



جامعة الحكمة

La Sagesse University
Faculty of
Health Sciences

2013 Anti-Polio Campaign

February 18th, 2014

OUTLINE

- Background
- Objectives of the study
- Methodology
- Polio Results
- Challenges

Background

- Study requested by WHO
- Undertaken by the Faculty of Health Sciences at La Sagesse University
- More than 700,000 children were reported to be vaccinated against measles and polio throughout 2012 and 2013.
- More than 1,000,000 doses were given during the November and December 2013 anti polio national immunization days.
- Target groups:
 - Children under 60 months old residing in Lebanon regardless of their nationality

Objective of the study

Assess the polio vaccination coverage during the 2013 national anti-polio campaign

Methodology (I)

- **Sample Size:**

- The calculation of the sample size was based on the rationale for cluster sampling assuming a significance level of 5%, a design effect of 2 and a precision of 7%
- The total number of children in each district was calculated based on the probability of finding the lowest presumed immunization coverage in that district
- The observational units in each cluster were fixed at 20 children per cluster

Methodology (II)

- **Sampling Technique:**

First Sampling Stage:

- Randomly selecting 446 clusters from the official administrative geographical division in Lebanon of Mouhafaza and Caza.
- A code for the Mohafaza, one for the district and a five digit code for the village/area or tented settlements were entered prior the random selection.
- The probability of an administrative area to be chosen was proportionally based on its resident population (CAS, household survey 2007).

Second Sampling Stage:

- Random selection of households within the geographical areas chosen using a systemic random selection.
- The WHO-UNICEF-EPI cluster approach method was used.

Methodology (III)

- **Instrument : Questionnaire:**
 - I. THE FRONT PAGE:* A consent form
 - II. SECTION I:* General questions on the socio demographic characteristics of the parent or legal guardian;
 - III. SECTION II:* Questions related to the selected children, their vaccination status and the utilization patterns of the Immunization Card;
 - IV. SECTION III:* Questions related to the national polio campaign in 2013 and whether children received the polio vaccination during the campaign.
- ***Developed in Arabic and Piloted in Four areas***



RESULTS

(1): Distribution of the Sample

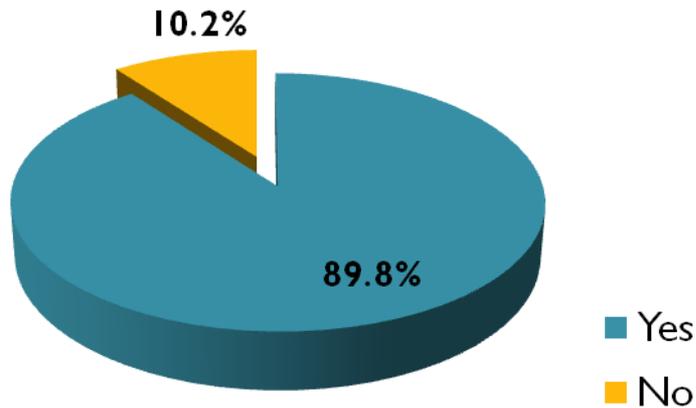
	n	%
GENDER		
Males	3675	54.9
Females	3016	45.1
NATIONALITY		
Lebanese	5100	76.2
Syrians	1573	23.5
Palestinians	18	0.3
TOTAL	6691	100.0

(II): Distribution of the Sample among Districts (N=6691)

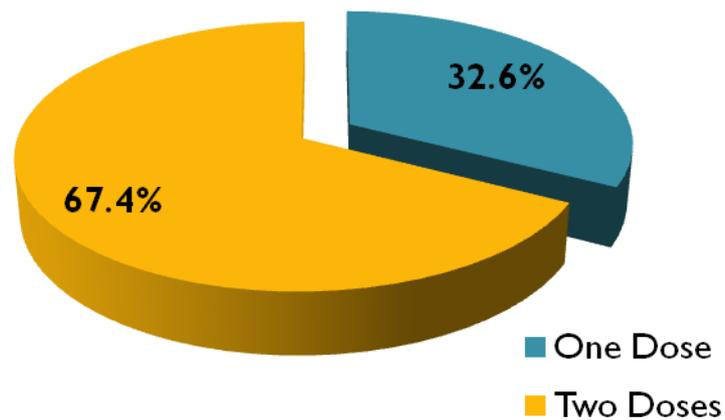
	n	%
Akkar	501	7.5
Aley	360	5.4
Baabda	390	5.8
Baalback	397	5.9
Bcharre	109	1.6
Beirut	309	4.6
Bent Jbeil	119	1.8
Chouf	330	4.9
Hermel	200	3.0
Jbeil	194	2.9
Keserwan	277	4.1

I	n	%
Koura	316	4.7
Metn	225	3.4
Minnieh	602	9.0
Nabatieh	86	1.3
Rashaya	254	3.8
Saida	485	7.2
Sour	298	4.5
Tripoli	403	6.0
West Bekaa	392	5.9
Zahle	244	3.6
Zgharta	200	3.0

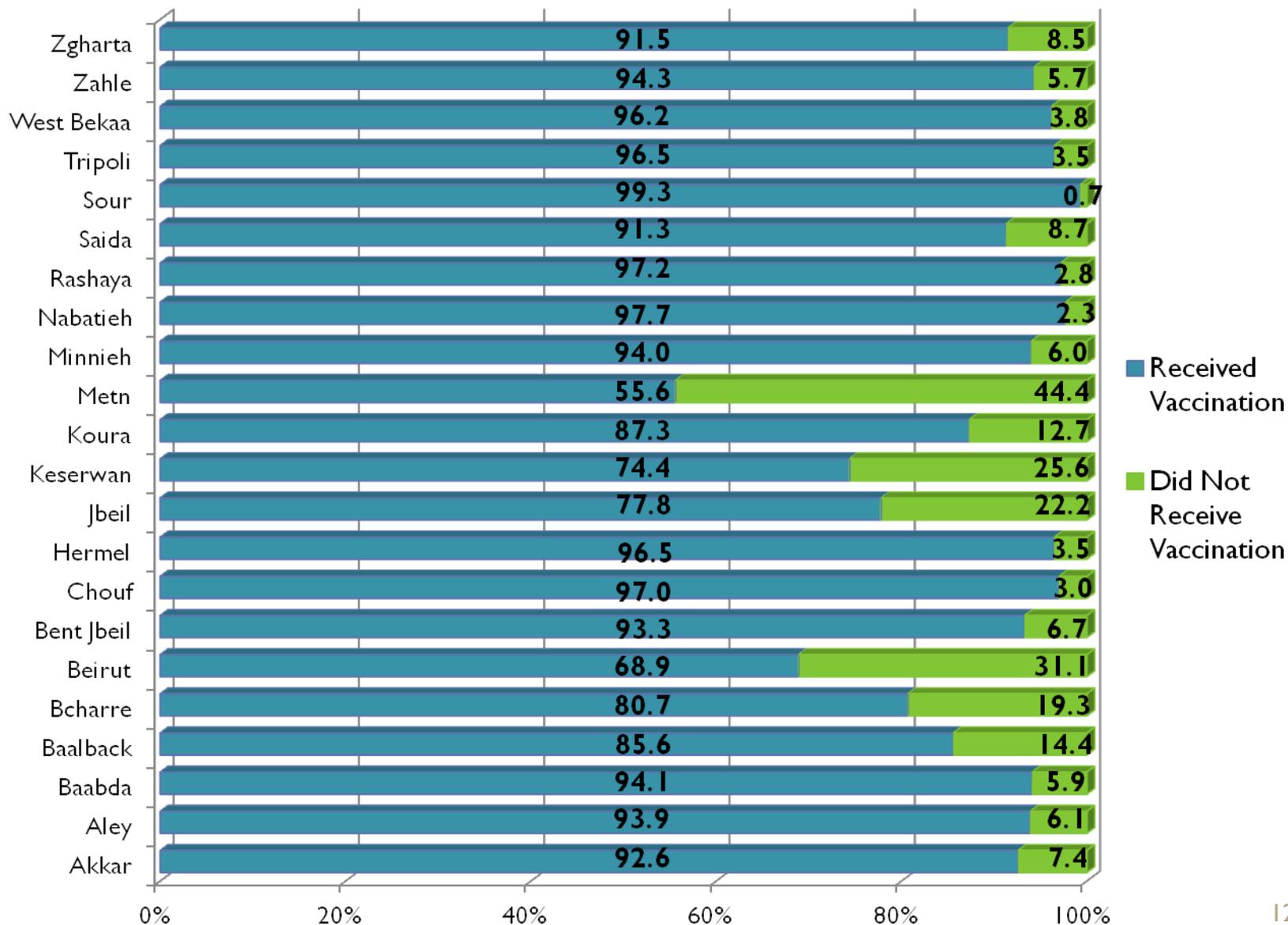
**(III): Received Polio Vaccination
During 2013 Campaign (n=6691)**



**(IV): Doses of Polio Vaccination
Received (n=6007)**

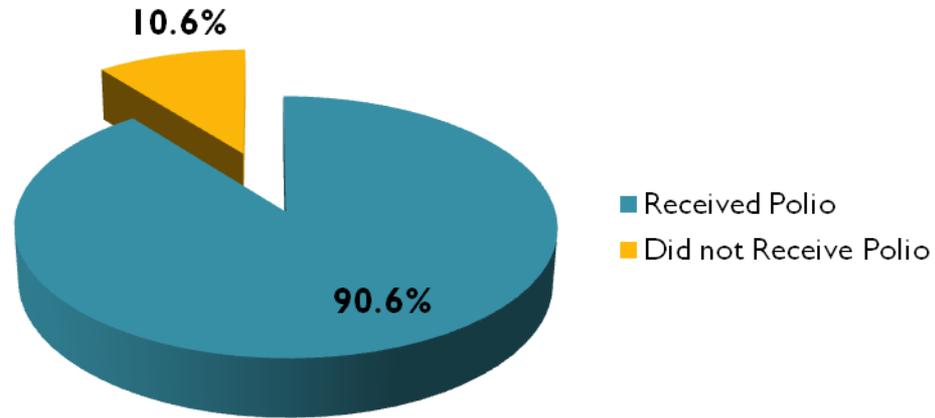


(V): Polio vaccination Coverage per District

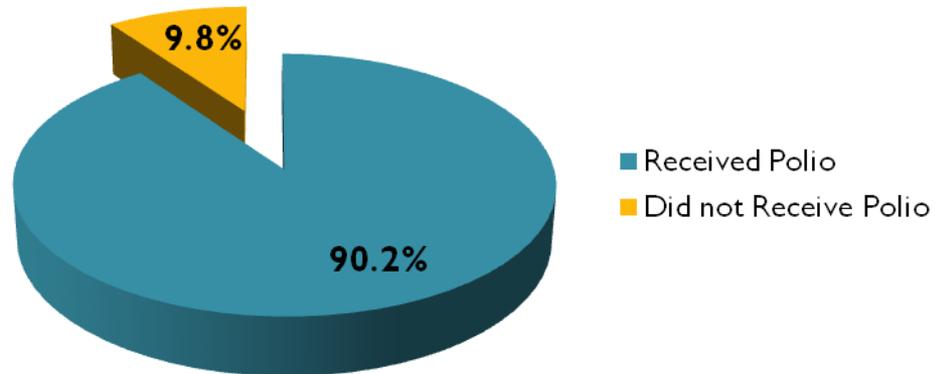


(VI): Coverage of polio vaccination during 2013 campaign by gender

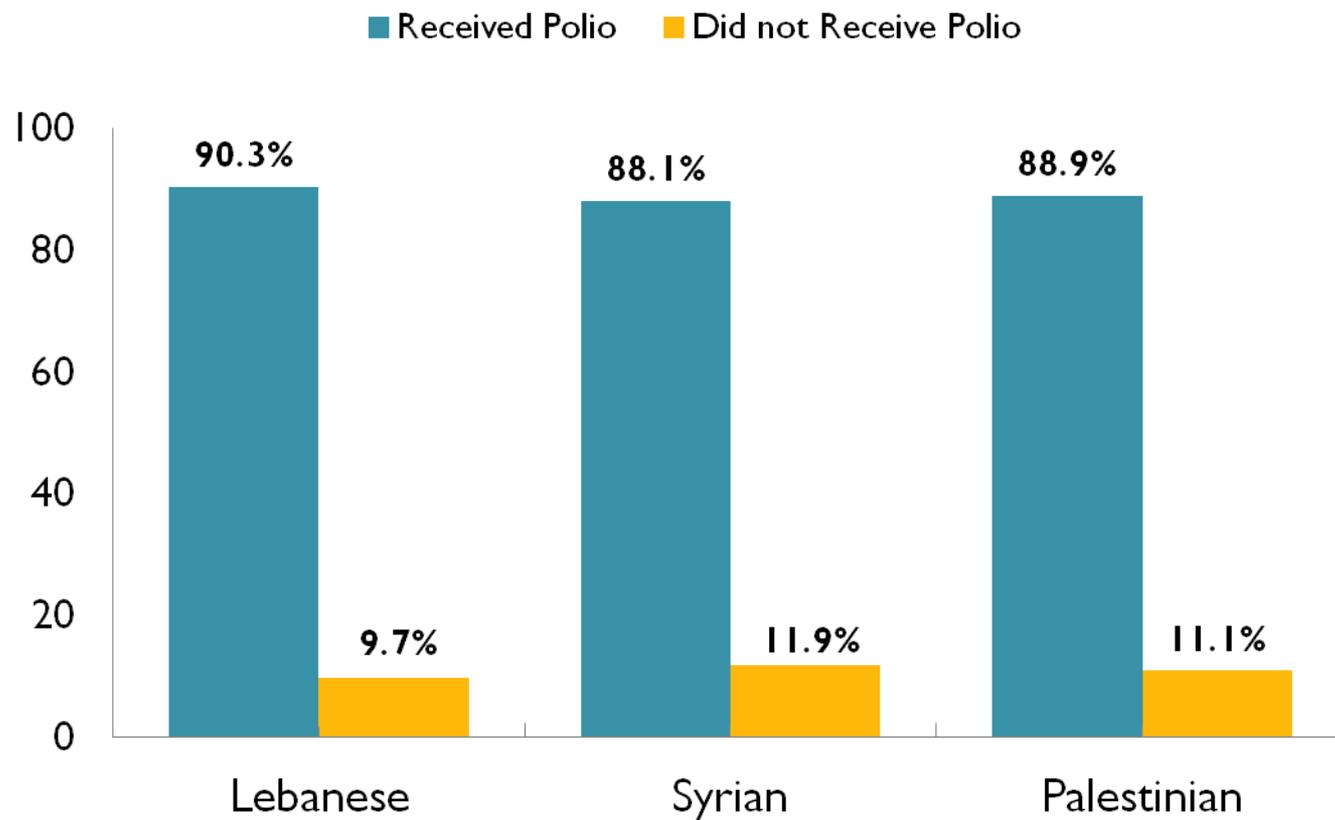
MALE



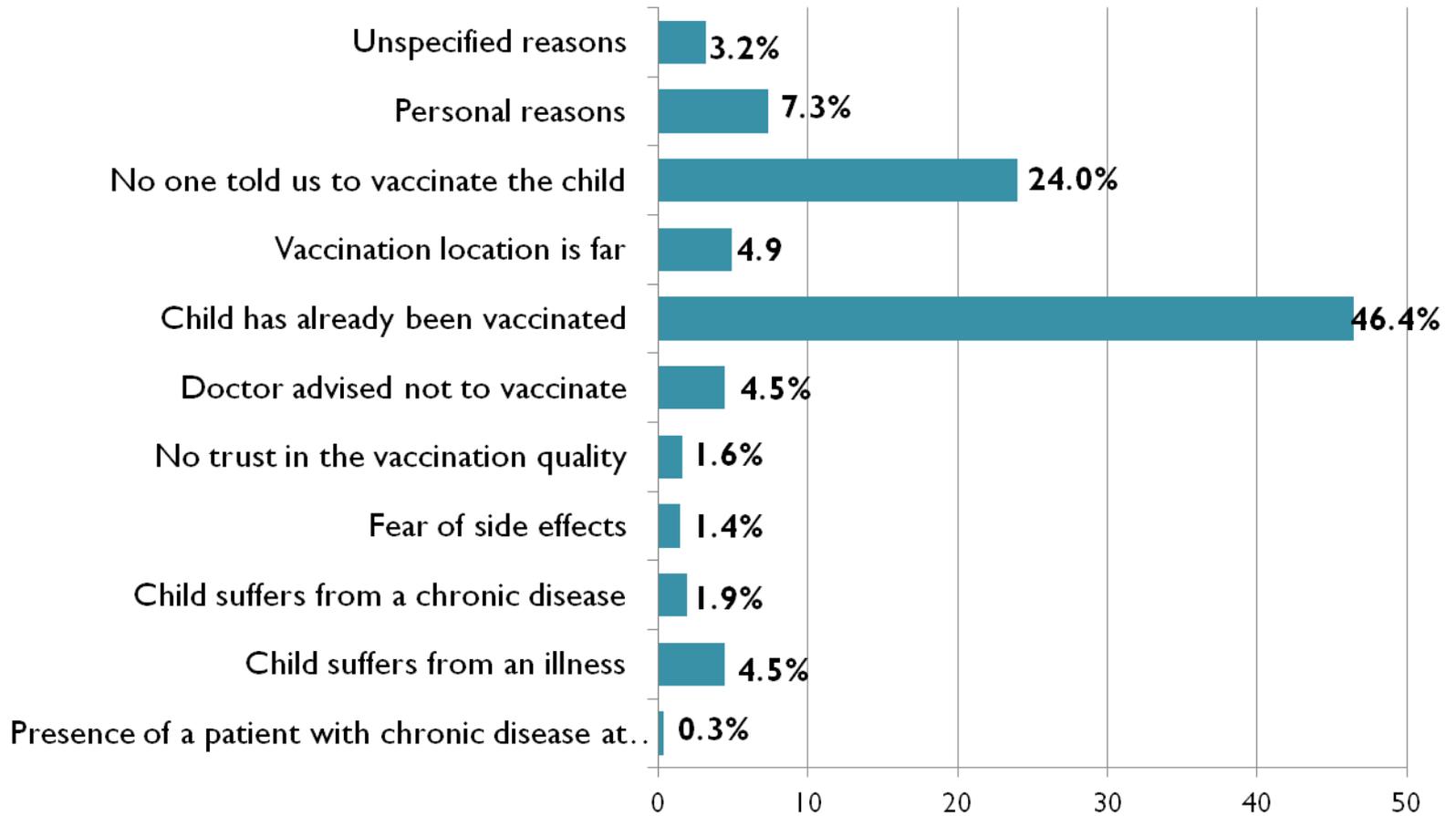
FEMALE



(VII): Coverage of polio vaccination during 2013 campaign by Nationality



(VIII): Reasons for not receiving polio vaccination during the 2013 polio campaign



Challenges

- More clusters were sampled than what was originally planned because fieldworkers were not able to reach the targeted number of 20 children in many clusters
 - Many areas did not have enough children under 60 months old to be sampled
- Delays in data collection caused by the security instability within the North, where fieldworkers had to postpone visits at many occasions in addition to scheduling multiple visits to one area to complete a certain cluster
- Many of the Immunization Cards were not kept in good shape or were not readable creating a challenge for the fieldworkers to administer the necessary information within the questionnaire.



Thank you