



Acceptance of Papillomavirus Vaccination among Females in Al-leith Province, Saudi Arabia

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Abstract

A community-based study was carried out among females in Al-leith province, Saudi Arabia to identify the acceptance of females to be vaccinated against Human Papillomavirus (HPV). We interviewed 315 females in ages from 11 to 26, the target group of HPV vaccination. The relevant data were collected using a simple questionnaire. The findings illustrated that majority of participants were in age group (15 – 26 years), the actual target of vaccination against HPV, most of participants were Saudi females, and most of them were not married. It was found that less than half (43.8%) of females were willing to receive the vaccine, and the rest of the total females did not accept vaccination. The study concluded that still high percentage of females in Saudi Arabia did not accept vaccination against Human papillomavirus, the issue that need more efforts to increase the percentage of vaccination acceptance.

Keywords: Papillomavirus, vaccination, acceptance, HPV, Al-Leith

Introduction

The human papillomavirus (HPV) is a sexually transmitted viral infection and is common throughout the world (Kehinde, 2020) (Jian et al,

2022). The virus infects both sexes, however sexually active young women are more exposed the risk factor of HPV (Ming et al, 2023). It was reported that more than 70% of sexually active females and males will be infected during their lives (Kehinde, 2020). HPV is the common cause of cancers in female, it is estimated that about 57,000 cancer cases in women are associated with Human Papillomavirus annually (Kendal et al, 2021). Giovanna et al (2023) reported that 4.5% of all cancers are due to HPVs, about 8.6% of cancer cases in women and 0.8% in men are associated with HPVs worldwide.

Human papillomavirus infection is preventable through vaccination as the available vaccination is effective. World Health Organization (WHO) reports that the vaccine will prevent more than 4 million women in low- and middle-income countries in the coming decade (Atheer et al, 2022). The Health Authority in Saudi Arabia is implementing activities included measures for HPV vaccination and screening, and recommends 2 doses vaccination for girls aged 6–17 against HPV in addition to that also women aged between 15 and 26, should be subjected to vaccination with three doses, moreover, HPV vaccination becomes one of the routine immunizations for females in Saudi National Immunization Schedule (Layla et al, 2023) (Atheer et al, 2022).

Although the Human papilloma vaccine is available and free in all health facilities in the Kingdom of Saudi Arabia, the biggest challenge to the success of this strategy and reducing the rate of infection with the virus is the acceptance of Saudi girls and women to take the vaccine as recommended. Several studies mentioned that the prevalence in KSA ranging between 9.8% and 43% (Khalid et al, 2024)

Materials and methods

The study design was descriptive community-based study among females in Al-Leith province which is in Makkah region, Kingdom of Saudi Arabia. It is located 180 km to the south west from the holy city of Makkah. Most of the governorate's population are Arab tribes that have preserved their customs and traditions over time.

The sample size were 315 females in ages from 11 to 26 years, because it is internationally recommended for vaccination against human papillomavirus infection. They were selected using simple random sampling technique. The relevant data were collected using questionnaire and analyzed by SPSS.

Results

In the following, table one shows the Demographic characteristics of participant females that most of them were in age group (15 – 26 years old),

the majority were Saudi females, the highest percentage of them have no work, and the majority were not married yet. In table two, only close to half of females accept the vaccination against Human papillomavirus.

Table 1. Demographic characteristics of participant females in Al-Leith, Saudi Arabia

Age (years)	No	%
from 11 to 14	15	4.8
from 15 to 26	300	95.2
Nationality		
Saudi	299	94.9
Non-Saudi	16	5.1
Occupation		
Work	34	10.8
Do not work	281	89.2
Marital status		
Married	13	4.1
Not married	302	95.9

Table 2. Acceptance of Human papillomavirus vaccination among females in Al-Leith, Saudi Arabia

Acceptance	No	%
Accept	138	43.8
Not accept	177	56.2
Total	315	100

Discussion

Human papillomavirus (HPV) is a group of viruses usually cause asymptomatic condition, but the infection is a risk factor of cancers in both males and females. It is responsible for a considerable percentage of human cancers, for example cervical cancer in women. The infection transmitted sexually, so sexually active individuals are at risk of infection. Fortunately, it is vaccine-preventable infection. The vaccine is available and it is recommended that Everyone through age 26 years should get HPV vaccine if they were not fully vaccinated already.

In Saudi Arabia, HPV vaccines are available in all health settings throughout the Kingdom, but the vaccination coverage is still low as shown by several studies (Atheer et al, 2023). In this study we found that more than half (56.2%) of vaccination target females were not willing to receive the doses. It is one of limitations that we did not ask them about the reasons behind their rejection, but many studies in Saudi Arabia attributed that to limited awareness and some cultural barriers in some regions (Hind et al, 2024) (Alaa and Osman, 2022).

Our study has shown that the vaccination acceptance rate is actually low and is much lower than the ambition of the health authorities in the Kingdom. Addressing this problem requires efforts from the relevant sectors,

especially the educational sector, to encourage girls and their families to engage in vaccination and protect themselves from many types of cancers, especially in this study area, which we pointed out that women there need to raise their awareness on such health issues

Conclusion

The study showed that the percentage of girls and women who accept vaccination against the Human Papilloma Virus (HPV) is still low among target females, despite the disease existing in the Kingdom of Saudi Arabia. The reason behind this reluctance on their part may be due to a lack of awareness regarding the danger of the infection and that it may be the cause of types of cancers.

Conflict of Interest: The authors reported no conflict of interest.

Data Availability: All data are included in the content of the paper.

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