of the participant's expressions were captured. Data was collected in the private room at Katter Health Centre, Windhoek. Pilot testing of data collection tool was contacted before the actual interview. Two women were selected for the pilot study at the same health centre and few adjustments were made on the interview guide. The results obtained from the pilot study were not included in the report of the main study.

Data was analysed using Tech's method. The data analysis procedure include steps of preparing and organizing data such as text data in transcripts for analysis, then reducing the data into themes through a process of coding and controlling the codes and finally representing the data in a discussion. The data were sorted in themes and subthemes, based on the question asked and how they were answered.

## **ETHICAL ISSUES**

Permission to conduct research was obtained from the University of Namibia, School of Nursing research ethical committee and the Ministry of Health and Social Services research ethical committee. The purpose of the study and the right to participate or to withdraw from the study was explained to the participants before the study. Participants participated were voluntary by signing the informed consent before commenced with the study. This was done to ensure the principle of respect, justice, autonomy and beneficence. Confidentiality and anonymity were maintained by not writing names of the participants on the questionnaires so that participant's name could not be linked with answers. All participants were informed of their right to opt out of the study any time if they wished to do so.

**RESULTS**

**Description of the demographic characteristic of the participants**

Participants were within the age range of 20-30. Regarding the employment status, majority of women had formal employment, 2 were unemployed, one was self-employed and another one was a student.

**THEMES**

During data analysis four main themes and three sub-themes were identified and presented in table 2.

Table 2: Themes regarding cervical cancer screening

THEME	SUBTHEME
Theme 1 : Participants knowledge on cervical cancer screening	
Theme 2 : Participants knowledge on cervical cancer screening methods	
Theme 3 : Participants had no cervical cancer screening before	
Theme 4 : Participants indicated factors hindering cancer screening uptake	Subtheme 4.1: Lack of knowledge regarding the importance of cervical cancer screening
	Subtheme 4.2: Poor health care service delivery

	Subtheme4. 3 : Pain during the procedure
--	--

**Participant’s knowledge of regarding cervical cancer screening definition**

This theme describes the essence of how participants in this study understood the term cervical cancer screening. The findings revealed that women who attended six weeks post-natal care had a clue of what the term cervical cancer screening is. Cervical cancer screening is used to find changes in the cells of the cervix that could lead to cancer.

In this study participants interpreted cervical cancer screening as evidenced below:

*“..... I think testing women for cancer of the cervix”. (P 6)*

*“(Silent)...Cervical cancer screening is done on women to test for cervical cancer.” (P 8)*

**Theme 2: Participants expressed knowledge regarding methods of cervical cancer screening**

Participants expressed their knowledge regarding cervical cancer screening as Pap-smear.

Below is a quote from one participant:

*‘Hahira!! I only know of one method, isn’t it the only one available? Mammy its pap smears, I did it once in July last year, you know what the nurse did. Mammy she took a metal instrument, inserted in my vagina and felt it being rotated inside me and collected some fluid that were sent to the laboratory for testing’. (P 7)*

*“The method that I know is they make you lay on your back and there is an equipment they insert in your private parts so that the doctor examining you can see the opening of the cervix well and whether it has wounds or not and they collected something for the laboratory.” (P4)*

**Theme 3: Women had co cervical cancer screening before.**

Majority of women interviewed had no cervical cancer screening before. This is evidenced by one participant as below:

*Oo..., I never had Pap smear in my life... I did not know that it is important ... (P3)*

*"I never had pap smear before. I heard that it is painful."(P2)*

#### **Theme 4: Factors hindering cancer screening uptake.**

This theme describes the essence of the participants regarding cervical cancer screening. Two subthemes emerged as follow.

***Sub-theme: Lack of knowledge regarding importance of cervical cancer screening. Women indicated that they don't know if it is necessary to have a cervical cancer screening done because they felt that they don't have problem that would lead them to have it done. They also feel too many unnecessary screening that women have to undergo.***

*Below is a quote from one participant:*

*"I don't think it's necessary for me to have a pap smear test because I don't have any abnormal bleeding, even after giving birth my flow was normal, I don't express any pain on my lower abdomen. I am healthy, and that's why I wouldn't go for the cervical screening."( P 6)*

*Sub-theme: Poor health care service delivery*

*Most women feel one day per week of pap smear test which is offered in all state facilities is not enough. Furthermore, participants indicated that the system followed where by each health facilities have a limited number of clients for pap smear in one day per week is hindering pap smear uptake. This was evidenced by the following quote:*

*"There was one Tuesday I came for pap smear at this clinic before I become pregnant and the nurse told me to come on Wednesday. She didn't even bother to tell me that they only take 30 people per week on Wednesdays. So when I came I just wasted my time. They had reached their limits. I wonder now is it done like that everywhere or only in state health facilities?"( P 4)***6.2.4.3 Pain**

Participants indicated that women who took the cervical cancer screening experienced pain during the examination and they bleed after the procedure. This is evidenced by the following quote of one participant:

*"Awash. I will never have a pap smear done again because of the pain I felt. Or is that the nurse was not gentle. I was paining down there even up on my tummy."(P 8)*

## **DISCUSSION**

Most of the participants were within the age range of 20-30. This can be because this age group is the highest of child bearing women and categorized as being the most sexually active. These results is different from the result on (Ministry of Health and Social Services ,2013) which shows that many women aged less than 20 years attended postnatal care at 6 weeks after delivery followed by women aged 35-39 years. All women regardless of age are advised to go for postnatal care so that postnatal care services including pap smear should be conducted. Women will also be advised by health workers on the next Pap smear test.

Employment plays a vital role in people particularly women in seeking medical attention. People who are employed are more likely not to seek health care due to the educational status as well as financial status e.g. transport cost(Ministry of Health and Social Services of Namibia , 2003). This study finding concurs with Ministry of Health and Social Services, (2013) who stated that employment status was associated with the participation in cervical cancer screening. Women who were employed had lower screening participation than those without jobs. It is difficult to attend a cervical cancer screening during working hours probably because companies do not provide leave days for such services. Participants indicated the knowledge of the cervical cancer screening. These results are supported by the study done by hang et al. (2013), where by the findings suggested that most women knew that pap smears are used to test for cervical cancer. Most women are attending health education sessions where they are being informed on many health related aspects. However, this study findings are different from the study conducted in Peru by Rustic et al ( 2012) regarding the low knowledge of cervical cancer screening among women and how it can be improved which revealed that women had low knowledge regarding cervical cancer screening.

Participants indicated their knowledge on the type of cervical cancer screening as pap smear. Knowledge is defined as the fact or condition of knowing something with familiarly gained through experience or association. Pap smear is a procedure to collect cells from the cervix and vagina, whereby a piece of cotton, a brush or a small wooden stick is used to gently scrape from the cervix and vagina the cells are viewed under a micro scope to find out if they are abnormal (World Health Organization, 2011) .This study revealed that many participants had never had pap smear before. This study finding is supported by a study conducted in South Africa which found out that at least half of study participants have never had a Pap smear or had one more than 10 years ago( Paz-sold an et al , 2010) .This study findings is supported by the findings of a similar study done ([Mosavel](#) et al, 2009) were lack of awareness of cervical cancer and the lack of knowledge on the importance of screening. Reasons cited by participants reflected ignorance on part of the participants as respondents indicated that there was no reason for not taking a Pap smear.

The importance of cervical cancer screening is pointed out by (Gatos et al, 2015) by stated that if the Pap smear test detects any irregular cells that have the potential to develop into cervical cancer, women can get the appropriate treatment they need right away to stop the cancer from developing.

The result of the study on poor service delivery are similar to the study done (Jain et al, 2016) which reveal that women unanimously expressed unhappiness over the lack of facilities, staff, and infrastructure in government hospitals. Long waiting queue and lengthy procedural delays are common was also stated as contributing to low cervical screening uptake. Participants indicated pain as contributing to low cancer screening uptake. This results are supported by a similar study (Comair , 2014) in rural Kwazulu-Natal, which suggested that women who had a screening associates the procedure with some degree of fear. Women stated that pap smear is easy but a little painful and are frightened by the nurse looking at their private parts and deter many women because they are afraid and they think it will hurt. Therefore, education and awareness is needed to equip the women with adequate knowledge on cervical cancer screening.

## **CONCLUSION**

The study concluded that although cervical cancer is one of the highest cancers among women in Namibia women have poor knowledge on cervical cancer screening. The study unveiled factors which affect cervical cancer screening uptake such as poor understanding of the importance of cervical cancer screening, health care limitation and negative experiences during cervical cancer screening procedures. The study recommends that, health education programs should be initiated to women through different platforms to equip the women with sufficient knowledge about cervical cancer screening. In addition, the MOHSS should ensure that cervical cancer screening should be available every day at all health facilities without limitation of the number of patients to be screened per day. The MOHSS should also ensure that all health workers are trained on cervical cancer screening.

## **ACKNOWLEDGEMENT**

The researchers would like to thank the Ministry of Health and Social Services research ethical committee for approving this study and providing the ethical clearance. We also thank the registered nurse in charge of Katter Health Center for granting us permission to conduct this study. Lastly, our sincere gratitude goes to the participants who participated to this study voluntarily.

## **REFERENCES**

- Assume, S. Z., Mafia, M. B., Mbiguino, A. N., &Mustapha, M . (2015). Awareness and knowledge regarding of cervical cancer, Pap smear screening and Human papillomavirus in Gabonese women.*BMC Women's Health*,15:37<https://doi.org/10.1186/s12905-015-0193-2>
- Chang,H.K. , Minong, J. , Bun, S.W , Lee, S. , Lee, Y. S. , Lee K.H , Park, D. C, Kim, C. J , Hur, S. Y , Park, J.S. , Park T. C . (2017). Factors associated with participation in cervical cancer screening among young Koreans: a nationwide cross-sectional study *BMJ*, doi: 10.1136/bmjopen-2016-013868



- Comair, A. (2014). "Barriers to Successful Cervical Cancer Screening in Rural Kwazulu-Natal, Cato Manor, and Cape Town" Independent Study Project (ISP) . Collection. Paper 1759. [http://digitalcollections.sit.edu/isp\\_collection/1759](http://digitalcollections.sit.edu/isp_collection/1759)
- Gattoc, L., Viswanathan, A.N., Perez, C.A., Tew, W.P & Makhija, S. (2015).Cervical cancer. *Caucasus Journal of Health Sciences and Public Health*. 1 (1).
- [Isaacs](#) C.D, [Truer](#) E.J and [Khan](#), S. (2015). Prevalence of human papilloma virus in cytological abnormalities : Association of risk factors and cytomor theological findings.  
*Cato Journal*. : 9:19
- Jain, N., Halder, A. & Mehrotra, R. A . (2016). Mixed Method Research to Identify Perceived Reasons and Solutions for Low Uptake of Cervical Cancer Screening in Urban Families of Bhopal Region. *Scientific*. 1-13. doi:10.1155/2016/5731627
- John, J. ( 2011). *The knowledge, attitude, practice and perceived barriers towards screening for premalignant cervical lesions among women aged 18years and above*. Songea urban: Ruvuma. Master thesis. Muhimbili University of Health and Allied Sciences. [http://ihi.eprints.org/962/1/muhas\\_\(39\).pdf](http://ihi.eprints.org/962/1/muhas_(39).pdf)
- Ministry of Health and Social Services of Namibia . (2003). National policy for reproductive health. Windhoek ,Namibia. Namprint.
- Ministry of Health and Social Services (MoHSS) & ICF International ( 2013). *Namibian Demographic Health Survey* . Windhoek, Namibia and Rockville, Maryland, USA: MoHSS and ICF Internationa .
- Modibbo, F.I., Dareng, E., Bamisaye, P., Jedy-Agba, E., Areole, A., Oyeneyin, L., Olaniyan, O. & Adebamowo, C. ( 2017). Qualitative study of barriers to cervical cancer screening among Nigerian women. *BMJ Journal*. 6(1):1-12.<http://bmjopen.bmj.com/content/6/1/e008533>
- [Mosavel](#) M, [Simon](#) C, [Oakar](#) C, and [Meyer](#) S. (2009).Cervical Cancer Attitudes and Beliefs – A Cape Town Community Responds on World Cancer Day.*Journal of Cancer Education*. 24(2): 114–119.
- Moyer VA.( 2012). Screening for Cervical Cancer: U.S. Preventive Services Task Force Recommendation Statement. *Annals of Internal Medicine*. 156(12):880-891
- Ndejjo, R, Mukama, T., Musabyimana, A. and Musket D . ( 2016) .Uptake of Cervical Cancer . Screening and Associated Factors among Women in Rural Uganda: A Cross Sectional Study.Plos One : 1-13. doi.org/10.1371/journal.pone.0149696
- Parkin D.M., Ferlay F., & Pisani J. Global Statistics. (2002) *Cancer Journal for Clinicians*

PDQ® Screening and Prevention Editorial Board. PDQ Cervical Cancer Screening. Bethesda, MD: National Cancer Institute. Updated <04/14/2016>. Available at: <https://www.cancer.gov/types/cervical/patient/cervical-screening-pdq>. Accessed <05/30/2017>. [PMID: 26389215]

[Paz-soldán](#) V.A, [Nussbaum](#) L, [Bayer](#) A.M , and [Cabrera](#) L .(2010). Low knowledge of cervical and cervical pap smears among women in Peru, and their ideas of how this could be improved. *Int Q Community Health Educe* : 31(3): 245–263.

Rositch, A. F., Gatuguta, A., Choi, R. Y., Guthrie, B. L., Mackelprang, R. D., Bosire, R., Farquhar, C. ( 2012). Knowledge and acceptability of Pap smears, self-sampling and HPV vaccination among adult women in Kenya. *PLoS ONE*, : 7(7). <http://doi.org/10.1371/journal.pone.0040766>

Torre L.A, Bray F, Siegel R.L, Ferlay,J Lortet-Tieulent,J , Jemal, A .( 2015).Global Cancer Statistics, *A. 65 ( 2)*:87–108

World Health Organization. *American Cancer Society*. (2011) Retrieved from [www.healthcentral.com](http://www.healthcentral.com) (14, Feb 2017).

World Health Organization. (2001)*WHO guidelines for screening and treatment of precancerous lesions for cervical cancer prevention*. World Health Organization publication. Geneva. Switzerland.