Parents’ Knowledge of HPV Vaccination of their Daughters and Factors Influencing their Acceptance

Hye Seon Choi¹, Hye Young Ahn²*, Ji Eun Lee³, Won Hee Park⁴,
¹ Department of nursing, Woosuk University
²,³,⁴ College of Nursing, Eulji University
771-71 Beon-gil, Gyeryong-ro, Jung-gu, Daejeon 301-746, Korea
*Corresponding Author: ahanaya@eulji.ac.kr

Abstract. This study aims to check patient knowledge on cervical cancer and HPV vaccine and to examine acceptance and effects of HPV vaccine on children. As results, in the knowledge about cervical cancer and HPV vaccine, significant difference was found between mothers and fathers with the former getting the total score. Among the factors affecting the acceptance of HPV determining factors of mother for vaccination was 46.2% and interfering factors for vaccination was 60.7%. With regard to determining factors for future vaccination among mothers who have daughters not vaccinated, acquisition of knowledge was 61.4% and interfering factor for future vaccination was 76.6%. It seems necessary to provide accurate information related to promotion and side effects of HPV vaccination on parents.

Keywords: Knowledge, Papillomavirus, Parents, Vaccination, Uterine cervical neoplasms

1 Introduction

Cervical cancer is the 2nd most common cancer in women [1], and women who smoke or start having sex young, or those infected with HIV or HPV can develop cervical cancer. And HPV is related to penile cancer, anal cancer, oral cancer, and pharynx cancer in men as well as cervical cancer in women, rendering HPV becoming a critical health issue for both men and women [2]. Fortunately, vaccination against HPV is highly effective in preventing cervical cancer [3]. Against this background, efforts should be made to have people be aware that HPV is an important health issue for both men and women, departing from the practice of focusing on the risk of HPV as women’s issue only. Therefore this study aims to check patient knowledge on cervical cancer and HPV vaccine and to examine acceptance and effects of HPV vaccine on children.
2 Methods

2.1 Design

The study is descriptive research aiming at identifying parents’ knowledge of HPV vaccination of their children, acceptance of the vaccination, and factors influencing the acceptance.

2.2 Samples and Procedure

Data collection period is from Aug. 10 to Oct. 10, 2013 and subjects of this study were 260 mothers and fathers of middle and high school daughters at D metropolitan. This study went through investigation process of institute life research and institutional review board (IRB) of this university.

2.3 Measurements

2.3.1 Knowledge of Cervical Cancer

The tool developed by Jo [4] and complemented by Kim & Choi [5] was used to assess knowledge of cervical cancer. The tool’s Kuder Richardson Coefficient of reliability (K-R 20) in the preceding study [4] was .63 and the corresponding figure in this study was .82.

2.3.2 Knowledge of HPV Vaccine

For the measurement of knowledge of HPV vaccine, the HIV knowledge measurement tool developed by Kim & Ahn [6] and supplemented by this author was used. The tool’s K-R 20 in the preceding study [6] was .87 and the corresponding figure in this study was .72.

2.3.3 Acceptance of HIV Vaccination of Daughters

In the study, acceptance of HIV vaccination of daughters means whether daughters of the parents are vaccinated against HPV (vaccinated, not yet vaccinated) as well as their intention to vaccinate their daughters (have intention to vaccinate, no intention to vaccinate).

2.3.4 Factors Influencing Acceptance of HPV vaccine

In this study, factors influencing acceptance of HPV vaccine means the factors influencing HPV vaccination of their daughters (factors led to vaccination and factors
hindering vaccination) and the factors influencing vaccination intention (factors led to having vaccination intention and factors hindering vaccination intention).

2.4 Data analysis

Using SPSS 21, all data was analyzed in a two-tailed test at the significance level of α=.05. Frequency and percentage were used to analyze general characteristics of study participants, parent’s acceptance and influencing factors. T-test was conducted to compare knowledge of mothers and fathers about cervical cancer and HPV vaccine.

3 Results

3.1 Parents’ Knowledge of Cervical Cancer and HPV Vaccine

Knowledge on cervical cancer was 6.75±1.93 for mother and 3.68±2.56 for father at the full scale of 10 points, showing significantly low knowledge degree in father group compared to mother group (t=-10.935, p<.001).

Knowledge on HPV vaccine was 6.85±3.68 for mother and 1.38±2.75 for father at the full scale of 16 points, showing significantly low knowledge degree in father group compared to mother group (t=-13.607, p<.001).

3.2 Acceptance of HPV Vaccination of Daughters and Influencing Factors

Of the mothers who chose “vaccinated” (10%) on whether their daughters are vaccinated, the largest percentage (46.2%) picked “acquisition of knowledge” when further asked what factor made them decide to get their daughters vaccinated, which is followed by vaccination recommendation (38.5%), free benefits or discount (15.4%), cost-effectiveness (15.4%), and wish of their children (7.7%). Of the mothers who chose “not yet vaccinated” (90%), 60.7% said worries over adverse side effects prevented them from having their daughters vaccinated, followed by high vaccination cost (35.9%), no knowledge (18.8%), taking long time and complex (7.7%), and refusal by children (6.8%). Of the mothers who chose “have intention” to have their daughters vaccinated (59.8%), the largest percentage (61.4%) picked “acquisition of knowledge” when further asked what factor made them have the intention to have their daughters vaccinated, followed by vaccination recommendation (24.3%), free benefits or discount (24.3%), cost-effectiveness (10.0%), and wish of their children (4.3%). Of the mothers who chose “no intention” to have their daughters vaccinated (40.2%), 76.6% said worries over adverse side effects prevented them from having their daughters vaccinated, followed by no knowledge (25.5%), high vaccination cost (17.0%), taking long time and complex (2.1%), and refusal by children (2.1%). Of the fathers who chose “vaccinated” (3.1%) on whether their daughters are vaccinated, 50.0% picked “vaccination recommendation” when further asked what factor made them decide to get their
daughters vaccinated while ‘free benefits or discount’, and ‘cost-effectiveness’ accounted for 50%, each (duplicate answers allowed). Of the fathers who chose “not yet vaccinated” (96.9%), 77.0% said no knowledge prevented them from having their daughters vaccinated, followed by worries over adverse side effects (19.8%), high vaccination cost (7.9%), refusal by children (2.4%) and taking long time and complex (1.6%). Of the fathers who chose “have intention” to have their daughters vaccinated (31.0%), the largest percentage (71.8%) picked “acquisition of knowledge” when further asked what factor made them have the intention to have their daughters vaccinated, which is followed by vaccination recommendation (59.0%), free benefits or discount (10.3%), cost-effectiveness (2.6%), and wish of their children (0%). Of the fathers who chose “no intention” to have their daughters vaccinated (69.0%), 75.9% said no knowledge prevented them from having their daughters vaccinated, followed by worries over adverse side effects (19.5%), high vaccination cost (4.6%), refusal by children (2.3%), and taking long time and complex (1.1%).

4 Conclusion

Knowledge on HPV vaccination of parents who have daughters in middle schools or high schools was found lower than that on cervical cancer. In particular, knowledge of father was found very lower than that of mother. In addition, HPV vaccination rate of daughters in middle school and high schools as well as intention of parents to have daughter vaccinated was found low, which are attributable to lack of information on HPV vaccination and high concern over side effects. In this regard, it seems necessary to provide accurate information related to promotion and side effects of HPV vaccination on parents. Also in order to raise Korea’s HPV vaccination rate, which is much lower than those of advanced countries, vaccination subsidies and diverse government policy efforts, such as government-led education and promotional programs, are required.

References