

***National institute of Public health
Center for Population Health Research***

***Research interventions on
RTI injuries in Mexico***

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***COMMUNITY-BASED IDENTIFICATION
AND IMPLEMENTATION OF
INTERVENTIONS FOR RTI PREVENTION
IN CUERNAVACA, MEXICO***

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RESEARCH QUESTION

¿WHICH WOULD BE THE FEASIBLE AND EFFECTIVE INTERVENTIONS FOR THE PREVENTION OF ROAD TRAFFIC INJURIES IN THE CITY OF CUERNAVACA, MEXICO, SINCE THE POINT OF VIEW OF THE MAIN ACTORS INVOLVED ON THEM?

MAIN OBJECTIVE

To use participatory methods with stakeholders to identify, design and implement feasible and effective interventions for the prevention of road traffic injuries in young population in the city of Cuernavaca, Mexico

Research Problem

Traditional approach for RTI preventive interventions

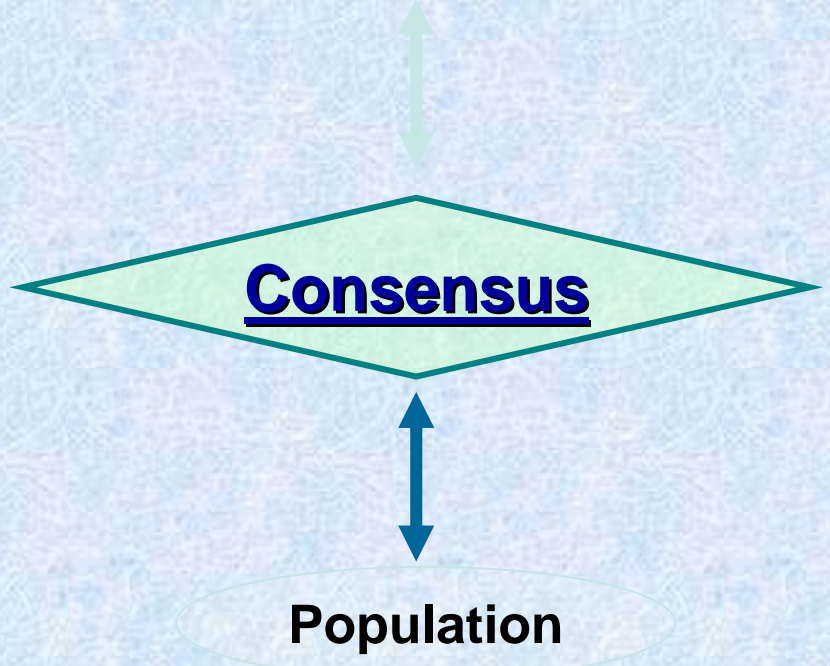
Decision makers (experts or Health workers)



Population

Proposed approach for RTI preventive interventions

Decision makers (experts or Health workers)



Methodology

PHASE ONE

The focus was on: situation analysis and intervention identification

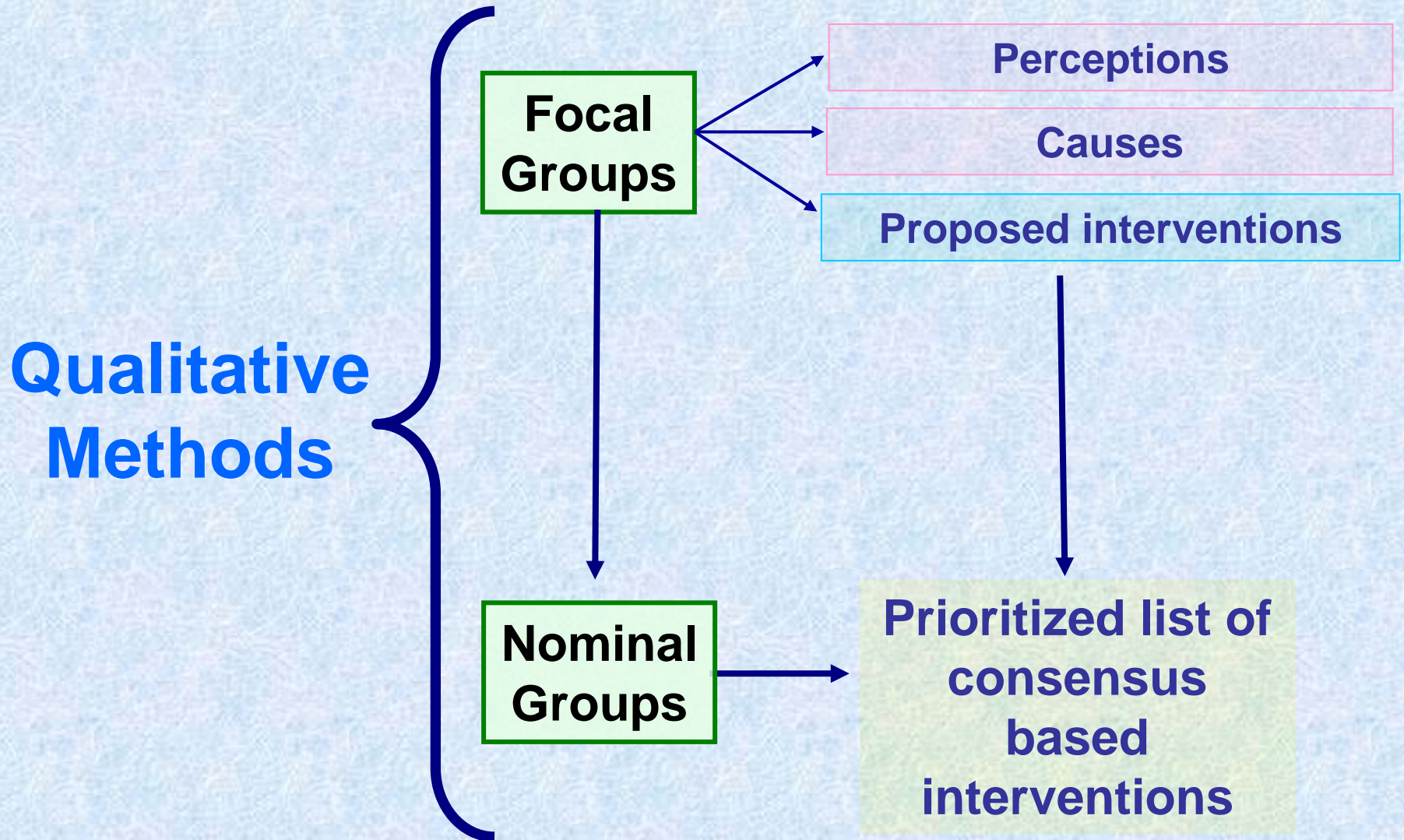
- Focal and nominal groups techniques

PHASE TWO

The focus is on: implementation of the selected interventions and evaluation

- Quasi-experimental design

Methodology Phase 1



WHO WERE THE STAKEHOLDERS?



Proposed interventions

Prioritized list

- 1 **Massive educational campaign to young people (15-19 years) as target population)**
- 2 Educación vial en las escuelas
- 3 Mejoramiento y aumento de vialidades
- 4 Políticas de ubicación (escuelas, establecimientos)
- 5 Programa de conductor designado (o retención)
- 6 Colocación de pasos peatonales (zonas de riesgo)
- 7 Señalización clara de paraderos (rutas)
- 8 Capacitación permanente a agentes de tránsito
- 9 Vigilancia del cumplimiento de leyes de tránsito
- 10 Evaluación teórico-práctica de licencias (no a menores)

Identification

Intervention Design

Dissemination

Implementation

FG'S

NG'S

EC

Pamphlets,
Banners, radio spot
Postal cards

A CALL FOR PARTICIPATION
TO YOUNG PEOPLE TO
DESIGN THE EDUCATIONAL
CAMPAIGN.

Jury for select the
winners

THE CAMPAIGN WAS DESIGNED
BY EXPERTS ACCORDING THE
SELECTED MATERIAL

Baseline data about
knowledge of risk
factors for RTI

Campaign Implementation
Using media and
participating at the schools

Methodology Phase 2

**Quasi-experimental
Design**

Baseline Data:

**Sample size : MD 0.02,
SD 1.46, Power 90%
CL 95% =700
students (15-19 years)
and 16 schools
randomly selected**

**Knowledge of risk
factors, perceptions
and behaviours
(10 questions)**

**Intervention
3 months**

**Follow up Data:
was applied 3 months after
the intervention**

**The measure of impact was: changes on the knowledge
of the risk factors measured**

Results

Questions	baseline	Follow up	P value
	n (%)	n (%)	
<p>Place of RTI among the 10 pricipals causes of death</p> <p>First and second Third and fourth Fifth and seveth Do not know</p>	<p>695</p> <p>207 (29.8) 222 (31.9) 29 (4.2) 237 (34.1)</p>	<p>691</p> <p>403(58.3) 132(19.1) 14(2.0) 142(20.5)</p>	0.000
<p>¿who must be use seat belt?</p> <p>Only the driver All the vehicle occupants Only those seated at front side Do not know</p>	<p>693</p> <p>6 (0.8) 625(90.1) 61(8.8) 1(0.1)</p>	<p>696</p> <p>0 662(95.1) 33(4.7) 1(0.1)</p>	0.002
<p>When you will not be able to drive a car</p> <p>After two drinks After 4 or more drinks After any amount of alcohol intake Other Do not know</p>	<p>696</p> <p>98(14.0) 117(16.8) 428(61.5) 43(6.2) 10(1.4)</p>	<p>682</p> <p>122(17.8) 130(19.1) 386(56.6) 32(4.7) 12(1.7)</p>	0.130
<p>Use of seat belt</p> <p>Always Just on highways Only in long journeys Do not know</p>	<p>691</p> <p>673(97.4) 14 (2.0) 1 (0.1) 3 (0.4)</p>	<p>696</p> <p>683(98.1) 8(1.1) 5(0.7)</p>	0.061

Index* Results

Knowledge Index	Baseline	Follow Up
	n (%)	n (%)
Low	263 (41.16)	165 (25.62)
Medium	227 (35.52)	222 (34.47)
High	149 (23.32)	257 (39.91)
Total	639	644

p = 0.000

* Factorial analysis¹ taking into account the 10 questions

Conclusions

- ❑ Educative interventions represent a first strategy for changes in knowledge and population behaviors.
- ❑ Appropriate methodology to measure short term changes in the knowledge of risk factors associated with RTI
- ❑ Changes in knowledge do not mean changes on behavior, to achieve is necessary:
 - 1) rethink the interventions strategies according dissemination of information to target groups and
 - 2) to pay attention on the environmental factors and social norms of behavior.
- ❑ The used design limitation was not to have a control group