

Knowledge and Perception towards Pap Smear, HPV, and Cervical Cancer Among Women in Riyadh, Saudi Arabia, in December 2016

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Abstract: Cervical Cancer is considered the fourth most common cancer in females worldwide, with most cases occurring in the third world countries⁽³⁾. In Saudi Arabia, Cervical Cancer ranks as the eighth most frequent cancer among women⁽¹⁾. Human Papillomavirus (HPV) is considered the causative agent of Cervical Cancer, mainly HPV types 16 and 18⁽⁴⁾. Unfortunately, there is no database for the prevalence of HPV among women in Saudi Arabia, which is a setback in the fight against Cervical Cancer.

Objective: The aim of this study is to measure the knowledge of women in Riyadh regarding Cervical Cancer and its risk factors, Pap Smear, and HPV information, and if they have taken the HPV vaccine which has recently been introduced to Saudi Arabia.

Method: A cross sectional study was done in December, 2016 in Riyadh. A self-administered questionnaire based survey was distributed through an online link to the general population by social media, and by hand to patients in the waiting area at the Obstetrics and Gynecology clinic in Prince Sultan's Medical Military City hospital in Riyadh. A total of 628 women agreed to voluntarily participate in this study, ages ranging between 15 and 61 years.

Result: The results of this study pointed out some important information about the reasons of why the woman visits/do not visit an Obstetrics and Gynecology clinic. Furthermore, 47.6% did not know what a Pap Smear is, 67.2% never had a Pap Smear, 23.6% haven't heard of Cervical Cancer, more than 65% did not know what the risk factors of Cervical Cancer are, 35.4% did not know if Cervical Cancer can be prevented or not, 83% did not know what HPV is, 79.5% did not know that HPV causes Cervical Cancer, 81.17% did not know that HPV is sexually transmitted, and lastly 98.4% did not take the HPV vaccine.

Conclusion: Despite this cancer as being preventable, yet it has little attention paid to it in Saudi Arabia. Our research concluded that there is a huge lack of knowledge among this particular disease

Keywords: Cervical Cancer, Human Papillomavirus (HPV), Gynecology clinic, particular disease.

1. INTRODUCTION

Cervical Cancer is a type of cancer that occurs in the cells of the uterine cervix; the lower part of the uterus that connects to the vagina⁽²⁾. Cervical Cancer is considered the fourth most common cancer in females worldwide, the majority of cases occurring in the third world countries⁽³⁾. Although it is a preventable cancer, yet it has a very high mortality rate in these under developed countries.

In Saudi Arabia, Cervical Cancer ranks as the 8th most frequent cancer among women⁽¹⁾. Current estimates indicate that every year 241 women are diagnosed with Cervical Cancer and 84 women die from this disease⁽¹⁾.

Early detection of cervical changes with a Pap Smear (papanikolaou test); that detect early cellular changes, which decreases the mortality and morbidity associated with Cervical Cancer⁽⁵⁾.

Human Papillomavirus (HPV) is considered the causative agent of Cervical Cancer, mainly HPV types 16 and 18⁽⁴⁾. Unfortunately, there is no database for the prevalence of HPV among women in Saudi Arabia, which is a setback in the fight against Cervical Cancer. It is well known that the HPV vaccine decreases the incidence of HPV related cancers⁽⁶⁾. The HPV vaccine has been recently introduced to Saudi Arabia and is only available in selected hospitals, making it not accessible for the majority of the Saudi population.

The aim of this study is to measure the knowledge of women in the city of Riyadh, the capital of Saudi Arabia, regarding Cervical Cancer and its risk factors, Pap Smear and HPV information, and if they have had the HPV vaccine. Moreover, in the future we would want to expand this research in all the cities of Saudi Arabia.

2. METHOD

A cross sectional study was done on December, 2016 in Riyadh, Saudi Arabia. A self-administered questionnaire based survey was distributed through an online link to the general population by social media, and by hand to patients in the waiting area at the Obstetrics and Gynecology clinic in Prince Sultan's Medical Military City hospital in Riyadh. A total of 628 women agreed to voluntarily participate in this study, ages ranging between 15 and 61 years. The questionnaire was conducted in Arabic and was divided into:

- 1- Demographic characteristics of the participants
- 2- If they visit an Obstetrics and Gynecology clinic or not
- 3- The reasons of visiting/not visiting the clinic
- 4- Knowledge regarding cervical cancer, pap smear testing, and HPV
- 5- If they took the HPV vaccine

An answer sheet with important information regarding Pap Smear, Cervical Cancer, and HIV was handed out to all the participants after they gave back the answered questionnaire, in the aim of raising awareness and empowering women with knowledge about Cervical Cancer.

3. RESULTS

A total of 628 women volunteered to be part of our research. The mean age of the volunteered women was 37.6 (range from 15 to 61). The participants were asked if they visit an OBGYN doctor for any reason, 58% (364/628) do visit the OBGYN clinic, and 42% (264/628) don't. Of those women who usually visit the OBGYN doctor, 41.4% (176/628) only visit the doctor when they complain of a new symptom, 29.2% (124/628) visit the clinic only to followup their pregnancy, 9.6% (41/628) chose "as long as I'm healthy I don't need to visit the OBGYN doctor" as their answer, 9.4% (40/628) have yearly OBGYN clinic visits, and 10.4% (44/628) had other reasons. On the other hand, the women who never visit the OBGYN clinic had different reasons as well. 39.7% (126/628) stated they don't need to visit the OBGYN doctor, 41.6% (132/628) are virgins, 6.6% (21/628) are scared, 6.3% (20/628) are embarrassed, and 5.7% (18/628) had problems in transportation.

Regarding Pap Smear:

52.4% (329/628) knew what a Pap Smear is, and 47.6% (299/628) did not. 32.8% (206/628) have had a Pap Smear, and 67.2% (422/628) never had it.

Regarding Cervical Cancer and its risk factors:

76.4% (480/628) have heard about Cervical Cancer, and 23.6% (148/628) never heard of it. 66.7% (419/628) did not know if smoking is a risk factor for developing Cervical Cancer, 24.5% (154/628) agreed to the fact that smoking is a risk factor for Cervical Cancer, and 8.8% (55/628) chose that smoking is not a risk factor for Cervical Cancer.

72.6% (456/628) did not know if immunodeficiency and medications that decrease the immunity are risk factors in developing Cervical Cancer, 24% (151/628) agreed to this statement as being true, and 3.3% (21/628) disagreed. 63.7% (400/628) knew that Cervical Cancer can be prevented, 35.4% (222/628) did not know if Cervical Cancer can be prevented or not, and 1% (6/628) thought that Cervical Cancer cannot be prevented.

About Human Papillomavirus (HPV):

17% (107/628) knew what HPV is, and 83% (521/628) did not know, 79.5% (499/628) Did not know that HPV causes Cervical Cancer, 18.9% (119/628) believed that HPV causes Cervical Cancer, and 1.6% (10/628) believed that HPV does not cause Cervical Cancer. 81.17% (513/628) did not know if HPV is sexually transmitted, 13.1% (82/628) agreed to the fact that HPV is sexually transmitted, and 5.3% (33/628) claimed that HPV is not transmitted sexually. 98.4% (618/628) did not take the HPV vaccine, 1.6% (10/628) have taken the HPV vaccine.

4. DISCUSSION

In our research we aimed to evaluate random women's knowledge in Riyadh about Pap Smear and Cervical Cancer. A survey was sent through social media and was also distributed in the Obstetrics and Gynecology clinic in Prince Sultan Military Medical City. A total of 628 participants, in different age groups, have volunteered in this study. 58% of them visited the OBGYN clinic for various reasons, 41.4% only visit the doctor when they complain of a new symptom, 29.2% visit the clinic only to follow up their pregnancy, 9.4% have yearly OBGYN clinic visits, 9.6% believed that as long as they are healthy, they don't need the frequent (annual) visits, and 10.4% had other reasons (ex. follow up fibroids). However, 42% of those women never actually visit the OBGYN clinic. The different reasons were, 39.7% stated they don't need to visit the OBGYN doctor, 41.6% are virgins, 6.6% are scared to visit the doctor, 6.3% are embarrassed, and 5.7% had problems in transportation, which is a major issue for women in Saudi Arabia. Pap Smear is known to be the diagnostic test of detecting premalignant lesions in the cervix. From the results we collected, in general, most of the volunteers not only had a decreased level of knowledge about the questions they have been asked, but the majority never had a Pap Smear (67.2%). Unfortunately, out of the 32.8% of women who have had a pap smear, some of them never actually knew what it was. We had to explain how the test was done for them to recall if they have had it or not. This shows the defect in communication between the doctor and the patient. Accordingly, 47.6% of the participants did not know what Pap Smear is. Fortunately, 52.4% knew what a Pap Smear is. Moreover, about their knowledge towards Cervical Cancer and its risk factors, 76.4% have heard about Cervical Cancer, and 23.6% never heard of it. 66.7% did not know if smoking is a risk factor for developing Cervical Cancer, 24.5% agreed to the fact that smoking is a risk factor for Cervical Cancer, and 8.8% chose that smoking is not a risk factor for Cervical Cancer. Furthermore, 72.6% did not know if immunodeficiency and medications that decrease the immunity are risk factors in developing Cervical Cancer, 24% agreed to this statement as being true, and 3.3% disagreed respectively. In addition, 63.7% knew that Cervical Cancer can be prevented, 35.4% did not know if Cervical Cancer can be prevented or not, and 1% thought that Cervical Cancer cannot be prevented. On the contrary, their knowledge on Human PapillomaVirus was also on the low side. 17% knew what HPV is, and 83% didn't. 79.5% did not know that HPV causes Cervical Cancer, 18.9% believed that HPV can cause Cervical Cancer, and 1.6% chose to deny this statement as being true. Also, 81.17% did not know if HPV is sexually transmitted, 13.1% agreed to the fact that HPV is sexually transmitted, and 5.3% claimed that HPV is not transmitted sexually. Additionally, 1.6% have taken the HPV vaccine, and 98.4% haven't, as they never heard of it, due to the fact that this vaccine was not introduced to Saudi Arabia until recently.

5. CONCLUSION

To sum up, Cervical Cancer is considered the 4th most common cancer worldwide, and the 8th most frequent cancer in Saudi Arabia. In contrast to this cancer as being preventable, yet it has little attention paid to it in Saudi Arabia. This research was done to evaluate the knowledge of women in Riyadh towards Pap Smear and Cervical Cancer. Our study concluded that half of the women don't know what a pap smear is, more than half never had a pap smear, the majority did not know what HPV is or how it's transmitted, nor did they know what the risk factors of developing Cervical Cancer are, and finally more than 90% of them did not take the HPV vaccine. This shows that there is a huge lack of knowledge, and a lack of communication between the doctor and the patient. Therefore, there has to be a change made in all methods of communication to raise the awareness that is needed towards this important topic to all women in all ages to prevent the harm that could be found later in the disease, and for them to maintain a healthy life.

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