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Efficacy of Elder Support and Education on Measles Vaccination Rates in Amish Communities

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ABSTRACT

**Background**

- Unvaccinated travelers entering the United States from Western Europe and India were identified as the source of importations (Kutty et al., 2014).

**Significance**

- It is hypothesized that education regarding prevention of measles in the Amish community will decrease the incidence rate of the measles virus.

**Method**

- A pretest and posttest questionnaire assessing vaccination knowledge, advertising and their effect on measles vaccination rates and outbreaks.

**Analysis**

- Chi Square and statistical analysis used to determine outcome and results.

**Protection of human subjects**

- HIPPA protocols will be followed to ensure privacy and confidentiality.

**INTRODUCTION**

- Initial symptoms: fever, malaise, cough, inflammation of nasal mucous membranes, conjunctivitis, and a maculopapular rash (Kutty et al., 2014).

**BACKGROUND & SIGNIFICANCE**

- Measles outbreaks on the rise

- Decline in vaccination rate due to fear of adverse effects

- Affecting unvaccinated communities lacking herd immunity

- Majority of outbreaks have occurred in Amish communities

- Propose to increase vaccination rates among the Amish

- Provide education and access to vaccinations

- Study the effect of elder support on vaccination rate

- Only 11% of the Amish population are vaccinated.

- Increase of vaccinations after outbreak in 2014

- Church elders are influential in health-care decisions

- Hypothesized that elder support will lead to higher vaccination rates

**MENTAL HEALTH INPUT**

- Describe history, symptoms and treatment of measles

- Reduce fear, anxiety, and worry associated with the therapist and medical team

- Work with therapist to develop a plan for coping with medical decision and the stress associated with decision

- Counselors will provide the Amish community empathy and mental support

- Counselors will assist the Amish community with developing coping skills post-vaccinations

**METHODS**

- **Participants**

  - Will be recruited from two clinical sites. One is in Montgomery, Indiana and the other is in Arthur, Illinois. Both sites have 27 active districts/churches and over 3600 possible unvaccinated classes.

  - Publicity will be executed via an advertisement in the community newspaper.

  - To determine sample size: 10% for each unvaccinated population in Indiana (n=365) and Illinois (n=47) leading to a total of n=732.

- **The experimental group in Indiana will be recruited via nonrandom, convenience sampling with the assistance of networking through the Elders and their influence on the Amish community (EI).**

- **The control group in Illinois will be recruited through nonrandom, convenience sampling without utilizing the influence of the Elders’ leadership influence (WEI).**

- Inclusion criteria: Amish culture & interests

- Exclusion criteria: no involvement with the Amish community, having immunocompromised status, Amish people who have already had vaccinations, and infants under one-year-old

**EXPECTED RESULTS**

- The measles vaccination rate will increase in the Amish communities due to exposure to education and vaccination availability.

- Expected that the community in Indiana with Elder support will have a higher vaccination rate than the community in Illinois.

- This research proposal aims to increase measles immunity to prevent future outbreaks in specific communities that lack herd immunity.

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