HEALTH LITERACY: COMMUNITY-BASED STRATEGIES

2018 NMQF Leadership Summit on Health Disparities and Spring Health Braintrust
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knowledge changing life
OBJECTIVE:

• Review how advancing health literacy through a community-academic partnership using the community-based participatory research (CBPR) approach can reduce immunization disparities for children and youth.

• Suggest opportunities for promoting community capacity-building to reach health equity.
Disclosure

• The Project described was supported by Award Number R24MD001812 from the National Institute On Minority Health and Health Disparities (NIMHD).

• The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIMHD or the National Institutes of Health.
CITY OF MILWAUKEE

Population: 600,155

40%.... African American/Blacks
38%.... Caucasians/Whites
18%.... Latinos/Hispanics
4%...... Other i.e., Native Americans and Hmong
Phase I: Planning/Pilot: Infrastructure; Community Need Assessment

Enrollment: 81 parents/caregivers and 106 children.

Phase II: Interventions: Save Lives Immunize!: Beliefs and Attitudes of Vaccines; Pre/Post Immunization Knowledge; Focus Groups; Social Marketing Campaign; Infographics; and eLearning Café

Enrollment: 565 parents/caregivers and 1,533 children and youth.

Phase III: Take Control Immunize!: Dissemination Plan builds upon Findings from Phases I & II

Enrollment: 1,335 parents/caregivers and 2,261 children and youth.
KNOWLEDGE TO ACTION PROCESS

Monitor Knowledge Use

Evaluate Outcomes

Sustain Knowledge Use

Adapt Knowledge to Local Context

Assess Barriers to Knowledge Use

Select, Tailor Implement Interventions

KNOWLEDGE CREATION

Knowledge Inquiry

Synthesis

Products/Tools

Tailoring Knowledge

ACTION CYCLE (Application)

Identify Problem

Identify, Review, Select Knowledge
COMMUNITY HEALTH IMPROVEMENT FOR MILWAUKEE’S CHILDREN (CHIMC)

- Vaccinations
  - Protects people from preventable diseases
  - Vaccination coverage can be increased by community participation

- Healthy People 2020 (HP2020)
  - Targeted Goal of 80% for children ages 19-35 mos. for 4 DTaP:3 IPV:1 MMR:3 Hib:3 HepB:1 VZV:4 pneumo (4:3:1:3:3:1:4) antigen series

- Conflicting Messages include:
  - Mistrust of safety and effectiveness of vaccines
  - Misperceptions and beliefs about vaccines

- Milwaukee’s Children, Vaccination Rates for ages 19-35 mos.
  - In 2013, CHIMC’s ten Zip Codes: 56%
  - For the same time, State of WI: 70%
Activities:

- **Established consensus on the principles** of Community-Based Participatory Research (CBPR) approach to identify and address health disparities.

- **Conducted community health assessment** using secondary and primary data to result in prioritization for a child health issue.

- **Promoted bi-directional awareness** between parents, academic researchers, and childcare providers.

- **Developed** a customized culturally-tailored Health Information Dissemination Tools, i.e., web-based platform for Parents Toolkit; billboards; e-Learning Cafe'; & other promotional materials.

- **Monitored** impact of health information exchange.
## PHASE III: PARENTS/CAREGIVERS IMMUNIZATION KNOWLEDGE IMPROVEMENTS

<table>
<thead>
<tr>
<th>Selected Questions</th>
<th>% Correct Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Post Knowledge Exchange</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Selected Questions</strong></td>
<td><strong>% Correct Responses</strong></td>
</tr>
<tr>
<td><strong>PRE</strong></td>
<td><strong>POST</strong></td>
</tr>
<tr>
<td>Herd Immunity*** (n=547)</td>
<td>28.0</td>
</tr>
<tr>
<td>Safety of receiving multiple immunizations*** (n=547)</td>
<td>37.3</td>
</tr>
<tr>
<td>Purpose of Measles, Mumps, Rubella (MMR) vaccine*** (n=527)</td>
<td>76.9</td>
</tr>
<tr>
<td>Wisconsin Immunization Registry (WIR) provide Immunization Record access*** (n=547)</td>
<td>92.5</td>
</tr>
</tbody>
</table>

***Indicates statistically significant increase (p≤.001)
Take control!
Protect your child
with immunizations.

CHIMC-
TAKE CONTROL
IMMUNIZE!4
Welcome to the CHIMC Parent Toolkit

- Recommended Immunization Schedules
- Look Up Your Child's Immunization Record
- Free and Low-Cost Milwaukee Clinics
- Health Care Appointment Checklist
- Immunization Websites
- Frequently Asked Questions (FAQs)
PHASE II: UTD Immunization Rates Post Interventions compared to Parents’ Perceptions and Baseline Rates by Ages\(^5\) (WIR-verified)

- **n=1,342 Children & Youth**
- **n=470 Parents**

![Graph showing immunization rates across different age groups.](image)

- **Healthy People 2020 Goals**
- **Parental Perceived Immunization Status**
- **Baseline WIR**
- **2012 WIR**

Medical College of Wisconsin CONFIDENTIAL. Do not share.
Phase III, 2016

Parents Perceptions of Youngest Child’s Immunization Status

n= 1,335 parents
n= 1,857 children

UTD Immunization Rates Stratified by TCI! e-Learning Café Participation and Ages (WIR-verified)

- Baseline (n=1,213)
- Follow-up (n=1,099)
- Complete eLearning +1Q (n=356)
- Incomplete eLearning +1Q (n=101)
- No eLearning +1Q (n=614)
- HP2020 Goal
### HPVx3 Ancillary UTD due to Health Literacy Pre/Post Interventions for African Americans, (13-17 yrs.) Compared to Milwaukee and State of Wisconsin

<table>
<thead>
<tr>
<th></th>
<th>CHIMC-TCI! n = 118 (%)</th>
<th>City of Milwaukee n = 25,918 (%)</th>
<th>P-value&lt;sup&gt;a&lt;/sup&gt;</th>
<th>State of Wisconsin n = 41,630 (%)</th>
<th>P-value&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>67 (57)</td>
<td>12,862 (50)</td>
<td></td>
<td>20,567 (49)</td>
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<tr>
<td>Male</td>
<td>51 (43)</td>
<td>13,056 (50)</td>
<td></td>
<td>21,063 (51)</td>
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</tr>
<tr>
<td><strong>Vaccination Status</strong></td>
<td></td>
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<tr>
<td>UTD Pre-CHIMC-TCI!</td>
<td>30 (25)</td>
<td>3,877 (15)</td>
<td>0.003</td>
<td>6,244 (15)</td>
<td>0.003</td>
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<tr>
<td>UTD Post-CHIMC-TCI!</td>
<td>54 (46)</td>
<td>7,493 (29)</td>
<td>≤0.001</td>
<td>12,065 (29)</td>
<td>≤0.001</td>
</tr>
<tr>
<td>Brought UTD</td>
<td>24 (20)</td>
<td>3,616 (14)</td>
<td>0.042</td>
<td>5,821 (14)</td>
<td>0.046</td>
</tr>
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</table>

<sup>a</sup> Comparison between CHIMC-TCI and City of Milwaukee  
<sup>b</sup> Comparison between CHIMC-TCI and State of Wisconsin
LESSONS LEARNED

• Academic institutions are typically challenged to initiate, nurture and maintain community relationships.

• Identify potential partners through appropriate networks, associations, and key leadership roles.

• Elevation of community and institutional assets are needed to engage the partnership.

• Building trust and mutually beneficial relationships that result in shared vision and goals are essential for sustainability.

• Community involvement was fundamental to the success of the CHIMC Project.
LESSONS LEARNED

• Creation of a bidirectional learning environment to benefit partners for enhanced knowledge resulted in action, i.e., immunization health literacy.

• Community Forwarded Teams (CFTs) guided the cultural-relevancy of different health literacy tools in the CHIMC Project.

• CFTs reframed the typical research approach in all Phases of this Project and became effective community ambassadors for other health-related conditions.

• CHIMC participants readily embraced the use of technology (Satisfaction Rated 88-95%) to increase their immunization health literacy.
Bibliography


5. WILLIS E, Svapna S, Hamilton C. Improving Immunization Rates through Community-Based Participatory Research: Community Health Improvement for Milwaukee’s Children Program. Progress in Community Health Partnerships: Research, Education, and Action. 2015. PMCID:PMC4869973
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Welcome

Discussion & Questions