OPENING MINDS:
RESEARCH FOR SUSTAINABLE
DEVELOPMENT

Awareness of Cervical Cancer, Attitude and Practice towards Cervical Cancer Screening among Female Undergraduates in University of Peradeniya

Dilumi Jayawickrama* and Anuradha Rathnayake

Department of Nursing, Faculty of Allied Health Sciences, University of Peradeniya, Peradeniya, Sri Lanka

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

1 INTRODUCTION

Cervical cancer has become the second most common cancer among females in worldwide (World Health Organization, 2014). It is early detectable premalignant cancer type. The disease has a pre-malignant stage which usually occurs in younger women under the age of 40. Cervical cancers begin in the cells of the transformation zone of uterus which gradually become to pre-cancerous state prior to becoming a cancer.

Cervical cancer is the end result of sexually acquired infection caused by human papilloma virus, HPV type-16(HPV-16) and HPV type-18(HPV-18) (WHO, 2014). Risk for cervical cancer can be identified among females who acquired HPV for chronic and progressive cancer. Colombo *et al.*, (2012) have reported that the relationship between sexual behavior, HPV infection and risk of developing cervical cancer. Avoiding exposure to HPV, Obtaining HPV vaccine, smoking cessation, consuming diet rich in fresh vegetables, fruits and practicing healthy sexual activities leads to minimize occurrence of cervical cancer (American Cancer Society, 2014). National cancer control program of WHO, 2014 has revealed that cervical cancer can be early detectable by performing Papanicolaou (Pap) test which preferred to the women aged above 30 years. Well Woman Clinic (WWC) services were introduced for Family Health Programme to popularize the cancer screening test. Family Health Bureau in Sri Lanka coordinates Well Women Clinic (WWC) programs in Sri Lanka.

1.1 Background of the research

In Sri Lanka, cervical cancer is the third most common cause for death due to cancer among women aged 15-44 years. Family Health Bureau (2014), states that 1721 new cervical cancer patients are diagnosed annually in Sri Lanka. Almost 50%of patients are diagnosed when cancer is localized, with the survival rate of 92% for remaining five years. It is crucial to improve the quality of remaining years by introducing healthy practices and enhancing their level of knowledge. Percentage of women who had screened for cervical cancer has been increased from 10.6% to 33.9% in last few years during the period of 2009 to 2013(Family Health Bureau, 2014). The lack of nationally representative data related to the extent of cervical cancer and cancer screening among women in Sri Lanka make the area of research relevant. Due to the high incidence of mortality rate and

low coverage of screening, it is essential to identify the level of existing awareness, attitudes and practices related to cervical cancer and cervical cancer screening to further planning of the health care needs of the society. Without obtaining knowledge and awareness related to cervical cancer, it is in vain of program conducted to cancer control.

1.2 Objectives

Objectives were to assess the level of awareness of cervical cancer, attitude, and practices on cervical cancer screening among female undergraduates in 1st and 4th academic year in University of Peradeniya. Undergraduate populations were selected as they are the generation with the power of information carriers to the society and it's critically important to make them aware. They will be benefitted by enhancing their knowledge and correcting their misconception while participating for the research.

2 METHODOLOGY

Study on "Awareness of Cervical cancer and cancer screening among female university undergraduates" was designed as "Descriptive- Cross sectional study". Female university undergraduates (n=2589) who registered for 1st and 4th academic year, between 20 to 28 years of age, among nine faculties in University of Peradeniya are considered as the study group. Estimated sample size is 335 from the population.

Stratified random sample method based on populations was used to calculate the number of undergraduates to be taken from each faculty in University of Peradeniya. Self-administered questionnaire was designed based on Cervical Cancer Awareness Measure (Cervical CAM) pre validated toolkit version 2.1; 2007-08 adopted for data collection. Translated version of the questionnaire was face validated and content validated with the panel of experts. Information sheet attached to the questionnaire explained about the purpose of the study and written consent was obtained prior to data collection. Data was tabulated to Microsoft Excel 2010 and analyzed using the Statistical Package for the social Sciences (IBM SPSS) database program version 22. The Chi-square test was used to measure the strength of associations between academic year and level of awareness. P value <0.05 was considered as statistically significant. Modified Blooms cut points were used for measure the level of awareness of cervical cancer. (Nahida *et al.*, 2007). Scale consisted with Good, Satisfactory, and Poor based on the marks obtained. If the 0 to 17 questions were responded correctly participants were given poor grade, if the 18 to 27 questions were responded correctly participants were given satisfactory grade and if 28 to 36 questions responded correctly participants were given good grade. Scale was validated with expert panel and piloted before adapting to the sample. Attitude and practice of cervical cancer screening were obtained as percentage only.

4 RESULTS

4.1 Participant's Awareness of cervical cancer, and cervical cancer screening among 1st and 4th academic year

Table 01: Distribution of respondents by level of awareness of cervical cancer and cervical cancer screening according to 1st and 4th academic year according to "Modified Bloom's cut points"

Mark ranges	1st year n %	4th year n %
Good 28-36	1 (0.7)	14 (9.9)
Satisfactory 18-27	30 (19.7)	48 (33.8)
Poor 0-17	121 (79.6)	80 (56.3)

ISSN 2012-9916 © The Open University of Sri Lanka

Table 01 indicates that 9.9 % of the fourth year students have good level of knowledge while 79.6% of students are having poor levels of knowledge about the cervical cancer and cancer screening

4.2 Participant's practice about cervical cancer, and cervical cancer screening among 1st and 4th academic year

Figure 01 indicates that 64.5% 1st year undergraduates and 67.6% 4th year undergraduates are willing to do cervical cancer screening in future

4.3 Participant's Attitude about cervical cancer, and cervical cancer screening among 1st and 4th academic year

Figure 02 indicates that 86.2% 1st year undergraduates and 93.7% 4th undergraduates are having idea that cervical cancer screening is useful.

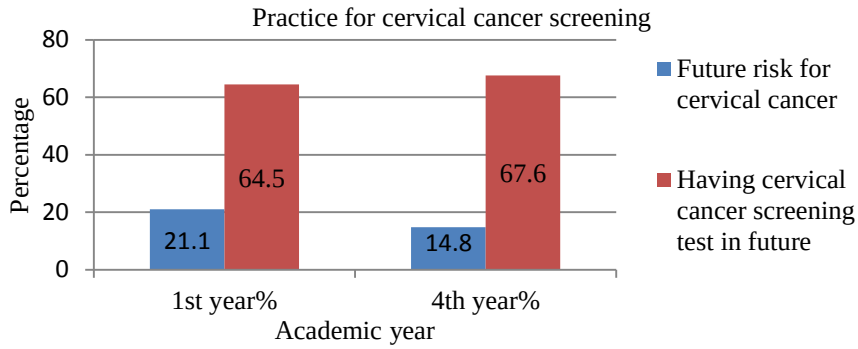

Figure 01: Practice towards cervical cancer screening among 1st and 4th academic years

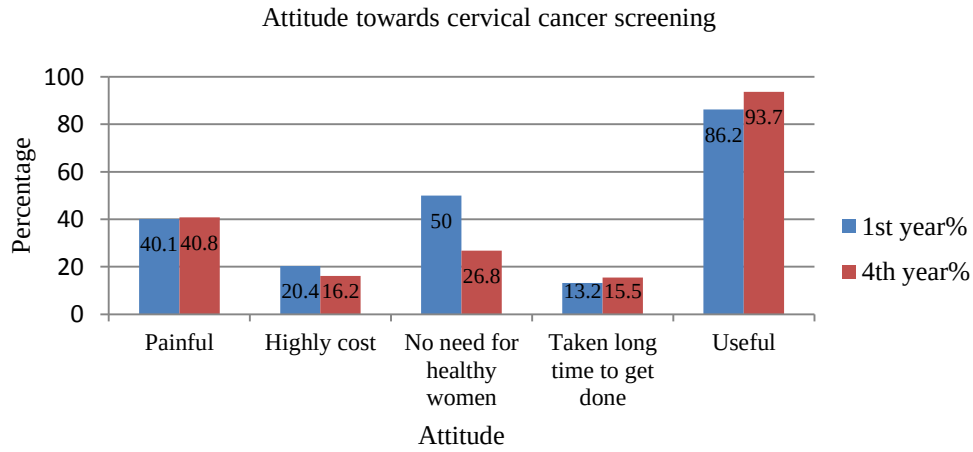

Figure 02: Attitude towards cervical cancer screening among 1st and 4th academic years

5 DISCUSSION

5.1 Awareness of the cervical cancer

In this study, awareness about cervical cancer was 94.6 %in total population which contrast to Joy *et al.,* (2011) which stated as the findings with limited knowledge and awareness among university undergraduates in the city of Kandy, Sri Lanka. Research finding are emphasized the role of media as information providers to society. From half of the participants who had heard of cervical cancer were able to identify vaginal bleeding between periods (58.8%) and persistent vaginal discharge (50.3%) as signs of cervical cancer. Significant association can be identified comparing with the academic year (1st and 4th year).The received p value for both categories are 0.005 which revealed that 4th year undergraduates are more prone than 1st year.

5.2 Awareness of cervical cancer and cervical cancer screening

Only 39% of undergraduates had known about Pap test as the screening test for cervical cancer. Only 25% has marked correctly that Pap test is preferred in 3 times in their life time to women who are above 35 years old. Although Pap test is freely available in Well Women Clinic in Sri Lanka, only few (17%) know about WWC in Sri Lanka. Annual Health Bulletin on Public Health Services (2012) has stated that Well Woman Clinics (WWC) implemented in 1996 to provide reproductive health services to Sri Lankan women. But results conveyed that public should be made aware about the WWC.

5.3 Attitude on cervical cancer and cervical cancer screening

A majority of the undergraduates 45% have identified that the Pap smear is useful for women's health and did not consider as high cost. Less than 20% of undergraduates have stated as the Pap test is painful and no need to perform for healthy women (19%). With the insufficient awareness of the cervical cancer screening test was difficult to measure the attitudes towards the Pap test. The 98% of the participants have answered that they would be worried (12%) and severely worried (86%) if they found with HPV infection. Osth (2015) has indicated in her research that majority of the study population thought that the Pap smear is important for women's health and did not consider it embarrassing.

5.4 Practice about cervical cancer and cervical cancer screening

Results have proven that more than half of participants believe that they are in a risk of getting cervical cancer in future. But risk factors, signs of cervical cancer and screening test of cervical cancer have not identified by the participants correctly. More than 50% of participants planning to get pap screening test in future. Therefore it emphasized the necessity of improving the awareness of cervical cancer and it's screening among the all women. Related to practice for cervical cancer, it was difficult to obtain more details as most of the undergraduates are below 35 years and they had not experienced cervical cancer screening test.

6 CONCLUSIONS

Awareness of cervical cancer correlate with academic year. This study conveyed that awareness of signs; risk factors, treatments, prevention and screening test for cervical cancer were poor even among university undergraduates. Only Less than half of the participants were able to identify the signs and risk factors of cervical cancer. Awareness of cervical cancer and cancer screening was poor among study population. Considering the attitudes and practices towards cancer they are having satisfactory level of

ISSN 2012-9916 © The Open University of Sri Lanka

attitudes and practices. As the study participants are not aware about the risk factors for cervical cancer, they have minimum chance to modify their life style. Sri Lankan society is in need of need of increasing adequate information on cervical cancer and preventive methods are desirable.

REFERENCES

American Cancer Society (2014). Retrieved from http://www.cancer.org/ cancer / cervical cancer/ detailed guide/cervical- cancer- risk- factors? -ga=1.144439669.1311912950.1458380539.

Colombo, N., Carinelli, S., Colombo, A., Marini, C., Rollo, D. and Sessa, C. (2012). 'Cervical cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up', *Annals of Oncology*, vol 23, pp.27-32

Family Health Bureau: National statistics. (2014). Retrieved from http://fhb.health.gov.lk/web/index.php?option=com_statisticsandview=islandwideallresultandItemid=134andlang=en

HPV Information Centre: Human Papilloma Virus and Related Diseases Report, Sri Lanka. (2014). Retrieved from http://www.hpvcentre.net/statistics/reports/LKA.pdf.

Joy, T., Sathian, B., Bhattarai, C. and Chacko, J. (2011). Awareness of cervix cancer risk factors in educated youth: A cross sectional, Questionnaire Based on Survey in India, Nepal and Srilanka. *Asian Pacific Journal of Cancer Prevention*, 12, 1707-1712.

Nahida, A. (2007). Knowledge Attitude and Practice on Dengue Fever*:Thesis for Masters in Public Health,'Southeast Asian j tromped Public health*, 07, 23-24.

Osth, J.E.E., Fernando, R., Kallestal, C., Selling, K.E., Warnakulasyrija, L. and Adikaram, N. (2015) 'Knowledge of Human Papilloma Virus, Cervical Cancer and Cytological

Screening and Attitudes towards and Practices of Screening among Undergraduate students at Rajarata University, Sri Lanka', *Rajarata University Journal*, vol 01, pp. 27-32

World Health Organization (2014): Comprehensive cervical cancer control: a guide to essential practice-2nd edition. Retrieved from http://apps.who.int/ir World his/bitstream /10665/ 144785/ 1/ 9789241548953_eng.pdf.