M TORONTO Public Health

Improving HPV vaccine coverage rate with catch-up clinics in Toronto: Parents tell us why they're important

1. Abstract

Background: In August 2007 the Government of Ontario announced a human papillomavirus (HPV) vaccine campaign beginning September 2007 for grade 8 females. Vaccine was only available through public health clinics. The provincial HPV vaccination rate in the 2007/2008 academic session was 58%, lower than other school-based programs coverage rates. Catch-up clinics were an opportunity to get vaccinated later in the school year if a parent changed their mind.

Objectives: To assess factors that influenced parental decisions around HPV vaccination of their daughters.

Methods: A cross-sectional survey of parents of grade 8 females attending Toronto Public Health (TPH) HPV catch-up clinics in 2008 was conducted. Parents were asked to complete a standardized self-administered questionnaire. Univariate statistics were performed with SPSS to assess demographic characteristics of participants and parental reasons to vaccinate their daughters against HPV at the catch-up clinics.

Results: A total of 262 parents were recruited for the survey. The major reasons for receiving the vaccine were to prevent cervical cancer (66.5%) and to protect their daughter's health (25.0%). Reasons for attending catch-up clinics included: absenteeism from school on the initial clinic day (48.2%) and change of initial decision to not vaccinate (23.3%). Parents who changed their mind about vaccinating their daughters cited the following reasons: recommendation from their doctor (41.0%), more time to make a decision (21.3%), recommendation from a friend/family (14.8%), and more scientific information about the vaccine (14.8%).

Conclusions: Catch-up clinics provided an important opportunity to improve access and enhance HPV vaccination rates among grade 8 females in Toronto. The influence of physicians and additional time for decision-making played a role in catch-up clinic attendance. Future vaccine campaigns should engage primary care physicians and provide parents time to decide or provide opportunities to receive the vaccine at a later date.

Hamidah Meghani, Vinita Dubey, Olayemi Kadri, Karen Beckermann, Joanne Cameron and Ameeta Mathur. Vaccine Preventable Diseases, Toronto Public Health, 277 Victoria Street, Toronto, Ontario, M5B 1W2

2. Introduction

- Gardasil® is the quadrivalent HPV vaccine that helps protect girls and women 9 through 26 years of age against the following diseases caused by an infection with HPV types 6, 11, 16 and 18: cervical cancer, abnormal & precancerous cervical cells, vulvar and vaginal cancers, abnormal & precancerous vulvar and vaginal cells, and genital warts.
- It is estimated that the occurrence of HPV in Canadian women ranges from 20 to 33%; the highest rates of cancer-causing HPV infection (16-24%) were in young women aged 15 to 29 years.
- In August 2007, Ontario Ministry of Health and Long Term Care announced a new HPV vaccine program for September 2007 for grade 8 females in Public Health Clinics only.
- Coverage rates were moderate for 3-doses (56% for 2006/07, 65% for 2007/08 & 63% for 2008/09) and catch-up clinics were an opportunity to get vaccinated later in the school year if a parent changed their mind.
- Studies pre-vaccine programs suggested good acceptability and uptake (>80%).

Objective: To assess factors that influenced parental decisions around HPV vaccination of their daughters at Toronto Public Health catch-up clinics.

3. Methods

• A cross-sectional survey of parents of grade 8 females attending Toronto Public Health HPV catch-up clinics in 2008 was conducted, as illustrated below:



- Parents were asked for consent to complete a standardized self-administered questionnaire about HPV vaccine knowledge, factors that affected their decision to vaccinate, and attitudes and beliefs about HPV, cervical cancer and the HPV vaccine.
- Descriptive summaries and univariate statistical tests were conducted with SPSS, version 14.0 to assess demographic characteristics and parental reasons to vaccinate their daughters.

4. Results

Table 1: Parent demographics			
Demographic Characteristics	Number	Percent (%)	
Parent type: Mother Father Legal guardian Unknown	181 65 12 4	69.1 24.8 4.6 1.5	
Age group (years): 20-29 30-39 40-49 ≥ 50 Unknown	6 33 145 64 2	2.4 13.2 58.0 25.6 0.8	
Education: University degree/college diploma Some university or college High school Less than high school	150 54 38 13	58.8 21.2 14.9 5.1	
Religion: Catholic Christian Muslim Hindu Jewish Other None	65 39 16 9 6 19 108	24.8 14.9 6.1 3.4 2.3 7.3 41.2	

Table 2: Parents' Knowledge, attitudes and beliefs towards the HPV vaccine			
Agreement* with statements:	Number	Percent (%)	
Accurate knowledge of HPV transmission by sexual contact.	214	82.0	
Cancer of the cervix is a serious illness.	241	92.0	
It is important to vaccinate for HPV before becoming sexually active.	227	87.0	
My religious or spiritual belief guides my daily decision.	103	48.0	
If your spiritual leader does not approve of HPV vaccine, would this change your decision about vaccinating your daughter?	17	7.9	
Do you think boys should receive the vaccine?	97	37.0	
If young people receive the HPV vaccine, they will be more likely to practice unsafe sex.	10	4.0	
If young people receive the HPV vaccine, they will become sexually active at an earlier age.	7	3.0	

- 262 parents of grade 8 females completed the survey from seven of the 34 HPV catch-up clinics held from April through December 2008.
- The questionnaire response rate was 83%.
- 1600 vaccinations were given 25% of total vaccinations for dose 1, 32% for dose 2 and 43% for dose 3.
- Almost half (48%) of the parents (n=215) agreed that their religious or spiritual belief guides their daily decisions; 71% of these parents will not change their decision to vaccinate their daughters if their spiritual leaders does not approve of the HPV vaccine.
- The two main reasons for attending catch-up clinics were:
 - ✓ Absenteeism from school on clinic day (48.2%).
 - ✓ Change of initial decision to not vaccinate (23.3%)
- The major reasons for receiving the vaccine were:
 - ✓ To prevent cervical cancer (66.5%)
 - ✓ To protect daughter's health (25%)
 - ✓ Recommendation/advice from physician (5%)
- 23.3% or 60 parents who changed their mind about vaccinating their daughters cited the following reasons:
- ✓ Recommendation from their doctor (41%)
- \checkmark More time to make a decision (21%)
- Recommendation from a friend/family (15%)
- \checkmark More scientific information about the vaccine (15%).

Figure 1: Indicators that parents' may have considered before making decision on whether or not to vaccinate their daughters



5. Conclusions

- Catch-up clinics were an important opportunity to improve access and vaccination rates for students who missed immunization clinics at school.
- The advice of physicians and additional time for decision-making played a critical role in catch-up clinic attendance.
- Religious affiliation did not influence the decision to not vaccinate in this group.
- Future vaccine campaigns should engage primary care physicians and provide parents time to decide or provide opportunities to receive the vaccine at a later date.

Limitations:

- Although a random sub-sample was chosen, the data may not be entirely generalizable, as it only includes parents from seven of the 34 HPV catch-up
- This study is limited to parents who decided to get their daughter vaccinated with HPV vaccine and does not represent those who chose not to get their daughter vaccinated.

Acknowledgements: We are grateful to TPH Vaccine Preventable Disease program staff for their contribution to the study.