Tailoring Immunization Programmes (TIP)

An example of tailoring communication on vaccinations targeting hard-to-serve communities in Sweden

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VHPB conference 2016
Ljubljana 2016-02-16
Agenda

- Background

- Principle of TIP toolbox

- TIP in Sweden
  - Piloted on 3 target groups (2013)
  - Intervention targets a Somali community (2015-2016)

- Reflections/lessons learned
TIP is **NOT** a magic toolbox but a very useful one!!
The national vaccination program in Sweden

- High vaccination coverage!! >98%

- Recurrent limited outbreaks of measles and rubella – sign that the NIP does not not reach all children!
Background (MMR)

- Europe >100,000 cases of measles and 80,000 cases of rubella last 4-5 years

- Estimated 0.7-1 million infants do not receive all scheduled vaccination (2012)

- Coverage rates are below the WHO-recommended threshold of 95% (herd immunity)

- WHO/Europe priority
  - Elimination of measles and rubella

- WHO/Europe: TIP “toolbox”
Tailoring immunization Programs (TIP)

- Based on behavioural theories, including social marketing and communication, with focus on behavioural change.

- Includes methods and tools
  - Identify (profile) at-risk population
  - Determine barriers and motivators to vaccination
  - Design targeted interventions based on the results

- TIP toolbox
  - TIP – pilot tested Bulgaria, Roma pop.
  - TAP – Tailored Antimicrobial, Sweden
  - TIP FLU
TIP - piloted in Sweden 2013

- To better understand the hard-to-reach/serve populations, identify factors that are important for parental decision (Phase I)

- Three populations with low or suspected-low vaccination coverage or at risk for outbreak
  - Anthroposofic community in Järna, Stockholm
  - Somali community in Rinkeby/Tensta, Stockholm
  - Undocumented migrant communities in Stockholm and Gothenburg

- To identify targeted interventions (Phase II)
**TIP process step-by-step (phase I)**

**Study 2013**

1. Workshop 1 – problem statement
2. SWOT analysis
3. Define further work
4. Planing, designing of qualitative studies
5. Qualitative data collection and analysis
6. Conceptuell maps (bubble maps)
## TIP process step-by-step (phase I)

### Table 1. Questions to help assess current immunization situation

<table>
<thead>
<tr>
<th>Area of inquiry</th>
<th>Questions</th>
<th>Sources of information</th>
</tr>
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</table>
| Vaccination, coverage and trends | What is the national immunization schedule?  
What is child vaccination coverage to-date?  
What is the DTP1-DTP3 drop-out rate?  
To what extent are delays in vaccination apparent?  
What is the quality of vaccination coverage data? How is it assessed?  
What potential limitations are there in the data?  
What are the prevalence and incidence of VPDs? What, if any, outbreaks have occurred? Where? Among whom?  
Who is not participating in child vaccination services?  
What do we know about these children and their families?  
Are there specific geographic areas that are more susceptible to VPDs because of low coverage or high drop-out? | Demographic and health surveys  
Multiple indicator cluster survey  
National-, regional-, district-level immunization data  
Health, maternal and child health, immunization surveys and research  
Disease surveillance data  
Key informant interviews with MOH/EPI, INGO/NGO and medical representatives |
## TIP process step-by-step (phase I)

<table>
<thead>
<tr>
<th>How can Sweden promote MMR vaccination within Somali communities? (TIP Problem Statement)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What is happening?</strong></td>
</tr>
<tr>
<td><strong>Where and when does this usually take place?</strong></td>
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</tbody>
</table>
## TIP process step-by-step (phase I)

| Challenges associated with the target groups’ knowledge, attitudes and behaviours | • The rumour of measles as a cause of autism leads Somali parents to refuse timely measles vaccination or postpone it until their child is able to speak.  
• Strong stigma associated with autism within the community.  
• Confusion and lack of understanding of what is autism and its causes. Belief that it is a “Swedish disease”.  
• Strong role of fathers in vaccination and health decision-making, particularly concerned with the well-being of boys, who show a higher prevalence of autism.  
• Interviews with parents reveal that behaviours with regard to MMR vaccination may shift over time, depending on the birth order and gender of the child. Some parents who vaccinated their older children, decided not to vaccinate their younger children.**  
• Low recall and thus risk perception of the seriousness of the vaccine preventable diseases |
| Challenges to communicating effectively with the target group | • Strong oral tradition, particularly among women, with a high tendency to spread rumours.  
• Information is shared through face-to-face conversations and peer discussion (mother-to-mother). Use of social media, across borders, is also common. |
Data collection

- Conceptual maps

Determinants that influences vaccination behaviour

**Qualitative studies**

- Quantitative data
- Literature searches
- Information searches
- Knowledge and experience from key informants and experts

![Conceptual map diagram showing determinants influencing vaccination behaviour](image-url)
Conceptual map most important determinants at different levels indicating barriers and promotors

**Data collection**
- Qualitative studies
- Quantitative data
- Literature searches
- Knowledge and experience from key informants
- Information-search strategies

**Opportunity**
- Societal level
  - Newcomer to the area of Rinkeby and Tensta
  - Trust in the CWC nurses and have positive encounters
  - Swedish immunization and health system offers good care
  - Vaccines are available and free
  - Residing a long time in the neighborhood
  - Perception of negative attitudes from some CWC nurses
  - Recommended MMR immunization at 18 months

**Support**
- Social and group level
  - Friends who vaccinate their children and are positive to MMR
  - Peer pressure from others in their social network
  - Allergy to MMR

**Personal motivators**
- Individual level
  - Positive attitude to immunization in general and to the MMR vaccine
  - Vaccinate because they want to protect their children

**Parents of Somali origin in Rinkeby and Tensta who delay or avoid vaccination**
- Perceived negative attitudes from some CWC nurses

Vaccination behavior is mediated by a number of determinants; these provide opportunity, support and motivation.
Study 2014-2015

1. Workshop 2
2. SWOT analysis, updating
3. Genomgång and discussion of results and bubble maps
4. Identify possible interventions for each target group
5. Planning of interventions
6. Implementation

TIP process step by step (phase II)

Part 4 & 5: Define strategic priorities
Use strategies for behaviour change
Design activities
Create indicators to measure change

Part 6: Design interventions
- Promising practices
- Design activities
- Budgets
- Final report
Aim of the project – Somali community

Overall and log-term:
- To increase the vaccination coverage of MMR to at least 95%, in the community within 5 years.
- To design a model for tailored communication on vaccination targeting hard-to-reach communities – to be used on other vaccine hesitant groups

Specific
- 2015: **develop tailored communication tools**: 2 movies, direct contact to vaccine expert, peer-to-peer project, series of seminars for parents and child welfare health professionals
- 2016: **implementation** and start of **evaluation**
Population in two districts Rinkeby and Tensta

- Population - 90% of foreign origin, 30% Somali background
- Young population, majority <45y
- Rinkeby (2013), 16 046 inhabitants – 1638 children <5 years
- Tensta (2013), 18 866 inhabitants – 1673 children <5 years
- Low vaccination coverage
- Fear of autism
Pockets of low vaccination MMR coverage

High and stable at the national and regional level, MPR >95%

Pockets low coverage in Rinkeby and Tensta, Somali community MPR <70%
Parents want more information, the risks and benefits of vaccination - not through traditional channels (CWC).

Knowledge and information is transmitted through existing trustworthy networks and in Somali language.

Health professionals need tailored methods and support.
Somalis prefer oral communication

• The Somali written language is young (1972)
• Strong oral traditions, storytelling, poetry, historical stories are important
• Knowledge and information is spread by personal and social traditional structures and networks
• Internet, TV and modern ways of communicating is popular, social media etc
• Travelling population, travel between the continents
Interventions at both the individual and community level

### Target groups
- General population and families
- Peer-to-peers
- Health professions at CWCs

### Tailored tools
- Seminars
- Website
- Film with rolemodels
- FAQ
- Educational programme
- Vaccination, communications and data collection
- Series tailored seminars
- Website
- FAQ
- Follow-up

### Dissemination
- Several channels
  - Health professionals at CWCs
  - Peer-to-peers
  - Local NGOs and networks
  - Seminars
  - Internet
  - Posters
  - Radio, local TV?
- Broad range
- Interactive

### To reach all
THE SOMALI POPULATION
Broad communication package based on digital, oral and visual information

Local and interactive contacts
- Peer-to-peers
- Dialog seminars

Internet based information
- Fact based film/powerpoint
- Film with role models
- Website with information

FAQ
- Email to vaccine- and autism expert
Seminars in somali and/or swedish

Two separate themes

• Basic knowledge on immunology, VPD and vaccines

• Autism: diagnosis and intervention/treatment (Somali specialist in disorders)
Peer group
- key communicators

• 14 volunteers
• 2 days training vaccine and health communication
• Transmits knowledge within their own network
• Gives the possibility to answer parents questions
• Support the staff at CWC - peers may reach vaccine hesitant parents
• Help to collect data for evaluation
• Good results from other peer-projects: HIV, diabetes
Support to CWC staff

- Tailored lectures with updated information on vaccine issues
- With emphasis on how to communicate with vaccine hesitant parents.
- Further training in MI-method (Motivating Interviews)
- Webb-site with specific information
- Support by FAQ
Model for tailored communication?
- from the first study to evaluation

Tailoring Immunization Programs (TIP)

1st study 2013-14
Development of tools 2015
Pilot 2015
Implementation, evaluation 2016

RE-AIM
Planning and evaluation

- Literature (best practices)
- Peer-to-peer projects
- Parallel interventions
- Broad collaboration: (health care/ local population/NGOs)
Evaluation using the RE-AIM

Reach – Efficacy - Adoption - Implementation - Maintenance

- Framework developed by Glasgow, Vogt och Boles (1999)
- First used to evaluate prevention and health behaviour change programs
- Has been used to measure different types of public health interventions
- Includes five aspects measured in a public health intervention

http://www.re-aim.hnfe.vt.edu/
RE-AIM – for planning and evaluation

- **Reach** (target group) – *individual indicator*, how many (or %) in the target group have been reached
- **Efficacy** – *individual indicator*, Pos/neg effects and behavioural change
- **Adoption** - *process indicator* – how many organisation chose to use the intervention
- **Implementation** – *individual+process indicator*, to what level is the project implemented in relation to the intentions/ instructions
- **Maintenance** - *individual+process indicator*, measures the long-term effect of the intervention
Reflections on the TIP toolbox (1)
- benefits

- **Structure:** Easier to focus on the content rather than the format of the methodology. There is a structure—a toolkit—that provides support.

- **Technical support** from the WHO consultants and possibly from local TIP experts is very important to get started.

- Seminars and workshops with interdisciplinary expertise and key informants are essential.

- TIP provides a good start for planning and designing targeted evidence-based interventions.

- **Flexibility:** Data are collected in several different ways with focus on qualitative studies. **All steps do not need be included** during the formative phase. TIP can be applied even if the study population does not allow for stratification, as in the case of the undocumented migrants in the present study.
Reflections on the TIP toolbox - disadvantages

- A general limitation is that the TIP method focuses too much on individual behavioural patterns. There are often structural barriers at the societal level that cannot be addressed at the individual level.

- The implementation part (phase II) of the TIP method needs to be further developed and supplemented with a toolbox containing suggestions for evidence-based strategies for communicating with and providing information about vaccinations to the specific target groups.

- It is also necessary to propose models and tools for systematically planning and evaluation of the targeted interventions.
Reflections on the intervention in the Somali community

- **Reference group** (community members) essential
- **Somali experts** in the research group
- Close collaboration with **health care** (CWC)

- Personal invitation by **SMS** – very effective
- Use **established structures** in the community for integrated lectures

- Authority/PHA in collaboration with community and NGOs
# Project organisation

## Steering group
- Anders Tegnell
- Ann Lindstrand
- Ingrid Uhnoo
- Bernice Aronsson
- Eva Netterlid
- Helena Hervius (Dept Comm Dis Ctr)
- Sahar Nejat/Helena Martin (Pev and Child Health Serv)

## County Council
- **Stockholms läns landsting**
- Health developer CHS - Åsa Heimer
- CHC Tensta: Carola Schäfer och Birgit Hyryläinen
- CHC Rinkeby: Ingrid Berg och Susanne Einarsson

## Project group (op)
- Asha Jama
- Emma Byström
- Susanne Kärregård
- Karina Godoy
- Mats Hedlin

## Other partners
### Municipality
- School health
- Health communicators, Transcultural center

### Local NGOs/ support org
- Reference group
- Somali National assoc
- Tensta parents
- Shanta association

## Other
- World Health Organization
- Folkhälsomyndigheten
Thank you!!!