Factors Related to Delayed Presentation of Cervical Cancer among Adult Females at Apeksha Hospital, Sri Lanka

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Abstract

Cervical cancer is the second most common cancer among women globally and in Sri Lanka. Delayed presentation of cervical cancer, increases morbidity, mortality, and decrease the survival rate of these patients. This study examined factors related to a delayed presentation of cervical cancer among adult females with cervical cancer. A descriptive cross-sectional design with an interviewer-administered questionnaire administered to a convenience sample of participants (n=286) with cervical cancer. Descriptive statistics were used to analyze the data. Nearly half of the participants were 56 years and older, did not attend to well women clinic and had not had a Pap smear test. There was a significant association between age and knowledge regarding cervical cancer, education level and knowledge regarding cervical cancer ($p < 0.05$). Low level of education, old age, poor knowledge about cervical cancer, non-attendance of well women clinics, no pap test were associated with a delayed presentation of cervical cancer. Awareness of regular cervical cancer screening could reduce delayed presentation.

Keywords: Cervical cancer, delayed presentation, perceived factors, Sri Lanka

Introduction

Cervical cancer is the 3rd most common type of cancer worldwide, with an estimated 530000 new cases, more than 85% of which were in developing countries (Ferlay et al., 2010). Furthermore, in developing countries, cancer of the cervix is a significant public health problem (Ferlay et al., 2010). Worldwide cervical cancer comprises approximately 12% of all cancer in women. Cancer occurs due to the abnormal growth of cells that having the ability to invade or spread to other parts of the body (metastasis) (Robert & Jeffery, 2005). Cervical cancer develops over a long period. Vaginal bleeding, contact bleeding (bleeding after sexual intercourse), moderate pain during sexual intercourse and vaginal discharge are early symptoms of cervical cancer (Brunner & Suddarth, 2011). Cervical cancer is associated with the present infection of the human papilloma virus (Kane et al., 2006). Although cervical cancer screening services are available, late presentation of cervical cancer and deaths are increasing. Ironically, cervical cancer is perhaps the curable form of any human cancer if detected at the precancerous stage (Adanu et al., 2002).

Cancer of the cervix is a significant public health problem globally, especially in developing countries where it is the most common cancer in women (Ferlay et al., 2010). Cervical cancer ranks as the 2nd cause of most common female cancer in women aged 15 to 44 years in Sri Lanka. About 1,721 new

cervical cancer cases are diagnosed annually and about 690 new cervical cancer deaths occur annually in Sri Lanka (ICO Information Centre on HPV and Cancer 2015).

Although cervical cancer screening programmes routinely screened for cervical cancer at the well women clinics and educate woman about risk factors of cervical cancer to detect it early, there is less reduction in cervical cancer incidence over the past few years in Sri Lanka (NCCP Sri Lanka Prevention and Early Detection of Common Gynecological Cancer, 2015). Furthermore, data available in factors related to delayed presentation of cervical cancer among women in Sri Lanka are limited. Therefore, this study focused on perceived factors related to delayed presentation of cervical cancer.

Objectives

General objective

- To determine perceived factors related to delayed presentation of cervical cancer among women in Apeksha hospital, Sri Lanka.

Specific objectives

- To determine socio-demographic, knowledge, attitudes and risk factors related to delayed presentation of cervical cancer.
- To determine the association between socio-demographic, knowledge, attitudes and risk factors and delayed presentation of cervical cancer.

Methodology

Study design

A descriptive cross-sectional design used.

Study setting

Apeksha Hospital, Sri Lanka

Sampling method

Convenience sample (n=286) of inpatients diagnosed with cervical cancer. Critically ill patients were excluded.

Data Collection Instrument and Method

Data was collected using a pre-tested (n=10) an interviewer-administered questionnaire developed by the researchers based on intensive and extensive literature search. This questionnaire mainly includes Part A – Socio-demographic characteristics of the participants, Part B - Disease related knowledge and attitudes of the participants and Part C – Risk factors affection on participants.

Data Analysis

Data were analyzed using descriptive statistics and chi-square test with the SPSS version 21.

Ethical considerations

Ethical approval was obtained from the ethics review committee of KAATSU International University, Sri Lanka. Further permission was obtained from the Director, in Apeksha hospital Sri Lanka. Informed written consent was obtained from all participants before the data collection.

Results

A total of 286 participants participated in the study (Table 1). Nearly half of them (n= 140, 48.8%) belonged to age group above 56years. Most of the participants were (n= 205, 71.6 %) Buddhist and most of them (n=234, 81.9%) were Sinhalese. More than half of them (n= 191, 66.7%) were married. More than half of participants (n= 161, 56%) had education up to grade 11. Unoccupied participants percentage was (n= 124, 43.3%) and (n= 51, 17.8%) of the participants were labours.

Table 1: Socio-demographic characteristic of the participants. (n=286)

Demographic Data	Frequency(n)	Percentage (%)
Age category		
35-45	50	17.4%
46-55	96	33.8%
Above 56	140	48.8%
Religion		
Buddhist	205	71.6%
Catholic	34	11.8%
Hindu	23	8.04%
Islam	24	8.39%
Race		
Sinhala	234	81.9%
Tamil	29	10.1%
Islam	22	7.6%
Burger	1	0.3%
Marital Status		
Married	191	66.7%
Widowed	62	21.6%
Divorced	29	10.1%
Single	4	1.3%
Number of children		
Childless	13	4.5%
Less than 3	92	32.16%
3-5	149	52.09%
More than 5	32	11.1%
Educational level		
No school	64	22.3%
Up to Grade 11	161	56.2%
Up to Grade 13	49	17.1%

Higher education	12	4.2%
Occupation		
Unoccupied	124	43.3%
Labour	51	17.8%
Foreign employ	23	8%
Self –employed	19	6.6%
Garment	18	6.2%
Clerical	13	4.5%
Administration	9	3.1%
Teacher	9	3.1%
Farmer	8	2.4%
Businessmen	7	3.1%
Health sector	4	1.4%
Security	1	0.3%
Monthly Income (LKR)		
5000-20000	112	39%
20001-40000	95	33.2%
40001-60000	57	19.9%
> 60000	6	2.1%
Not responded	16	5.5%

Disease-related information of the participants is summarized in Table 2. Most (76.3%) did not attend to well women clinic and the majority (79.1%) not had a pap smear test.

Table 2 Disease-related factors of the participants (n=286)

Attendance of the well women clinic	Frequency	Percentage
Yes	67	23.4%
No	219	76.5%
Pap Smear test is done		
Yes	60	20.9%
No	226	79.1%

Figure 1: Reasons for nonattendance to well women clinics (n=286)

As shown in figure-1, more than half of participants (57%) did not attend to well women clinic due to lack of awareness.

Figure 2: Factors associated with NoPap smear test (n=286)

As shown in figure 2, more than half of the participants (63 %) did not do the Pap test because of lack of unawareness; (19 %) did not have a Pap test because of shyness, 3 % of the participants did not want a clinical examination done by a male doctor, and 2% Of participants did not participate because their husbands did not allow it.

Table 3 shows that the cervical cancers were more prevalent among women who were sexually active from their early life (n=162, 56.6%); 18 (6.3%) women had multiple partners, 132 (46.1%) women were either active or passive smokers, 79 (27.6%) women were long term contraceptive users, and 89 (31.1%) women were multiparas. Some participants gave multiple answers.

Table 3: Risk factors for Cervical Cancer among the participants. (n=286)

Risk factors	Frequency	Percentage
Having sex at an early age	162	56.6%
Multiple sexual partners	18	6.3%
Active or passive smoking	132	46.1%
Long term use of contraceptives	79	27.6%
Multipara women	89	31.1%

Figure 3: Participants attitudes on disease condition (n=286)

Most of the participants (66.8%) had poor attitudes towards cervical cancer

Figure 4: Participants knowledge of disease condition (n=286)

Most of the participants (70.3%) had unsatisfied knowledge related to cervical cancer.

Table 4 shows the relationship between the demographic characteristics of participants with knowledge of cervical cancer and attitudes of cervical cancer. We use for that Pearson chi-square.

Table 4: Association between knowledge and attitudes towards cervical cancer with demographic characteristics

Demographic characteristics	Associated factor	Chi-square value	P value
Age	Knowledge of cervical cancer	15.319	.000 *
Education	Knowledge of cervical cancer	35.689	.000*

*P< .05 statistically significant association

Discussion

The majority of participants did not attend for well-women clinics and not done a pap test in this study. The result from this study is in concordance with those done with patients with lower socioeconomic status who were found to have a lesser probability of participation in programs for disease prevention and screening (Dragan et al., 2013). In this study, most of the participants had not known about screening test, signs and symptoms and risk factors of cervical cancer. Similar results were found in studies done in Malaysia, South Africa, and the USA. (Tan, Hassam & Qodryiah, 2010; Eshanul, 2010; Cottrell & Burnard, 2014). Most of the participants who had lower income and lower educational level were less likely to attend well women clinics. Contrast results were found in the study done in South India (Kaku, Methew & Rajan, 2008). This study identified barriers like fear, shyness, dislike of male providers as influencing not doing screening test. The most common reason in the female who avoid Pap smear is fear of vaginal examination (Nilaweera et al., 2012).

More than half the sample had education up to ordinary level and (22.6%) of a participant not gone school. Most of the participant was married (66.6%), and near half of the participant (43.2%) were unemployed. The similar results were found in the study done in Uganda. Same results were found in a survey done by (Mwaka et al., 2016). A similar relationship between education and delayed presentation of cervical cancer has been reported in some countries including the United States of America, Florida (Ferrante et al., 2000); South India (Kaku, Methew & Rajan, 2008). Sudan (Ibrahim et al., 2011). Nepal, (Gyenwali et al., 2014). Morocco (Berraho et al., 2012). Those are found that women with less education have difficulties in understanding the benefits of screening.

The association between smoking and passive smoking with cervical cancer has been reported in many studies. In this study, 132 participants were passive smokers. According to passive smoking as a carcinogen potentially could progress the transition of persistent infection or pre-invasive lesions to invasive cervical cancer. Though the mechanism by which passive, as well as active smoking, induce cervical cancer is not understood clearly, the possible mechanism is that tobacco smoke contains carcinogen which could cause immunosuppressant and consequently progression of HPV infection to disease (Louie et al., 2011). Most of the participants correctly knew that cervical cancer could be prevented through early diagnosis, but they did not get any treatment or advice. The same results reported could be found in South Africa (Khanet, 2005).

In this study, participants reported other perceived factors of cervical cancer, including prolonged use of hormonal contraceptive, having sex at an early age, multiple sexual partners, passive smoking multiple and having more pregnancies. Similar results were found in a study done in Uganda. In their study reported causes of cervical cancer early onset of sexual activity, having multiple sexual partners, smoking, multiparity, prolonged use of family planning pills and injections (Mwaka et al., 2015).

This study shows poor knowledge regarding cervical cancer and similar results were reported by (Bansal et al., 2015; Tran et al., 2011; Shrestha et al., 2013). However, the level of knowledge was far less than in developed countries. For example, a study was done in Kuwait, nearly half their participants had good experience about cervical cancer (Al Sairafi et al., 2009) and in London, most of their study participants with cervical cancer had adequate knowledge about (Yu & Rymer., 1998). Concerning attitude towards cervical cancer and its screening, a study done by (Bansal et al., 2015) reported that less than half of their study participants had positive attitudes toward cervical cancer and screening.

In the present study, an association between the average monthly income and the advanced stage presentation of the disease was identified. Most of the participants were in middle-level socioeconomic status. Few amounts of participants belonged to the lower level of monthly income. This condition also caused to increase cervical cancer among women. A similar study conducted in USA, the patients, living in areas with a low or average income had a higher probability of having advanced Stage disease at the time of presentation when compared with woman who lived in areas with a higher monthly income (Ferrante et al., 2010; Mandelbatt et al., 2010). Similar results were found in Morocco, a study done by (Tanturovski et al., 2013). Their study results showed that low monthly income, lower level of education caused to increase delayed stage presentation of cervical cancer.

Recommendations

Cervical cancer can be cured through early detection and medication. The society should be made aware of the Pap test and well women clinics for women above 35 years. The government should pay attention to minimize cervical cancer through an analysis of personal attitudes. Furthermore, quickly become the victims of cervical cancer due to not enough knowledge on cervical cancer, Pap test and well women clinics.

The women should be made aware of the HPV vaccine given by government hospitals, and regular methods should be implemented to distribute HPV vaccine throughout the country by the government. Health education programmes can be organized for healthcare workers, specially for community health workers with the help of cancer control programmes. Specific awareness programmes about risk factors, prevention methods and available facilities should be organized for target groups with using mass media, Audio and Visual aids. Besides, the findings of this study could serve as baseline information for planning for extensive studies and performing large scale education programmes for the general population. The consequences will be early detection, proper management, and reducing disease-related mortality. Remove cultural barriers to detection disease.

Limitations

Consequently, the results could not be generalized to all women in Sri Lanka due to geographic and cultural differences among the different regions of the country.

Acknowledgement

The authors thank full to all participants who voluntarily consented to participate in the data collection procedure and also acknowledge to the director and staff members of Apeksha Hospital who dedicated their valuable support.

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