OPENING MINDS:
RESEARCH FOR SUSTAINABLE
DEVELOPMENT

Factors Related to Poor Attendance for Pap Smear Screening In Vavuniya

V.Janarththany[1], R. Kalavani[1], T.Vijayakumar[1], S.N. Merin Devini[1], H.M.S.P. Herath[2] and B.S.S. De Silva[1*]

[1]*Department of Nursing, Faculty of Health Sciences, The Open University of Sri Lanka, Nugegoda, Sri Lanka.*
[2]*Department of Medical Laboratory Sciences, Faculty of Health Sciences, The Open University of Sri Lanka.*

**Corresponding author: Email: wadmweragoda@gmail.com*

1 INTRODUCTION

Cervical cancer is defined as uncontrolled growth of cells on the cervix (World Health Organization, 2002). It is the second most common cancer in women worldwide which causes 270,000 deaths annually (World Health Organization, 2002). Cervical cancer screening contributes to early diagnosis and thereby -minimize mortality and morbidity associated with the disease (Abdullah, Aziz and Su, 2011). Papanicolaou smear (Pap smear) is a screening method used for cervical cancer which can detect abnormal cells from the cervical epithelium (Matos and Eynde, 2004).

World Health Organization (WHO) recommended that cervical cancer screening programs need to cover over 80% of the risk population to successfully reduce the incidence of cervical cancer (WHO, 2002). The incidence and mortality rate of cervical cancer have decreased in developed countries during the last 50 years because of increased availability and attendance of cervical cancer screening programs (Nanda *et al.*, 2001). However, in developing countries the problem has become a burden due to under diagnosis, thus increasing the mortality rate (Forouzanfar *et al.*, 2011). The study further pointed out the reason as the poor attendance of women for cervical cancer screening in these countries. Many factors have been identified as barriers to attending cervical cancer screening. These are; poor knowledge of cervical cancer prevention, limited access to health care, low socio economic status, ethnicity, fatalism, time constraints, religious factors wrong thoughts, beliefs and behaviours. (Al-Naggar and Al-Naggar, 2012; Abdullah, Aziz and Su, 2011). Moreover, cultural factors have been identified as a significant factor related to attendance of Pap smear screening (Gan and Dahlui, 2013). A study carried out in the United States evidenced that differences in cultural background between Asian and Caucasian women have a significant impact on the difference in attendance of Pap smear screening (Miklancie, 2007). Further, the author points out that Caucasian women were less modest regarding their bodies and sexuality, therefore more likely to have had a Pap smear screening than the Asian women.

In Sri Lanka, Pap smear screening is one of the most effective strategies in controlling cervical cancer. Conversely, Pap smear coverage rate is only 6% in the country (Fernando and Wijayanayake, 2013), which is much lower than WHO

recommendation (over 80% of the risk population). Knowledge, attitudes, cultural beliefs and availability of service have been some of the contributory factors that affect non-attendance for Pap smear screening (Fernando and Wijayanayake, 2013). The Ministry of Health reported that cervical cancer incidence rate was 3% in the Vavuniya district while Pap smear screening coverage is only 1.3% (Annual Health Bulletin, 2013). Due to the low coverage of screening, it is essential to identify the factors related to poor attendance for Pap smear Screening. Therefore, the purpose of this study was to identify the factors related to poor attendance for Pap smear screening among women aged 35-55 years in the Urban Council area of Vavuniya district. The specific objectives of the study were to assess the knowledge, cultural barriers, psychological factors and health care factors related to poor attendance for Pap smear screening.

2 METHODOLOGY

A quantitative, non-experimental descriptive design was utilized in this study. The study was conducted in the Urban Council area of Vavuniya, during the period of January to March 2017. Women who were between the ages of 35 – 55 years were recruited for this study. Critically ill and women with communication failure (hearing impairments/muteness) were excluded from the study. Data were collected from purposively selected sample of 259. Written informed consent was obtained from every participant. Pre-tested, self-administrated questionnaire was used to collect data. It contained the demographic data, knowledge, cultural influences, psychological factors and health care factors related to attendance for Pap smear screening. Content validity and reliability were assured by referring to the standard literature and the subject experts. Privacy and confidentiality of participants were secured throughout the study. Ethical approval was granted by the ethical review committee, Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka. Data analysis was done with descriptive statistics using Microsoft Excel software.

3 RESULTS AND DISCUSSION

Two hundred and fifty nine women were studied. Collected data were presented as five main categories; demographic factors, knowledge, cultural influences, psychosocial factors and health care factors related to poor attendance for Pap smear screening.
Demographic factors

3.1 Demographic factors

The mean age of all participants was 42 + 1.6 years. Over half of the subjects (59.8%) being between 35 to 40 years old. Among the participants, 81.5% were married. About half of them were educated only up to General Certificate of Education (Ordinary Level). A majority were of Tamil ethnicity. Significantly, 78.4% of the participants were unemployed (Table 1).

3.2 Knowledge regarding Pap smear screening

The study findings indicated that a considerable number of participants (66.8%, n=173) were informed about cervical cancer, whereas only 57.5% (n=149) had knowledge about Pap smear screening. However, a study conducted in the Rathnapura District, of Sri Lanka, found 87.6% of subjects had knowledge about cervical cancer which is higher than the findings of the present study (Nandasena and Ekanayake, 2016). Further, the present study results highlighted that 56.8% of respondents had known that Pap smear is used as a screening test for cervical cancer detection. Moreover, a majority of

ISSN 2012-9916 © The Open University of Sri Lanka

subjects had - no satisfactory knowledge of symptoms and screening tests of cervical cancer, which may be a significant contributing factor for poor attendance of women for Pap smear screening. Similar finding has been obtained in the study conducted by Gan and Dahlui (2013).

Table 1: Demographic characteristic of participant

Socio demographic factors		**Frequency (n=259)**	**Percentage %**
Age	35 - 40 years	155	59.8
	41 - 45 years	32	12.4
	46 - 50 years	37	14.3
	51 - 55 years	35	13.5
Education level	No formal education	1	0.4
	Up to grade 5	49	18.9
	Up to G.C.E O/L	119	45.9
	Up to G.C.E A/L	59	22.8
	Higher education	31	12
Ethnicity	Tamil	162	62.5
	Sinhala	41	15.8
	Muslim	56	21.6
Employment	Employed	56	21.6
	Unemployed	203	78.4
Civil status	Single	32	12.4
	Married	211	81.5
	Widow	13	5
	Divorced	3	1.2

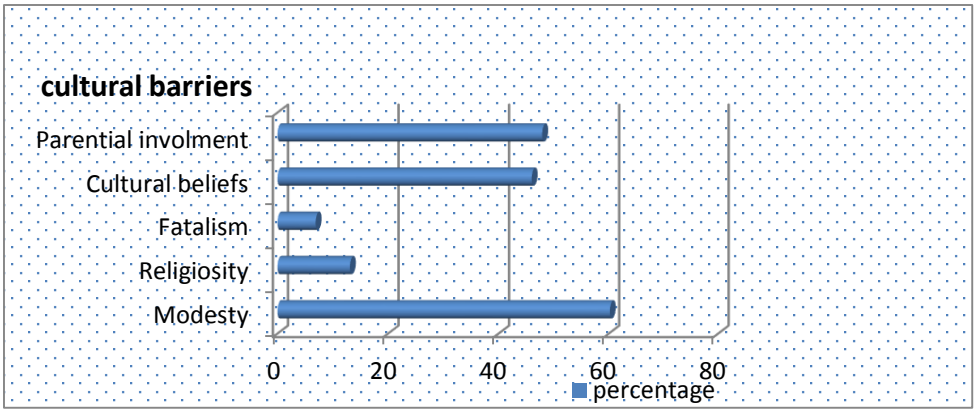

Figure 2: Cultural factors related to Pap smear

3.3 Cultural factors related to Pap smear screening

As shown in the figure 1, 58% participants pointed out modesty as being a major barrier for non-attendance of Pap smear examination. Cultural beliefs and parental involvement also were identified as barriers for poor attendance of Pap smear screening. Comparable results (65.6%, p=0.068, 95% CI) have been obtained by the contemporary research carried out by Abdullah, Aziz and Su (2011).

3.4 Psychological factors related to Pap smear screening

The study findings emphasized that several psychological factors contributed toward the lack of intent to appear for Pap smear screening such as belief it is painful (n=159, 61.5%), embarrassment (n=131, 50.6%), afraid about positive findings (n=113, 43.6%) and Pap smear screening is done by male doctors (n=132, 51%). A similar study done by Alfaro et al (2015) reported that in their study most women had no intention to appear for Pap smear screening because they viewed themselves as healthy, while half the study population of women answered that they were afraid to know the screening result.

3.5 Health care factors (hospital related factors) related to Pap smear screening

Eighty percent of the study participants emphasised that they had to wait a considerable length of time to receive health care services. Therefore, they pointed out that this was also a factor that affected poor attendance for Pap smear screening. Moreover, the absence of adequate number of trained staff (10.5%), staff members not helpful and not caring about patients (32%) were also contributory factors for poor attendance of women at Pap smear screening programs. A study carried out by Besseler, Aung and Jolly (2007) revealed that limited access to health care services and lack of trained staff reduced the rate of Pap smear screening.

4 CONCLUSION AND RECOMMENDATION

According to the study findings, lack of awareness of Pap smear screening and its benefits, embarrassment, modesty, fear of unbearable pain during screening, afraid about positive finding, Pap smear screening done by male doctors, cultural factors and the need to wait a long time to get the health care services were identified as main factors related to poor attendance for Pap smear screening in the Vavunia district. These factors have a major impact on cervical cancer in Sri Lanka. Further studies should be extended to a larger population including other districts to clearly identify the factors influencing poor attendance for Pap smear screening in Sri Lanka. It is recommended that public awareness programmes about the importance of cervical cancer screening be conducted to educate all the communities. Furthermore, health care providers should understand the cultural and religious beliefs of Sri Lankan women in order to create a proper environment for screening such as providing female staff and adequate privacy, thereby encouraging women to present themselves for cervical cancer screening.

Acknowledgment

We thank the respondents for their voluntary participation for this study.

REFERENCES

Abdullah, F., Azis, N.A., and Su, T. (2011) Factors related to poor practice of Pap smear screening among secondary school teachers in Malaysia. *Asian Pacific journal of cancer prevention*, 12, 1347-1352.

Alfaro, K., Gage, J., Rosenbaum, A., Ditzian, L., Maza, M., Scarinci, I., Miranda, E., Villalta, S., Felix, J., Castle, P. and Cremer, M. (2015). Factors affecting attendance to cervical cancer screening among women in the Paracentral Region of El Salvador: a nested study within the CAPE HPV screening program. *BMC Public Health*, 15(1).

Al-Naggar, R., and Al-Naggar, D. (2012). Perceptions and Opinions about Male Breast Cancer and Male Breast Self-Examination: A Qualitative Study. *Asian Pacific Journal of Cancer Prevention*, *13*(1), 243-246.

Annual Health Bullatin. (2013). *Ministry of Health, Sri Lanka*. Retrieved from http://www.healthcpc.org/downloads/annual_health_bulletin_2013/

Bessler. P., and Aung. M. (2007). Factors affecting uptake of cervical cancer screening among clinic attendees in Trelawny,Jamaica. *14*, 396-404.

Fernando. T.R.N., and Wijayanayake A.N. (2013). Knowledge and understanding of cervical cancer, risk factor and prevention,among rural women in Anuradhapura, North central province of Srilanka. *Rajarata university journal*, 27-32.

Forouzanfar, M., Foreman, K., Delossantos, A., Lozano, R., Lopez, A., Murray, C. and Naghavi, M. (2011). Breast and cervical cancer in 187 countries between 1980 and 2010: a systematic analysis. *The Lancet*, 378(9801), 1461-1484.

Gan, D., and Dahlui, M. (2013). Cervical screening uptake and its predictors among rural women in Malaysia. *Singapore Medical Journal*, *54*(3), 163-168.

Luengo Matos, S., and van den Eynde, A. (2004). Use of Pap tests for cervical cancer screening and factors related with use in Spain *Atención Primaria*, *33*(5), 229-234.

Miklancie, M.A., (2007). Caring for patients of diverse religious traditions: Islam, a way of life for Muslims. *Home Health Nurse.* 25(6), 413-7.

Nanda, K., McCrory, D., Myers, E., Bastian, L., Hasselblad, V., Hickey, J. and Matchar, D. (2001). Accuracy of the Papanicolaou Test in Screening for and Follow-up of Cervical Cytologic Abnormalities: A Systematic Review. *Journal of Lower Genital Tract Disease*, 5(1), 60-60.

Nandasena, H.M.R.K.G., and Ekanayake, E.M.J.S.K. (2016) Factors associated with the uptake of cervical cancer screening among married women in Udagangoda Grama Niladari division Rathnapura district Sri Lanka. *International Journal of Scientific and Research Publications*, 6(10), 82-85.

Witharana, C., Wijesiriwardhana, P., Jayasekara, K., Kumari, P., and Rodrigo, C. (2015). Awareness of female malignancies among women and their partners in Southern Sri Lanka and implications for screening: a cross sectional study. *BMC Public Health*, *15*(1).

World Health Organization. (2002*). Cervical cancer screening in developing countries Report of a WHO consultation.* Retrieved from: http:/who.int/cancer/media/en/cancer_cervical_37321