
SCHOOL- BASED TYPHOID VACCINATION PROGRAM IN KARACHI: POLICY IMPLICATIONS FOR TYPHOID CONTROL

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OUTLINE

- ✘ Epidemiology of Typhoid in Karachi
- ✘ Contextual risk factors analysis
- ✘ Rationale for the conduct of School based Program
- ✘ Typhoid Vaccination Program
 - + Project Component
 - + Target Areas
 - + Design and Conduct
 - + Targeted outcomes
 - + Results
- ✘ Conclusion
- ✘ Policy Advocacy Endeavors
- ✘ Way Forward

EPIDEMIOLOGY OF TYPHOID IN KARACHI

- ✘ Burden of Typhoid Fever
 - + Prospective population-based surveillance
 - + High burden in the slums of Karachi-Pakistan.
- ✘ Incidence of Typhoid Fever
 - + 573 per 100,000 persons per year in children aged 2-4 years
 - + 423 per 100,000 in children aged 5-15 years
- ✘ Age distribution
 - + 70 % of *S. Typhi* infection in children aged 1-15 years

CONTEXTUAL RISK FACTOR ANALYSIS

- ✘ Disease Burden
- ✘ Rapidly Increasing Antibiotic Resistance Rate
- ✘ Improper water & sanitation system
- ✘ Poor Living Conditions

RATIONALE: SCHOOL BASED PROGRAM

- ✘ Typhoid fever incidence is high in school age children (Between 5-15 years)
- ✘ Majority of children aged 5-15 years are enrolled in schools and madrasahs
- ✘ The program in schools will have an impact on Typhoid Fever occurrence.
- ✘ Not included in EPI Routine Immunization Program

PROJECT COMPONENTS

- ✘ Formative Research
- ✘ Development of SM Tools
 - + Content Writing
 - + Designing and Pretesting of Social Mobilization (SM) Tools
- ✘ Mapping
- ✘ Social Mobilization
- ✘ Vaccination
- ✘ Fund Management / Fee Collection
- ✘ Monitoring
- ✘ Impact Assessment by AKU through Case Control Study

TARGET AREAS

1. Gulshan Town
2. Jamshed Town

Why?

- ✘ Mix of Population (different ethnic and socio-economic groups)
- ✘ Sufficient number of Private schools to support the Cross Subsidization Model

DESIGN & CONDUCT

Increasing Awareness

Typhoid awareness and health education sessions at the school

Information
Dissemination

Posters, Banners, and flyers providing the disease awareness and informing about the vaccination program

Vaccination
Scheduling

Parental agreement form distribution and scheduling of vaccination date

Vaccination

Medically qualified teams to visit your school to vaccinate the students

TARGETED OUTCOME

- ✘ Introduction of Typhoid Vi-polysaccharide vaccine through school-based campaigns.
- ✘ Creation of demand for Typhoid Vaccine in targeted area.
- ✘ Immunization of maximum number of children against Typhoid fever.
- ✘ Demonstration to policymakers that a school-based Typhoid vaccination campaign is feasible and desired by the population.

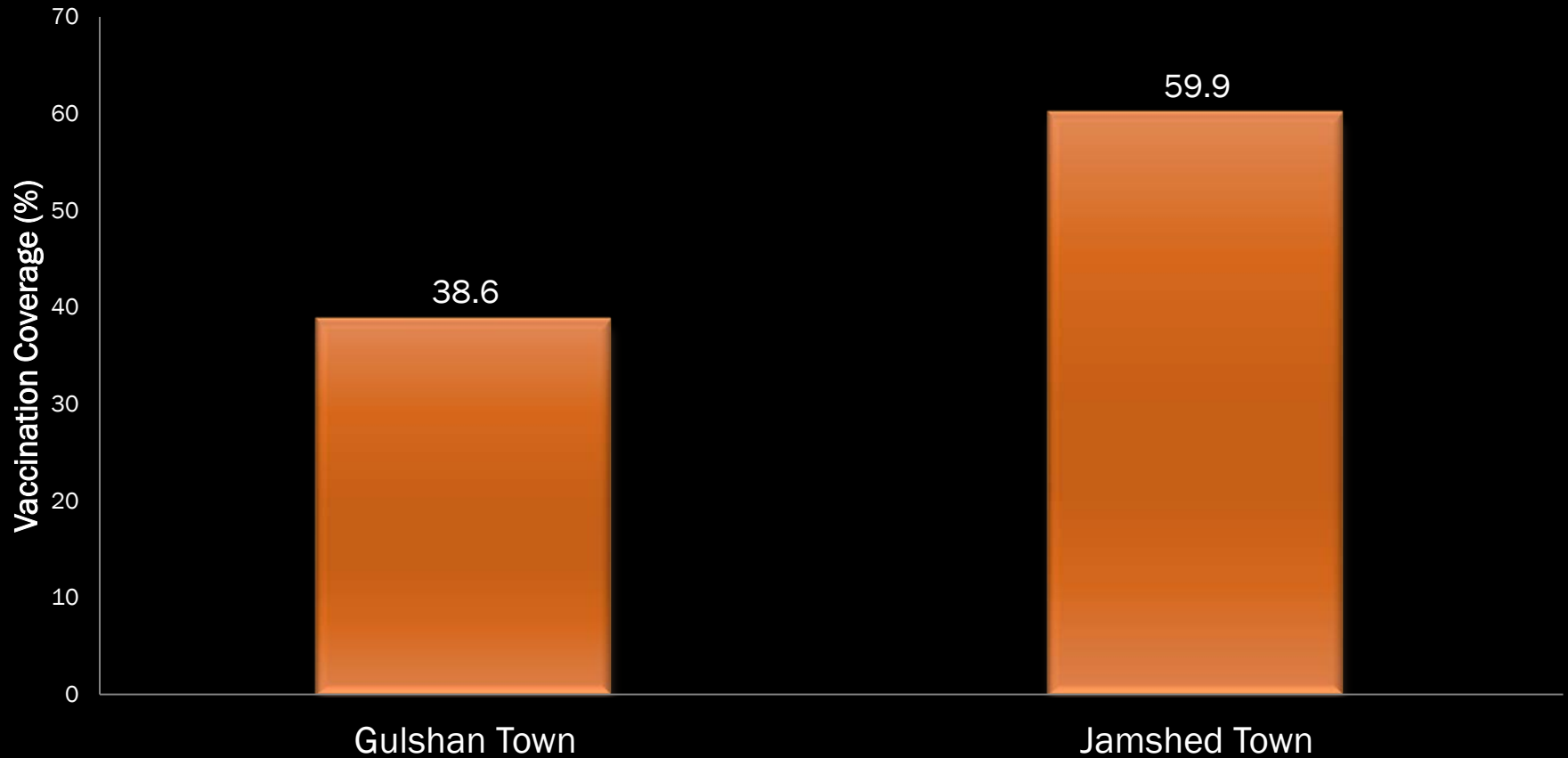
SUMMARY OF RESULTS

S.NO	Variable	Number
01	Total Number of eligible institutions targeted for vaccination	1654
02	Total Number of institutions in which vaccination carried out	1250
03	Total Number of institutions refused for vaccination	404

SUMMARY OF RESULTS

Variable	Public	Private	Madrasah	Others	Total
Target Population	42291	153308	30712	4515	2,30,826
Total Number of institutions in which vaccination carried out	272 (21.76%)	707 (56.56%)	247 (19.76%)	24 (1.96%)	1250
Total Number of Students Vaccinated	25572 (21.92%)	68197 (58.47%)	19846 (17.03%)	3020 (2.58%)	1,16,635 (50.5%)

FEASIBILITY AND ACCEPTABILITY: VACCINATION COVERAGE



POLICY ADVOCACY ENDEAVORS

- ✘ Incorporation of school based vaccination program into existing public health immunization program.

- + Continued sensitization of stakeholders for increasing acceptability.
 - ✘ Dissemination seminar
 - ✘ Debriefing to
 - ✘ Health Minister
 - ✘ Town Health Officers
 - ✘ Outcome
 - ✘ Policy statement and commitment for inclusion in EPI

POLICY ADVOCACY ENDEAVORS

- × Typhoid Consultation Meeting
 - ★ Tried to get recommendations from various stake holders
 - × Provincial EPI Manager
 - × Pediatricians
 - × Pakistan Pediatric Association,
 - × Pakistan Medical Association
 - × International Donor Agencies
 - + WHO, USAID, Save the Children
- × Individual Meeting
 - ★ NITAG(National Immunization Technical Advisory Group)
 - × Priority is Rota how ever next step will be inclusion of Typhoid Vaccine
 - ★ Government Officials

CONCLUSION

- ✘ The project demonstrated the safety, feasibility, acceptability and importance of a school-based Typhoid vaccination program.
- ✘ The initial phase of the project has sensitized the population for Typhoid fever prevention.
- ✘ It indicated the importance of providing parents with adequate information to assist them in making informed decisions.
- ✘ A sustained program will build confidence and thus may result in increased acceptance.

TYPHOID VACCINATION INITIATIVES: WAY FORWARD

- ✘ Since we lack contextual hospital based data and evidence, it would be difficult to convince the policy makers to include Typhoid Vaccine in regular EPI program
- ✘ TVI is initiating a hospital based study in government tertiary care hospitals to further strengthen the case
- ✘ TVI is also going to propose for relevant data collection regarding Typhoid Investment Case for Sindh Province

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+ (Gulshan, Jamshed towns)
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- ✘ All those who worked during these vaccination campaigns

THANK YOU!

