

## Improving Immunization Rates Through Community-Based Participatory Research: Community Health Improvement for Milwaukee's Children Program

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### What is the Purpose of This Study/Review?

- The purpose of the Community Health Improvement for Milwaukee Children (CHIMC): “Save Lives—Immunize!” program was to develop, implement, and assess interventions to decrease immunization disparities and increase immunization rates within underserved populations using a community-based participatory research (CBPR) approach.
- The target group was families with children under 14 years of age who resided within four contiguous zip codes areas with low immunization rates and a predominant population of color.
- The partnership consisted of 18 local community residents and 32 local organizational partners including the Medical College of Wisconsin, Children’s Hospital of Wisconsin, Children’s Community Health Plan, family resource centers such as Next Door Foundation and Neighborhood House of Milwaukee, the Milwaukee Health Department, State of Wisconsin Department of Health Services—Immunization Program, and the Milwaukee County WIC program.
- The interventions included:
  - An education program implemented on enrollment into the study with pretest/posttest of knowledge.
  - A social marketing campaign developed using parents’/caregivers’ feedback, a collaborative process and focus groups
  - Planned behavior change model that included a) identification of barriers to immunization, b) teaching parents/caregivers how to access children’s immunization records, and c) sessions to model, rehearse, and reinforce techniques of self-advocacy and effective health care navigating behaviors, to increase self-efficacy in monitoring and maintaining their children’s up-to-date (UTD) immunization status.
- Analysis of data was conducted through engaging community members and included qualitative and quantitative methods.

### What Is the Problem?

- Although national immunization rates have increased steadily, there are unfortunately significant immunization disparities within subpopulations that are often in economically disadvantaged densely populated, urban areas where disease outbreaks would be most harmful.

### What Are the Findings?

- Culturally tailored interventions to reduce immunization disparities can be successful using CBPR.
- Using multilayered interventions, including education, social marketing, and a behavior change model, the CHIMC program increased the proportion of children who were UTD with immunizations.
- The 0-to-18-month age group showed the smallest improvement, suggesting that this group might need additional intervention.

- This study revealed a high retention rate (80% of enrollees), consistent increases in knowledge about immunization, and a high recognition rate (85% of participants) of the social marketing campaign of the community-developed message (“Take Control: Protect Your Child with Immunizations”).
- The most significant parental/caregiver factors influencing UTD status were the perception that vaccines recommended by doctors are safe, accessibility to doctor’s office, self-efficacy, and helpful clinic staff at the doctor’s office.
- Understanding the importance of immunization was associated with higher UTD status.
- Although immunization rates for childhood vaccinations were being assessed for this study, an increase in rates for the adolescent human papilloma virus vaccination was noted as well most likely owing to education.

#### Who Should Care Most?

- Community-based organizations.
- Community health centers.
- Community coalitions.
- Faith-based organizations.
- Public health officials and health departments.
- Hospitals.
- Academicians.
- Primary care providers.

#### Recommendations for Action

- Results from this study reveal that multilayered interventions using the CBPR models to raise immunization awareness may be invaluable in the elimination of immunization disparities and in raising immunization rates to the *Healthier People 2020* goals.
- Culturally tailored and community-developed social marketing messages may be effective in increasing immunization rates owing to exposure to relevant, positive immunization messages.
- This model can identify and overcome potential barriers to immunization for parents/caregivers within a community and can promote trust in preventive primary care using a participatory approach with community members.