

**ORIGINAL ARTICLE**

# Cervical Cancer Awareness and uptake of Pap-Smear Services among Women above 18 years of Age

<sup>1</sup>M.H. Simaubi\*, <sup>2</sup>M.C. Ngoma

<sup>1</sup>Livingstone School of Nursing

<sup>2</sup>Department of Nursing Sciences, School of Medicine

## ABSTRACT

Cervical cancer is a significant public health problem among women in Zambia. The purpose of the study was to determine the awareness of cancer of the cervix and Pap smear uptake among the women aged 18 years and above. This was a mixed method study that used both quantitative and qualitative methods that was conducted in Maramba compound in Livingstone. Multistage and convenient sampling methods were used to select 389 respondents who participated in the study. Quantitative Data was collected using face to face interviews.

Purposive sampling of 2 Focus Group Discussion (FGD) participants that had 6 participants per FGD was carried out. The first group comprised participants who were 18 - 35 years old and the second group was participants above 35 years old.

The findings revealed that 52.2% (203) of the respondents had never heard of cancer of the cervix whilst slightly less than half 47.8% (186) of the respondents had heard of cancer of the cervix, while 55.8% (217) had heard of Pap smear. None had ever done a Pap-smear, when asked why none of them did not do a Pap smear, 56.3% (219) of the respondents said that they were not aware of Pap smear services offered at Livingstone general hospital, while 40.4% (157) did not do Pap smear because of fear of positive results. The respondents were asked to identify women who were at risk of cervical cancer, 39.1% (152) said all women, 32.1% (125) said women who are sexually active and 26.5% said married women. There

was an association between Socio-Demographic characteristics Educational Level (P-value 0.368), Age (P-value, 0.136) and respondents' response of those who are at risk of developing cancer of the cervix. Economic status was significantly associated with awareness of cancer of the cervix (P-value 0.004). There is need to for the Health care professionals to intensify Information, Education and Communication (IEC) on cancer of the cervix and its prevention.

## INTRODUCTION

Cancer of the cervix is a major cause of death in women around the world, but has become less common in countries that use Pap tests<sup>12</sup> Women are at risk for cancer of the cervix through out their lives, If the cancer is found and treated early, as many as 90% of women who have it can be cured<sup>19</sup>

Pap smear has been the preferred prevention strategy for cervical cancer by periodically screening women to identify abnormal cells, and destroy them before they progress into invasive cancer, and it has proven to be an effective means of reducing morbidity and mortality of cancer of the cervix<sup>5</sup>

Statistics show that 63 out of 100,000 women in Zambia die from cervical cancer<sup>17</sup> In Zambia, cervical cancer strikes 63 women in 100, 000<sup>17</sup> .<sup>17</sup> further pointed out that in 2003 alone, more than 1,000 women died of cervical cancer with two or more dying every week. The current estimates indicate that every year 1650 women are diagnosed with cancer of the cervix and that 1340 die from the disease in Zambia<sup>23</sup>

### \*Corresponding Author

Simaubi, M.H  
Livingstone School of Nursing  
P.O. Box 60091, Livingstone

The same study showed 30.6% crude incidence rate of cervical cancer in Zambia, this could be attributed to lack of awareness on cervical cancer and Pap smear services offered at the 2<sup>nd</sup> level hospitals in all Provincial centers except Lusaka at the University Teaching hospital and urban clinics where a single visit approach is used which is visual inspection with acetic acid (VIA) application is used. VIA has not yet been scaled up to the entire country, hence the rest of the nine provinces still use Pap smear test. The only province using VIA is Lusaka province. In Zambia, as in most developing countries, cervical cancer is usually diagnosed at an advanced stage, making it very difficult to treat<sup>15</sup> Yet with screening, early detection and treatment, this form of the disease is usually preventable and curable<sup>15</sup>

## OBJECTIVE

To determine the awareness of cancer of the cervix and Pap smear uptake among the women aged 18 years and above.

## METHODOLOGY

This is a mixed method study that was done in Maramba compound

Multistage and convenient sampling methods were used to select the respondents who were interviewed. A total of 389 respondents were interviewed using a semi-structured interview schedule.

Purposive sampling of 2 Focus Group Discussion (FGD) participants that has 6 participants per FGD was done, the first group comprised participants who were 18 - 35 years old and the second group was participants above 35 years old.

## DATAMANAGEMENT

- ♦ Data was collected using a semi-structured interview schedule comprising of open ended and closed ended questions and a focus group discussion guide.
- ♦ Quantitative data was analyzed using SPSS version 16.0 and qualitative data was analysed using content analysis.

- ♦ Chi-square was used to determine the association of independent variables with the dependent variable.

## ETHICAL CONSIDERATION

Ethical approval was obtained from the University of Zambia Research Ethics committee and permission to conduct the study was obtained from the Provincial Office and District Health Office and the respondents before the commencement of the study.

## STUDYLIMITATIONS

This study is limited by the sample, which was in one locality. This does not allow for generalisability of the findings.

## RESULTS

Of the 389 women who participated in the study 52.2% (203) of the respondents had never heard of cancer of the cervix whilst slightly less than half 47.8% (186) of the respondents had heard of cancer of the cervix, while 55.8% (217) had heard of Pap smear. None had ever done a Pap-smear, when asked why none of them did not do a Pap smear, 56.3% (219) of the respondents said that they were not aware of Pap smear services offered at Livingstone general hospital, while 40.4% (157) did not do Pap smear because of fear of positive results.

When asked as who was at risk of developing cancer of the cervix 39.1% (152) said all women, 32.1% (125) said women who are sexually active and 26.5% said married women. There was significant association between the respondents whose income was above K1, 500, 000 and awareness of cancer of the cervix (61.4%, P-value 0.004). There was an association between Socio-Demographic characteristics Educational Level (P-value 0.368), Age (P-value, 0.136) and respondents' response of those who are at risk of developing cancer of the cervix. None of these factors was significant.

There was no significant association between cervical cancer awareness and uptake of Pap-smear since none of the respondents ever had Pap smear. Economic status was significantly associated with awareness of cancer of the cervix (P-value 0.004).

## DISCUSSION

The study was conducted to find out cervical cancer awareness and uptake of Pap smear among women above 18 years. Half of the women interviewed were not aware of cervical cancer and no one had ever done a Pap smear. Those who were aware of cancer of the cervix had no adequate knowledge on the disease. This was noted in the focus group discussion where respondents said they had heard people talk about cervical cancer but they were ignorant of the full information on the same. The above findings are contrary to findings, where almost all of the respondents had heard of cancer of the cervix while only a few had adequate knowledge of the disease. In this study, the knowledge of young women aged 18-28 and 29-39 was low compared to the study done by that showed knowledge levels that were higher among younger women and those who had obtained regular smears. findings further revealed that older women tend to have more concern about their health and cancer of the cervix in particular because in the past cancer of the cervix affected the older women more than the young, this finding is similar to this study's findings that showed that older women were aware of cervical cancer.

This study revealed that half of the respondents had heard about Pap smear, these results are contrary to the findings by<sup>20</sup> which showed three quarters of the respondents in his study were aware of the Pap smear. When asked about their sources of information, the majority of the respondents said that they heard about Pap smear services from Television, a few said from the hospital. These findings are contrary to those by<sup>11</sup> where most of the respondents said that the family Doctor was the most important source of information about Pap smear services.

## RESULTS OF FOCUS GROUP DISCUSSION CERVICAL CANCER AWARENESS

The participants were asked to define cervical cancer in their own understanding and most of them said that it "is a disease," although some defined it is "a wound or lump." This is evidenced by the following responses from the participants:

Participant 1 from the first group (aged 18–35 years), said that cancer of the cervix is like "a wound, or lump that cause difficult in urinating, with yellowish discharge from the vagina and that if the disease prolongs the cervix will harden and that it kills". Participant 2 said "it is a disease", participant 3 said "it is a tumor". The other three participants said that they did not know what cervical cancer is and that "they said they only hear from people that it is the disease for women, but we don't really know". In the 35 years and above age group, participant 1 said that "it is the disease where women have a lot of white discharge coming out from the vagina", participant 2 said "in fact, it is a disease that is believed to come about due to witchcraft, especially where a husband has a girl friend, the wife at home will be bewitched by the girlfriend". Participant 3 also added saying "yes it is true, the woman will have prolonged bleeding from the vagina". Participant 4 said that "it is a disease like any other disease".

When asked about the causes of cancer of the cervix, the following were the responses from the participants interviewed:

- This illness is caused by the traditional herbs women like drinking and adding to the porridge to keep their bodies warm, as one participant in the 18-35 year age group said "the powders we add to the porridge for drying vaginal secretions are a cause of cancer of the cervix". One participant in the 18-35 years age group said that "as for me, I have never used traditional herbs since I got married, even my husband knows". The other participant from the same age group said that "we are forced to take these powders in porridge by our friends during social conversations". Participant 3 said that "you see, "I am worried now because of these powders I have been using, I will tell my husband about it so that I can stop, I fear to die from this disease".
- Insertion of herbal powders in the vaginal canal to dry up the secretions in order to make the vaginal canal small: One participant in the age 35 years and above said that "the herbs women insert in the vagina are to excite men during sexual intercourse so that they feel nice and good". The other participant from the same

age group said that “I have never used powders myself because they can destroy the cervix which is soft and tender, making it easy for germs to enter and cause cancer”.

- ♦ When asked about the complaints a patient who develops cancer of the cervix will experience, responses were as follows: the participants from the age group 18-35 said that “pain during sexual intercourse” the other participant from the same age group said that “yellowish discharge”, and one participant from the age group 35 years and above said that “bleeding “kuzwa bulowa kubukaintu” and “back ache”.
- ♦ When asked on the prevention of cancer of the cervix, diverse responses were given to the question asked: “women should stop inserting powders in their vagina, and that women should be going to the hospital early when they discover abnormal vaginal discharges, pain during sexual intercourse. They said early treatment will reduce the spread of the cancer to other organs that can later cause death.

### **PAPSMEAR UPTAKE**

Participants were asked if they had any information on Pap smear or if they had once done a Pap smear, however the participants except one (1) showed ignorance about what Pap smear was. They knew that Pap smear is done in the hospital, but did not know that such services were offered at Livingstone hospital.

The participant from the age group 18-35 said that “*it is not painful, I did it last week at Monze Mission Hospital, it was free, they did not charge me anything, they used a camera, I don't really know what they actually did inside the vagina, but after a few minutes the procedure was finished and they told me I had no cancer of the cervix*”. *Why can't that procedure done at Monze hospital where they use a camera be done in Livingstone also for the benefit of women who can't afford to travel to Monze.*

### **CONCLUSION**

This study provides a further understanding and basis for future research regarding cervical cancer awareness and uptake of pap-smear services among women. The study revealed that knowledge about cervical cancer was limited. This indicates that awareness messages on cervical cancer and its prevention to the Public are not adequate. Therefore, there is need to for the Health care professionals to intensify Information, Education and Communication (IEC) on cancer of the cervix and its prevention.

### **ACKNOWLEDGEMENTS**

The authors acknowledge the Ministry of Health for sponsoring this research study. We especially thank the respondents who participated in this study. Sincere thanks go many people who supported this study; Professor Parham; Mrs. M. Mbewe, Pastor Simaubi and Livingstone Tutors.

### **REFERENCES**

1. Adanu, A. (2002). Determining the level of knowledge about cancer of the cervix and Pap smear, Accra.
2. Adefuye, P. O. (2006). Knowledge and practice of cervical screening among professional health workers in a suburban district, Nigeria.
3. Bayo, S, Bosch F. X, Sanjose, S, Munoz, N, & Combita, A. L. (2002). Risk factors of invasive cervical cancer, Pub Med Publisher, Mali.
4. Becker, S. A, Affonso, D. D & Blue Horse Beard, M. (2006). Talking Circles: Northern Plains Tribes American Indian Women's View of Cancer as a Health Issue, Public Health Nursing, 23, 1, 27-36.
5. Bosch, F. X. (2007). The epidemiology of human papillomavirus infection and cervical cancer, Pub Med Publisher, Mali.
6. Bowa, K (2008). Cervical Cancer Screening. [File://C:\Documents and settings\james\My Documents\CIDRZ...](#)

7. Bowa, K, Wood, C, Chao, A, Chintu, C, Mudenda, V, & Chikwenya, M. (2008). The Epidemiology of Cancers, University Teaching Hospital, Lusaka.
8. Burns N & Grove, S.K. (2009). The Practice of Nursing Research, appraisal, synthesis, and generation of evidence, 6<sup>th</sup> edition, Saunders, Arlington, Texas.
9. Centers for Disease Control and Prevention. (1993). revised classification system for HIV-1 infection and expanded surveillance case definition for AIDS among adolescents and adults. JAMA 1993, 269:729-730. PubMed Abstract.
10. Chirenje, Z. M, Rusakaniko, S, Kirumbi, L, Ngwalle, E. W, Makuta-Tlebere, P, Kaggwa, S, Mpanju Shumbusho, W, & Makoae, L. (2001). Situation analysis for cervical cancer diagnosis and treatment in east, central and southern African countries. Bull World Health Organ 2001, 79(2):127 – 132. PubMed Abstract.
11. Cheek, J. Joseph, C.D & Korn, A. (2008). Women and Pap smear: Issues in Promotion. *Journal of Pain and Symptom Management*, 18, 77-80.
12. Ferlay, J, Bray, F, Pisani, P & Parkin, D.M. (2004). GLOBOCAN 2002 cancer incidence. Mortality and prevalence worldwide. No. 5 version 2.0. Lyon, France International Agency for Research on Cancer Press (IARC), 2004.
13. Hellen, I. Biswas, L. & Chang, D.Y.(1992). How Sources of Health Information relate to knowledge and use of Cancer Screening examinations, Blackwell Scientific Publications Washington DC, USA.
14. Hubbar, D, Muffin, F.G & Poltan, J. (2006). sources of information about abnormal Pap tests and HPV in women, Mosby Elsevier Publishers, USA.
15. James, F. (2008). The viral origin on Cervical Cancer in Rabat, *International Journal of Nursing Studies*, 45: 23-25, Morocco.
16. Michielutte, R, Blinson, K., Dignan, M. & Wells, H.B. (2004). The cost of conducting face-to-face household interviews in a Rural, native American population, The North Muri, R, Franceschi, S, Ravizza, M, Flore, S, Bini, T, Mussini, C, Fasolo, M, Liuzzi, G, Ippolito, G, D'Arminio Monforte A. (2006). Access to gynaecological services and Papanicolau tests. *International Journal of Nursing studies* 2006; 18 (4): 376–378. PubMed
17. Mwanahamuntu, M. (2008). Cervical Cancer Screening. File://C:\Documents and settings\james\My Documents\CIDRZ... accessed on [4th August, 2009
18. National Cancer Institute. (2001). importance of early treatment of cancer of the cervix, *International Journal of Nursing studies*, USA.
19. Parham, G. P, Sahasrabuddhe V. V, & Mwanahamuntu, M. H. (2004). Prevalence and predictors of squamous intraepithelial lesions of the cervix in HIV-infected women, Published by CIDRZ. Lusaka.
20. Parkin, D.M, Pisani, P & Ferlay, J. (1985). Estimates of the worldwide incidence of eighteen major cancers, *International Journal of Cancer*, 1993, 54: 594–606.
21. Plan, J.F. (1993). Women's attitudes and awareness of smear and cervical cancer, McGraw Hill Publishing Co Ltd, London.
22. Polit, D.F, & Hungler, B.P. (2001). *Nursing Research: Principles and Methods*, 7<sup>th</sup> edition, Lippincott Williams & Wilkins, Philadelphia.
23. World Health Organization. (2002). Control of cancer of the cervix uteri. *International Journal of Cancer*, Geneva.
24. William, B. C & Joseph, C. D. (1990). Compliance behavior in women with abnormal Pap smears. *International Journal of Cancer*, Washington.
25. Wong, L. P. (2008) Knowledge on cancer of the cervix and Pap smear. *International Journal of Cancer* Singapore.