A Teachers’ Perspective of School-based Human Papillomavirus Vaccination of Girls in Kitui County: Knowledge, Acceptability, Facilitators, Barriers & Opportunities

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**Background:** Cervical cancer is the leading cause of cancer-related morbidity and mortality among women in sub-Saharan Africa. Two effective Human papillomavirus vaccines are available as means of preventing the disease. School-based vaccination has been identified as a viable delivery method but there is need understand the local environment for optimal vaccine delivery and uptake among adolescent girls in schools.

**Objective:** To assess knowledge and acceptability of HPV vaccine in primary school teachers in Kitui County and explore the facilitators, barriers and opportunities presented by the HPV vaccination of class four girls.

**Methods:** This was a cross-sectional, mixed methods study conducted in Kitui Central Division of Kitui County where the Ministry of Health is administering the quadrivalent HPV vaccine to all class four girls. Self-administered questionnaires were filled by 339 primary school teachers and two focus group discussions with a total of 13 participants were held. We collected data on awareness, knowledge and acceptability of HPV vaccine as well as facilitators, barriers and opportunities presented by the project. Analysis was done using SPSS® (quantitative data) and ATLAS.ti® (qualitative data) testing associations using chi-square for categorical variables and t-test for numerical variables.

**Results:** Sixty percent of the respondents were female. The mean age was 40 years (standard deviation (SD) = 10.7). Nearly all were Christians (99%), 1% were Muslims. Most respondents (90%) were aware of the vaccination exercise. The average score on knowledge was 48% with women scoring significantly higher than men (50% vs 46%, p=0.002). The level of knowledge about HPV and cervical cancer among teachers was moderate (48%, SD = 10.9). Most teachers would recommend the vaccine to their daughter or close relative (89%). Teachers who would recommend the vaccine had more knowledge than those who would not (49% vs 40% p=<0.001). Nearly all teachers wanted to know more about HPV vaccine (98%). Most felt that the vaccine was safe (79%) and should be continued (93%). The main barriers reported by the teachers were insufficient information about the vaccine, poor accessibility of schools, absenteeism of school girls on vaccine days and fear of side effects.

**Conclusion and Recommendations:** Despite low to moderate levels of knowledge about HPV vaccine in the study population, vaccine acceptability is high. Nevertheless, knowledge and awareness had a significant effect on whether teachers would recommend the vaccine to their daughter or close relative or not. There is need to come up with cost-effective means of disseminating information on HPV vaccine among teachers, parents and pupils in our settings.

*Thesis submitted as part of the requirements for a Master of Science degree in Tropical and Infectious Diseases at the University of Nairobi Institute of Tropical & Infectious Diseases*