

Parental Knowledge of Childhood Immunizations, and Barriers to the Immunization of their Children



Type of Project: Research

Organization: Kingston, Frontenac and Lennox & Addington Public Health
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Objectives:

1. Assess parental knowledge of Prevnar® and Pentacel® vaccines in the areas of:
 - illness for which they offer protection
 - side effects associated with vaccination
 - appropriate actions to take if side effects are experienced.
2. Describe the barriers that parents encounter in obtaining complete immunization according to the schedule recommended by the Ontario Ministry of Health for their children 3 months to 6 years.

Target Audience: Parents

Project Summary: A telephone survey will be used to collect information from parents on the risks, benefits and perceived barriers to immunization. Parents or guardians of a child or children aged 3 months to 6 years will be asked to participate. The telephone interviews (n=500) will be conducted by Compustat Consultants, Inc. using a random sample of residential telephone numbers for Kingston, as well as Frontenac and Lennox & Addington counties. Households will be screened for eligibility.

Data entry will take place simultaneously with the interview through the use of computer assisted telephone interviewing (CATI) software. Data will be analyzed by a member of the Public Health Research, Education and Development Program, using SPSS (Statistical Package for the Social Sciences).

The proportion of children immunized according to the schedule recommended by the Ontario Ministry of Health will be calculated, and deviations from the recommended schedule will be described. Associations with sociodemographic variables will be explored. The barriers that parents experience in obtaining immunization for their children will be described.

Parental knowledge of the illnesses for which Prevnar® and Pentacel® offer protection, potential side effects associated with vaccination and appropriate actions to take if side effects are experienced will be assessed as correct or incorrect. The proportion of incorrect answers will be calculated and areas in which parents are not well-informed will be described.

Completion Date: December 2007

Outcomes:

The implemented survey measured parental knowledge of childhood immunizations and barriers to immunization. Results from 500 parents surveyed by telephone during 2007 indicated that receiving two shots in one day is not a significant barrier to immunization. When two vaccines were recommended together, over 91% of children received them on the same day. Barriers to immunization that did emerge from the research seem to relate to costs associated with newly recommended vaccines that are not publicly funded. Another key finding from the research was that while parents are fairly knowledgeable of the appropriate responses and side effects to vaccines, they are not familiar with what the vaccines protect against. Only 1.8% could correctly identify all the diseases that Pentacel® protects against and 8.7% could identify the disease covered by Prevnar®. In addition, up to 85% of parents mistakenly attributed some symptoms to vaccines when in fact they are not associated with immunization. Immunization rates were found to be high (92.4% to 98.6%) at various ages except for the 15- month immunization (79.4%) where uptake was lower. Implications of this research indicate a need for stronger education regarding why we immunize and information about side effects should be presented clearly with each immunization visit. More details regarding this research will be published in the future.