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## RESEARCH ARTICLE

### AWARENESS AND KNOWLEDGE OF HPV AND CERVICAL CANCER

\*Nor Masitah Mohamed Shukri and Dr. Gheena, S.

Bachelor of Dental Surgery (year 2), Saveetha Dental College and Hospitals, No. 162, PH Road,  
Chennai-600077, India

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#### ABSTRACT

Cervical cancer is the second most common disease that affect women globally. Everyday there will new cases and deaths occur in tremendously. Although this cancer is considered to be a preventable health problem, adequate knowledge on cervical cancer is a paramount of importance. The objective is to validate a questionnaire used to assess level of general knowledge upon cervical cancer including its primary and secondary prevention. This is to create an awareness on cervical cancer and to explore the preventives measure of this disease.

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## INTRODUCTION

Cervical cancer is the second most common cancer in women globally and it is the commonest cancer among Indian women. There was an estimation of 550,700 new cases and 286,823 deaths that occur due to cervical cancer in the year 2010 (Farley, 2010). Nowadays, this cancer is a primarily disease that can be found in developing and low-income countries (Sankaranarayanan, 2006), 83% of nearly 500,000 new cases are in developing countries, as are 85% of the 274,000 deaths associated with cervical cancer (Ferlay, 2001). In India alone, there is an estimation of 132,000 new cases and 74,000 deaths occur annually (Laikangbam, 2007). In relation with India's rapidly growing population, the burden of incidence and mortality of cervical cancer is foreseen to be increase by 78% in the year of 2030 (International Agency for Research on Cancer, 2012). Cervical cancer, which is a malignant neoplasm, can be asymptomatic sometimes in early stages. The symptoms that can be seen normally in advanced stages are persistent pelvic pain, unexplained weight loss, unusual bleeding during periods, bleeding and pain after sexual intercourse (Kumar, 2007). This disease is globally infected with 75% transmission of human papillomavirus (HPV) types 16 and 18 (Walboomers, 1999), Remaining 35% include tobacco consumption, sexually transmitted disease, increasing

parity, multiple sexual partners, prolonged use of oral contraceptive pills and early age of sexual intercourse (Gadducci, 2011). This cancer can be assessing with the HPV vaccine and early detection normally is preventable. Pap smear test is credited with reducing the number of cases of cervical cancer by identifying pre-cancerous lesions and treating these lesions before they start to progress. This can help to reduce mortality due to cervical cancer, which can be seen in many countries. The introduction of Pap smear test is shown to reduce 90% deaths in United States (Eddy, 1990). In a study done in Tamil Nadu, pap-screening test is feasibly used as primary screening test for referral HPV testing (Parimala, 2017). However, there are some barriers that have been reported in screening test such as, inadequate access to health care, fear of finding cancer, aversion to the discomfort of screening and having to take time off work for screening and lack of awareness of the importance of screening (Lantz, 1995; Mamon, 1990 and Paskett, 1990). It is said that almost half of women in United States with invasive cervical cancer have never had a Pap smear and 20% of them have not had Pap smears in the last five years. In Australia, about 85% of them die because of cervical cancer and have not had regular Pap smears ([text.nlm.nih.gov/nih.uploadv3/CDC\\_statements/cervical/cervica](http://text.nlm.nih.gov/nih.uploadv3/CDC_statements/cervical/cervica)). The level of awareness of potential beneficiaries confess great significance in the extent of public health program to keep controlling and prevent cervical cancer at a national level. At the same point, it is very crucial that health care professionals need to be aware of advanced

\*Corresponding author: Nor Masitah Mohamed Shukri

Bachelor of Dental Surgery (year 2), Saveetha Dental College and Hospitals, No. 162, PH Road, Chennai-600077, India

secondary strategies in developed countries and the intervention that can be employed in low-resource settings (li, 2010; Bansal, 2015).

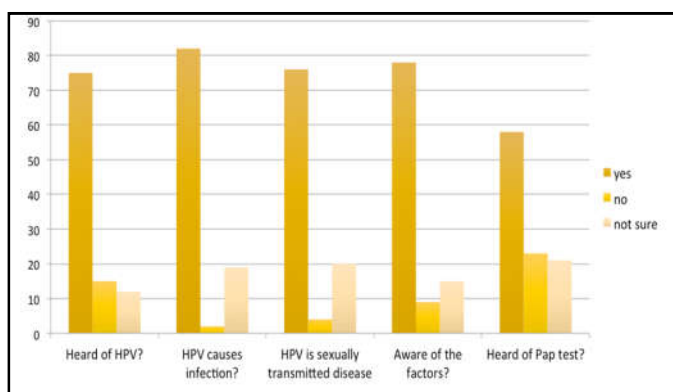
**MATERIALS AND METHODS**

This study was conducted online through Survey Planet. The survey consists of 14 multiple-choice questions that assessed the participants’ knowledge about cervical cancer signs/symptoms, transmission, management and control. Particularly, they are aged between 20 to 23 years old.

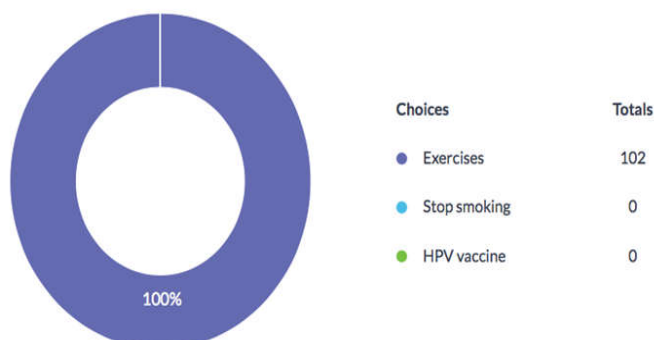
**Questionnaire on Awareness and Knowledge on HPV and Cervical Cancer**

- Have you ever heard about human papillomavirus
- Where do you get the information about cervical cancer
- Can HPV infections cause genital cancers in males and females
- HPV vaccine is available to protect from genital cancers
- HPV is sexually transmitted disease
- Are you aware of risk factors for cervical cancers
- Below are the symptoms of cervical cancer except
- Which of the way to prevent cervical cancer? EXCEPT
- Which of these following is the treatment for cervical cancer
- In which group is likely to diagnose with cervical cancer
- Have you ever heard of cervical cancer screening tests
- Have you heard of Pap test
- Who should get tested for cervical cancer
- Women diagnosed with cervical cancer usually will survive their cancer for

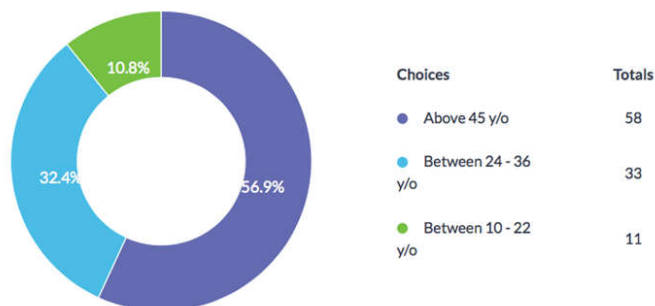
**Questionnaire Analysis**



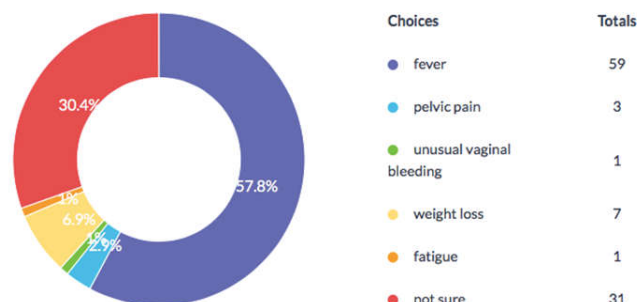
**Prevention (except)**



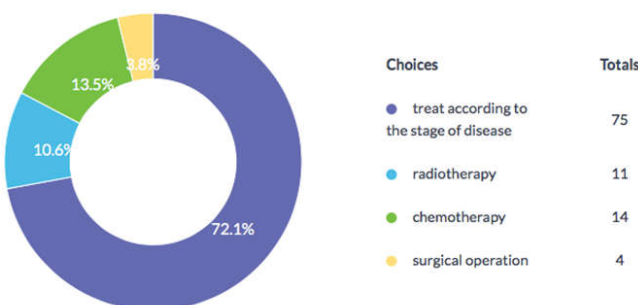
**High risk individual**



**Symptoms (except)**



**Treatment**



**DISCUSSION**

This study shows suboptimal level of knowledge and awareness regarding cervical cancer and HPV but still 73.5% of the respondents had heard of human papillomavirus (HPV). About a quarter of them had not heard of it. It could be probably due to lack of population-based screening programs, inefficient mass media campaigns and there are cultural barriers wherein most women in India feel shy to discuss the diseases associated with sexual organs (Bansal, 2015). About 80% of the participants knew that HPV infections can cause genital cancers in males and females but very few responded as no (1.9%) and not sure (18.4%). These result shows sufficient knowledge of HPV infection being the cause of cervical cancer which is about 98% of cervical cancer is due to this infection, as reported in a study in India (Das, 2008). Majority of the respondents, who said HPV, were aware that it is transmitted sexually (76.5%), while few thought no (3.9%) and were not sure (19.6%). Nearly half (56.9%) of all participants have heard of Pap smear test that can be used to detect HPV. Few studies reveal that knowledge, attitude and the beliefs about the Pap smear test is related to the participation in cervical cancer

screening (Bundek, 1997; Chavez, 1997 and Harmon, 1996). Therefore, it is imperative to increase their level of knowledge as screening can substantially reduce the worldwide cervical cancer mortality. Of 102 participants, 78 (76.5%) of them knew the risk factors for cervical cancer, while 8.8% did not know any of the risk factors. In a study done in Pakistan, there are more than 35 risk factors were reported which include unprotected sex, poor hygiene, multiparity, early stage at first coitus, family history and smoking (Li, 2010). Regarding the prevention of cervical cancer, hundred percent of all respondents answered correctly that HPV vaccine and smoking cessation are the preventive methods. HPV vaccine is very essential in prevention of cervical cancer that has become a great breakthrough in this present. Many studies had been done in many countries to assess the knowledge, attitude and beliefs of HPV vaccine. The studies in developed countries such as USA, Belgium and Australia reported better knowledge about HPV and HPV vaccine [20-26]. In total, 59 out of 102 were correctly thought that fever is not one of the symptoms for this cancer. 30.4% of them were not sure of the symptoms and few of the remaining opted for pelvic pain (3.4%), unusual vaginal bleeding (1%), weight loss (6.9%) and fatigue (1%). Awareness about the treatment of cervical cancer was widespread among them. Seventy-two percent answered the correct treatment option, which was to treat according to the stage of disease. 10.6% of them had opinion that radiotherapy is required to cure cervical cancer, whereas 13.5% were in favor of chemotherapy and 3.8% for surgical operation, only. Many of the participants (56.9%) believed that individuals aged above than 45 years old have higher risk to diagnose with cervical cancer. 32.4% thought middle aged individuals are more likely to develop cervical cancer meanwhile 10.8% of them had opinion that people between age of 10 and 22 years old have a higher risk for this deadly disease.

## Conclusion

In this study, the level of awareness and knowledge of HPV and cervical cancer were identified and was fairly good. However, the need for information about this disease emerges as a strong issue among them. Further intervention such as education, communication and reassurance are needed to overcome such resistance. It was reported that more than 85% cases and 88% deaths occur in developing countries due to cervical cancer, which suggested in relation because of lack access to cervical cancer screening and treatment. This urges a serious issue where early detection and treatment is crucial and needs to be continued for millions of women who are already infected and who may not receive vaccination in near future (Arunadevi, 2015).

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