



Awareness, Complication and Risk Associated With cervical cancer in different age group females in Pakistan Society

Maria Ayub*, Shazmeen Nawaz, Syeda Tuba Tariq, Sameen Shakeel, Rabia Rasheed, Saira Amir

Faculty of Pharmacy, Jinnah University for Women, Karachi 74600, Pakistan

Received: 26-08-2015 / Revised: 14-09-2015 / Accepted: 28-09-2015

ABSTRACT

cervical cancer is the second most common cancer among adult women. it is a major cause of death of women because it is not diagnosed at early stage due to lack of screening and awareness. The purpose of this survey is to study the awareness of cervical cancer & its knowledge in a community. This survey conducted by a written questionnaire in which there are questions about cervical cancer screening, causes, vaccination, and risk. result indicated that 30% of respondents knew cervical cancer is the most common type of gynecological cancer. 6% have done screening, 40% knew about its affects, 20% knew about screening and 19% had knowledge about screening. Only 18% knew about Pap test. Only 19% knew about HPV test. Only 13% knew the HPV as cause of cervical cancer. 28% knew about risk of cervical cancer. Only 18% knew birth of more children as cause of cervical cancer. Only 22% knew about HPV vaccination. 28% women feel hesitation for cervical screening. 83% respondents think that awareness programs about cervical cancer must be conducted. From the result it is concluded that the awareness programs for cervical cancer need to be conducted to make people to be aware of cervical cancer so treatment and prevention of cervical cancer will efficiently be done.

Keywords: cervical cancer, HPV, consequences, prevalence, awareness.

INTRODUCTION

Cervical cancer is the third most common cancer after nonmelanoma skin cancer and breast cancer affecting women and is also the third leading cause of death among women throughout the world, cervical cancer has high incidence in developing countries. Approximately every year 500,000 new cases and about 230,000 deaths are reported by cervical cancer throughout the world. The occurrence of cervical cancer starts from the age of 20 and increases with the age. Human Papilloma Virus (HPV) is the most common cause of cervical cancer. If Human Papilloma Virus (HPV) infection is not treated then HPV infection changes cervical cells into cancerous cells which lead to cervical cancer. In the United States every year 12,000 women are reported with cervical cancer and 4,000 died by this cancer. There are two tests that is pap test and HPV test that can help prevent cervical cancer, pap test is used to diagnose changes in the cell of cervix and HPV test is used to identify the types of Human Papilloma Virus (HPV) that cause mostly cervical cancer. At the beginning of 21 age every woman should have Pap test every three years and women with the age of 30 to 65 years can

choose either Pap test or HPV test at a time every five years [1]. According to the International Agency for Research on Cancer (IARC), there are highest number of cervical cancer cases in India, it is estimated that 1, 32,000 new cases of cervical cancer and 74,000 deaths by this cancer occur in India. Sexually transmitted infections by Human Papilloma Virus (HPV) are the leading cause for the development of cancer of cervix. There are 100 types of HPV out of which 18 have been identified as high risk type for cervical cancer whereas rest of the types have low risk of causing cervical cancer. The prevalence of HPV increases by having multiple sexual partners and due to poor genital hygiene. Glaxo SmithKline (GSK) made a vaccine named as Cervarix® that protects against HPV strains 16 and 18, and a vaccine that protects against HPV strains 16, 18, 6 and 11 is Gardasil® which is made by Merck. Cervical cancer is preventable cancer among other female genital tract cancer if diagnosed at early stage however cervical cancer become deadly and invasive if not detected at early stage [2]. Abnormal vaginal bleeding is the most common symptom of cervical cancer but in some cases there is no symptoms appeared even at advanced stage of cancer. At early stage treatment

is usually surgery including local excision and treatment for advanced stage is chemotherapy and/or radiotherapy. There are 500,000 cases of cervical cancer and about 270,000 women are dying with cervical cancer worldwide that means one death every two minutes. Approximately 80 percent deaths in developing countries such as Pakistan are due to cervical cancer. In Pakistan and Asia every women can be susceptible to cervical cancer from marriage due to sexual relations. According to study published in 2008 by GLOBOCAN that is a world health organization (WHO) project for cancer-related research, reported that incidence of cervical cancer in Pakistani women is 19.5 percent in 2008 as compare to 2002 there were less than 9 percent incidence of cervical cancer. Today young girls have much higher risk of cervical cancer. In fact in Pakistan, incidence of cervical cancer has been increased from low to moderate level especially younger women are diagnosed with the advanced stage [3]. Many studies have been reported about awareness and knowledge of Human Papilloma Virus (HPV) and its relation with cervical cancer. When HPV vaccine is introduced then it is investigated by conducting many studies that how many people have awareness about HPV and its association with cervical cancer and to know that who are interested to receive HPV vaccine. The percentage of people who have heard about HPV is 30-78% which depends on culture, level of education, age, sexual relation experiences, as well as presence for check up in a woman clinic. Despite many people have heard about HPV, however there is lack of general knowledge about HPV and there are a lot of misunderstandings that how this HPV sexually transmit, how this virus cause cervical cancer, genital as well as anal cancer, what is primary prevention of the virus and what is the role of HPV vaccine [4]. In Pakistan cervical cancer is neglecting because of lack of screening, vaccination and preventive steps. Changes induced by Human Papilloma Virus (HPV) in cervical cells last for a short time and about 90% changes go back within 12-36 months as immune system eliminates the virus. Papanicolaou (Pap) smear screening plays important role in the diagnosis of pre-malignant and malignant lesions in the cervix so screening programs decreases the mortality rate in countries in which proper screening programs are conducted, however in developing countries there is poor screening program practice and somewhere screening programs are non-existent. Screening programs, effective treatment strategies, use of vaccination are important to decline incidence of cervical cancer in Pakistan [5].

The objective of the study is to evaluate knowledge, practice and awareness of cervical cancer risk among females in Pakistan in view of that fact to assure need of its awareness in our society.

METHODOLOGY

The perspective data for this study was gathered from 19 May to July 2015 in different economical background females from three different age group of women (that is 20-30, 30-40, above 40) [table 1]. For the purpose of this A written questionnaire is prepared. The data was placed into rows & columns in a table format for analysis. The survey questions were concerned to peoples, from which data is collected. The questions were about awareness of cervical cancer, including its screening, causes, vaccination, symptoms, risk & other conditions. The subjects, whom data is gathered, were from family, relatives, friends & university and total 100 respondents involved. The survey was made to help & make people understand about cervical cancer. The data was collected to prevent & treat cervical cancer. Results were communicated by statistical representation which efficiently communicates the message to the women.

RESULT

According to data below it is conducted that 30% knew cervical cancer is the most common type of gynecological cancer. Only 6% have done screening of cervix. 40% knew that cervical cancer affects female above age of 30. Only 20% have idea of screening and 19% knew screening is recommended from 21 age of female. Only 18% knew that Pap test is recommended for female from 21-65 age. Only 19% knew about HPV test. 24% of respondents knew that abnormal discharge from vagina is the main symptom of this cancer. [Figure 1] Only 13% knew the HPV as cause of cervical cancer. 28% have awareness that having more than one sexual partner is the risk of cervical cancer. 26% respondents knew smoking may cause cervical cancer. 41% knew that HIV and other health problems may cause cervical cancer. 33% knew birth control pills as cause of cervical cancer. Only 18% have awareness that birth of 3 or more children may cause cervical cancer. Only 22% knew that HPV vaccination is available for prevention of cervical cancer. 28% women feel hesitation for cervical screening. 83% respondents think that awareness programs about cervical cancer must be conducted.

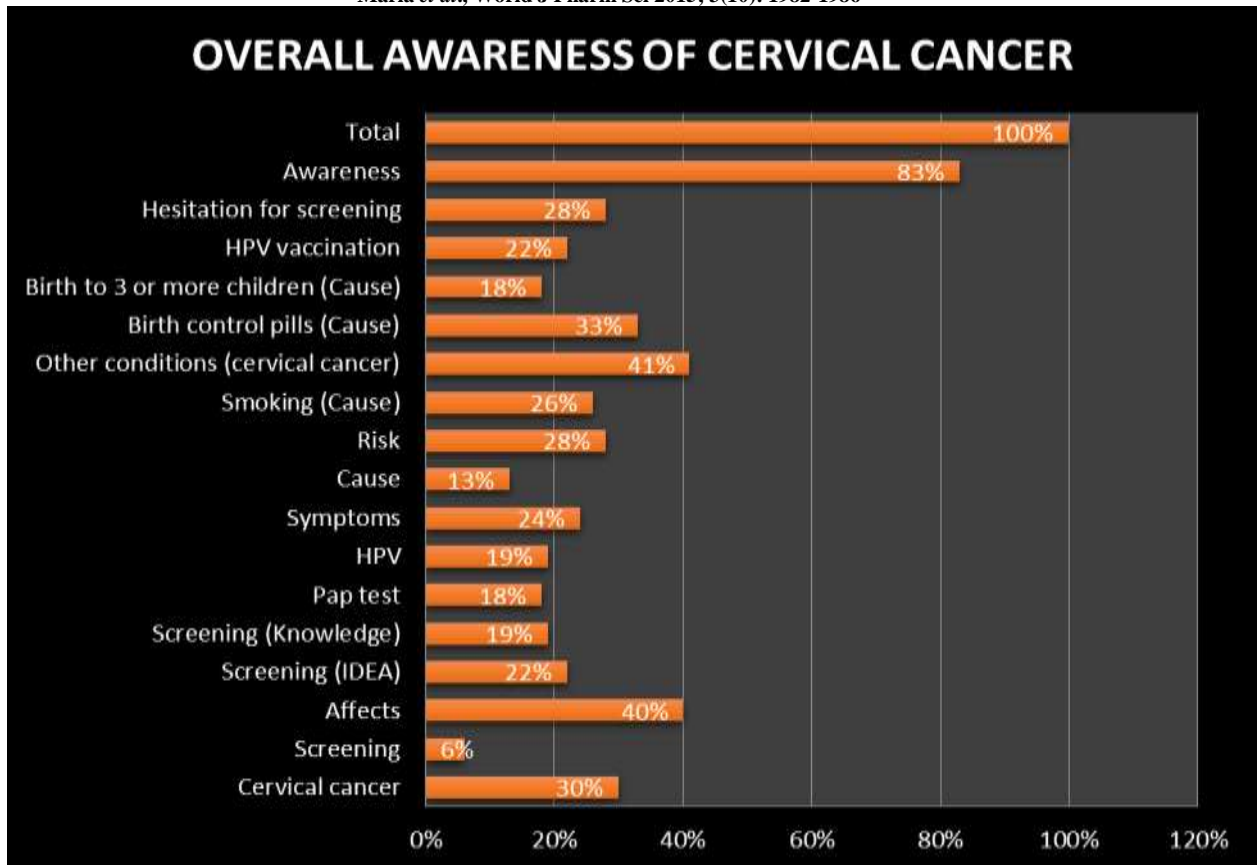


Figure1: overall cervical awareness

Table 1: AWARENESS IN AGE GROUPS & THEIR STATUS

Age (20-30)	Age (30-40)	Age (Above 40)	Married	Single	Graduated	Under Graduate	Illiterate	Total
55%	31%	14%	46%	54%	28%	43%	29%	100%

According to above data: There is 55% awareness about cervical cancer in 20-30years female, 31% in 30-40years and 14% in female above 40. 46% married female and 54% single have awareness of cervical cancer 28% graduated and 43% undergraduate females knew about this cancer. 29% illiterate women have awareness of this cancer.

DISCUSSION

In order to determine awareness of cervical cancer among women this study is done. Most of the respondents in this survey don't have knowledge about cervical cancer as a major disease, less than 40% women knew cervical cancer as gynecological cancer. Result shows that few respondents done pap screening of cervical cancer that means there is no proper routine of screening in Pakistan Pap test is necessary to diagnose cervical cancer but female of Pakistan never conduct this test because they don't know the importance of this test. Massive pap

screening have declined the incidence of cervical cancer and rate of death in the United State, reports from Europe shows that rates of cervical cancer can be reduced by 60% to 90% by introducing screening programs to population who are unscreened but there is hesitation among female of Pakistan regarding screening [6]. Most of the people don't have idea that cervical cancer affects those female who are above 30. Most of the respondents are unaware of virus that is human papilloma this is sexually transmitted virus among men and women and is the cause of cervical cancer and there are 100 types of this virus which are different in their genotype sequence and due to this sequence they are identified as low risk and high risk, out of 100 18types of the virus are the leading cause of cervical cancer [7].

Most of the female also don't know about risk of cervical cancer, risk factor of cervical cancer are early marriage, multiple sexual partners, prolong use of birth control pills, smoking, sexual exposure

to a partner suffering from human papilloma virus infection, history of sexually transmitted diseases, high number of live born children that shows signs of life after birth, immunosuppression, previous history of vulvar or vaginal squamous dysplasia and low socio-economic status [8].

Respondents don't have information about HPV vaccine whereas human papilloma virus vaccine is very important tool to stimulate long lasting immune response to remove Human Papilloma virus induced infections. GlaxoSmithKline Biological and Merck Research Laborites, have developed vaccines against HPV 16 and 18 to prevent cervical cancer. In June 2006, The Food and Drug Administration (FDA) have approved Merck vaccine that is Gardasil due to its excellent results on the basis of clinical trials [9].

A pleasant result of this survey is that most of the female want to know about cervical cancer by attending awareness programs. This study showed that there is inadequate awareness regarding cervical cancer as well as its cause Human Papilloma Virus (HPV) infection and its prevention among females. It can be said that there is lack of knowledge about cervical cancer among health professionals and general public because in Pakistan awareness programs are not conducting to spread the knowledge about cervical cancer to women and this can only be possible by health professionals. Dissimilar to most other cancers, cervical cancer is preventable but this will be possible when medical education programs conducted to give knowledge to general population especially women. There is no routine screening programs this is also due to insufficient knowledge of health professionals who are unable to educate their patients that screening is essential to diagnose cervical cancer. Health professionals must tell the proper time of screening that is just after marriage after sexual relation. Screening practice is less in Pakistan than other countries. For prevention of cervical cancer it is essential to prevent the cause

first that is Human Papilloma Virus (HPV) and for this HPV vaccine must be available in Pakistan and every health professional must have complete information about this vaccine.

In developed countries such as USA, Belgium and Australia have knowledge about Human Papilloma Virus (HPV) as well as HPV vaccine but there is poor knowledge in Thailand, Turkey, china and Pakistan [8]. The overall status conducted by many studies on gynecological cancers reveals awareness status in pakistan is below 50% which demonstrated awareness programs should conducted in pakistan [10].

CONCLUSION

It is concluded from this study that cervical cancer is the leading cause of death among females because there is lack of awareness among general population and health professionals. Therefore it is being necessary to prevent the occurrence of cervical cancer and rate of deaths by cervical cancer, awareness programs must be conducted in which must provide information including cause, risks, symptoms, treatment options and preventive steps. Health professionals play major role in preventing many diseases because they are ones who are able to give proper knowledge and guidelines to their patients but awareness programs should not confined to health professionals but must invite general public to attend such programs. The information should be easy to understand. For treatment of cervical cancer HPV vaccine must be available in every country and health professionals must have complete knowledge about the vaccine so main cause will be reduced. Pap screening must be conducted in gynecological practices. Thereby, cervical cancer can be prevented by educating health professionals as well as general public especially women about cervical cancer through awareness programs. Thus lives can be saved from cervical cancer.

REFERENCES

1. Érika Galvão Lima, Diego Breno Soares de Lima, Cleine Aglacy Nunes Miranda, Valeska Santana de Sena Pereira, Jenner Chrystian Veríssimo de Azevedo, Josélio Maria Galvão de Araújo, Thales Allyrio Araújo de Medeiros Fernandes, Paulo Roberto Medeiros de Azevedo, and José Veríssimo Fernandes, Knowledge about HPV and Screening of Cervical Cancer among Women from the Metropolitan Region of Natal, Brazil, ISRN Obstetrics and Gynecology, 2013.
2. V Shah, S Vyas, A Singh, and M Shrivastava, Awareness and knowledge of cervical cancer and its prevention among the nursing staff of a tertiary health institute in Ahmedabad, Gujarat, India, *ecancermedicalscience*, 2012; 6: 270.
3. Ghulam Jilany Khan, Hafiza Sadaf Naeem, Sara Khan, Talha Jamshaid, Muhammad Imran Sajid, Irfan Bashir, Muhammad Jamshaid, Understanding and Responsiveness Level about Cervical Cancer and its Avoidance among Young Women of Pakistan, *Asian Pacific Journal of Cancer Prevention*, 2014: Vol 15(12): 4877

4. Abdul Samad Gichki, Waranun Buajeeb, Sombhun Doungudomdacha, Siribang-on Pibooniyom Khovidhunkit, Knowledge of Human Papillomavirus and its Association with Head and Neck Benign and Malignant Lesions in a Group of Dental Patients in Pakistan, Asian Pacific Journal of Cancer Prevention, 2015: Vol 16(14):1581
5. Abida Siddiq, Maidah Zainab, Ishtiaq Qadri, Muhammad Faraz Bhatti, and Joanna L. Parish , Prevalence and Genotyping of High Risk Human Papillomavirus in Cervical Cancer Samples from Punjab, Pakistan, Viruses, 2014 Jul;vol 6(7): 2762–2777.
6. Shahina Parveen, Rena Sajjad, Misbah Masood, Hasan Anzar Usmani, Rafshan Sadiq, Numair Yunus, Saeeda Asghar, Cervical Cancer: Outcome of Treatment and Causes of Failure, journal of Pakistan medical association, Oct 2006: Vol. 56(10) :437
7. Saeed Khan, nadeem N. jaffer, , Mohajeeb, Mohammad Nasherwan Khan, Mohammad A. Rai, , Majid Shafiq , ,Adnan Ali , Shahid Pervez, Nusrat Khan, Aliya Aziz , Syed H. Ali, Human papillomavirus subtype 16 is common in Pakistani women with cervical carcinoma, International Journal of Infectious Diseases, 2007 : vol 11: 314
8. Syed Faizan Ali , Samia Ayub, Nauman Fazal Manzoor, Sidra Azim, Muneeza Afif, Nida Akhtar, Wassi Ali Jafery, Imran Tahir, Najam Uddin, Knowledge and Awareness about Cervical Cancer and Its Prevention amongst Interns and Nursing Staff in Tertiary Care Hospitals in Karachi, Pakistan, Plos one, 2010 : 5(6).
9. Sadaf Yousuf, Serajuddaula Syed, Prophylactic and Therapeutic Human Papillomavirus Vaccine: A breakthrough for women health, journal of Pakistan medical association, 2009 : Vol. 59(5): 311.
10. Maria Ayub*,Kainat Firdous, Huma Rizwan ,Safeena Siddique, Sumiya Khan, Ushna Maryam. AWARENESS STATUS OF BREAST CANCER IN PAKISTAN SOCIETY AMONG AFFECTED WOMEN WITH BREAST CANCER AND CONTROL MEN AND WOMEN: A CROSS-SECTIONAL STUDY.JCBPS 2015,vol 5 No:4.