



# Working through Community-based Channels to Introduce Zinc for Treatment of Pediatric Diarrheas

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# Presenter Disclosures



**Vicki MacDonald**

**The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:**

No relationships to disclose

# Overview



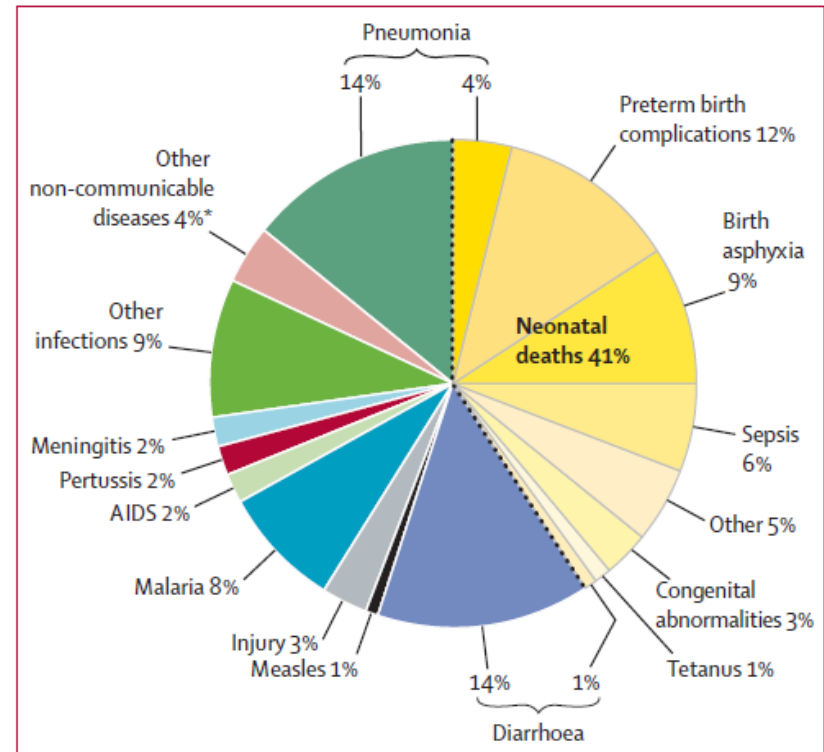
- Background
- Implementing diarrhea management programs in developing countries
- Community-based programs
- Research results
- Findings and conclusions



# Pediatric diarrhea



- 2<sup>nd</sup> leading cause of death in children under 5 years (15%)
- At least 1.3 million deaths per year
- Dehydration is most immediate cause of death



**Figure 4: Global causes of child deaths**

Data are separated into deaths of neonates aged 0–27 days and children aged 1–59 months. Causes that led to less than 1% of deaths are not presented.

\*Includes data for congenital abnormalities.

Source: Black et al. [Lancet 2010; 375:1969-1987](#)

# Zinc for the treatment of diarrhea: Research findings



- 25% reduction in duration of acute diarrhea
- 29% reduction in duration of persistent diarrhea
- 40% reduction in treatment failure or death in persistent diarrhea
- Zinc supplementation for 10-14 days has preventive effect on childhood illnesses in the 2-3 months after treatment

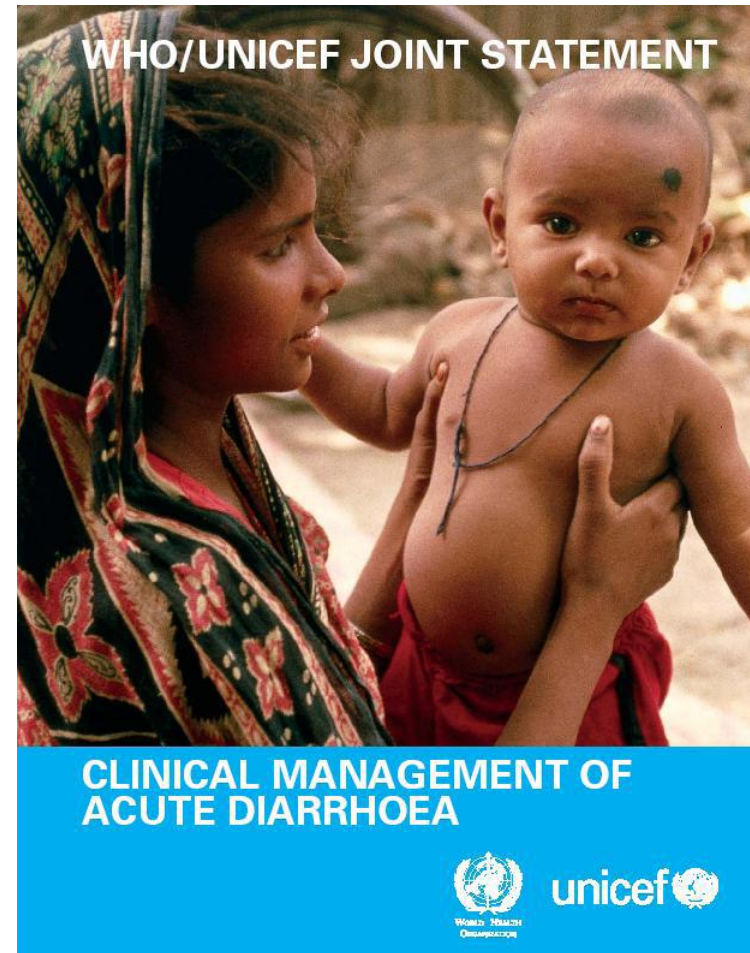
*Bhutta ZA, Bird SM, Black RE, et al. Therapeutic effects of oral zinc in acute and persistent diarrhea in children in developing countries: pooled analysis of randomized controlled trials. Am J Clin Nutr 2000; 72(6): 1516-1522.*

# WHO/UNICEF Joint Statement 2004



May 2004 WHO/UNICEF  
revise recommendations  
for the treatment of  
childhood diarrheas:

- 10-14 days of 10 or 20 mg zinc
- Along with new low-osmolarity oral rehydration solution (ORS) or oral rehydration therapy (ORT)



# Program Goals



- Assure availability of quality, affordable zinc and ORS
- Assure that zinc is accessible through both public and private sectors
- Create demand by educating consumers and providers through a variety of channels

# Benin



- No locally-made product available
- Imported zinc and low osmolarity oral rehydration salts and packaged together into a diarrhea treatment kit
- Built off PSI's *Orasel* brand awareness, launched diarrheal treatment kit (DTK) *Oraselzinc*
- Significant rural population without access to television led to need for interpersonal approaches







*Small groups &  
Door to Door  
Activities*

*Women's Groups  
& Community  
Health Workers*



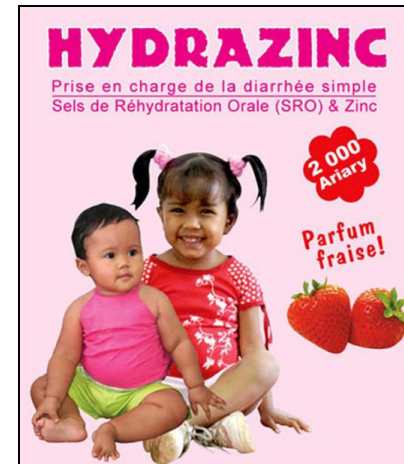
# Madagascar



**Public Sector program** initiated 2006

**Two Diarrhea Treatment Kits** (each containing 10 tablets of 20 mg zinc sulfate and two sachets of the new low-osmolarity ORS)

- **HydraZinc** launched and marketed through commercial pharmaceutical channels
- **ViaSûr** launched and made available through community-based distributors (subsidized by USAID)



# Community-based distribution



- NGO supported community-based sales agents sold ViaSur to rural households
- Agents supplied with IEC materials and kits
- Mobile video units supplemented promotional efforts



# Household survey methods



## Structured questionnaire

- Diarrhea treatment practices
- Exposure to messages and media
- Knowledge, perceptions related to diarrhea and zinc

## Administered to caregivers of children under 5

- Benin: youngest & next-youngest (if any) child in house (0-59 mos)
- Madagascar: youngest child in house (6-59 mos)

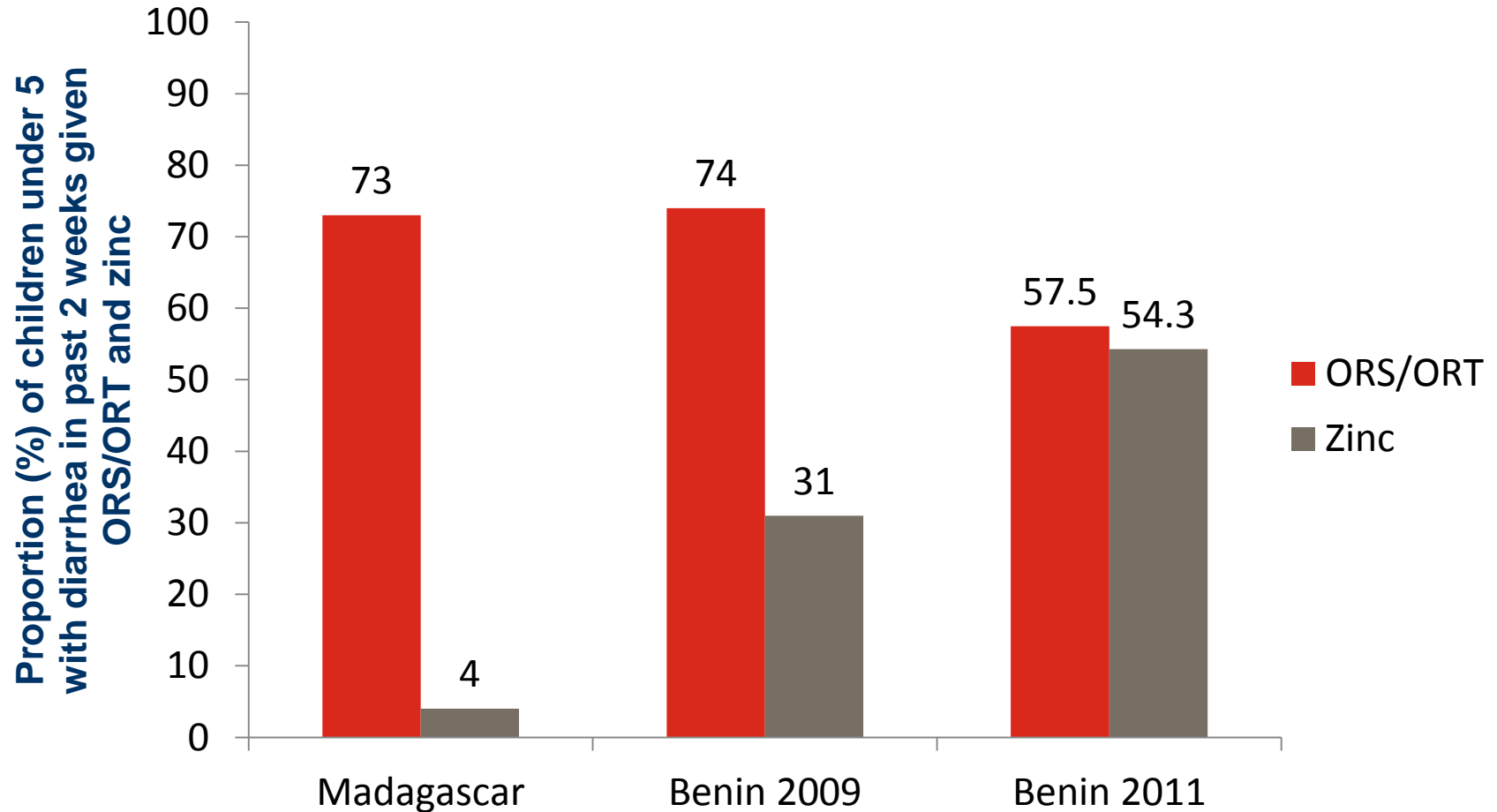
## Weighted analysis (complex sampling designs)

# Household survey details

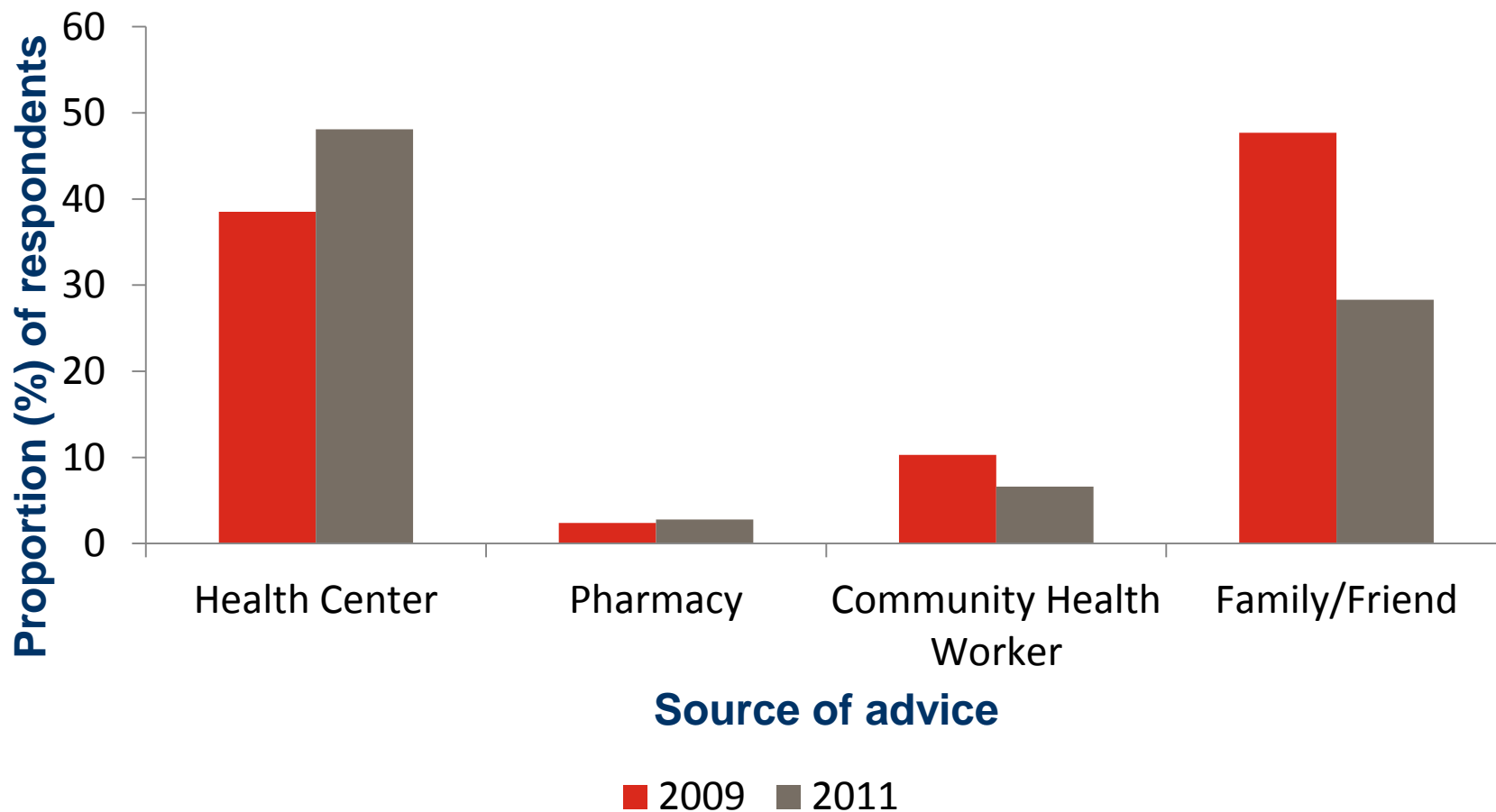


	Benin	Benin	Madagascar
<b>Dates</b>	Nov 2009	July-August 2011	March-April 2010
<b>No. of Households</b>	2912	741	1200
<b>No. of children</b>	3854	741	1200
<b>No. with diarrhea</b>	307	741	1000
<b>Age range</b>	0-59 months	0-59 months	6-59 months
<b>Design</b>	Cross-sectional	Cross-sectional	Cross-sectional; programs vs. comparison

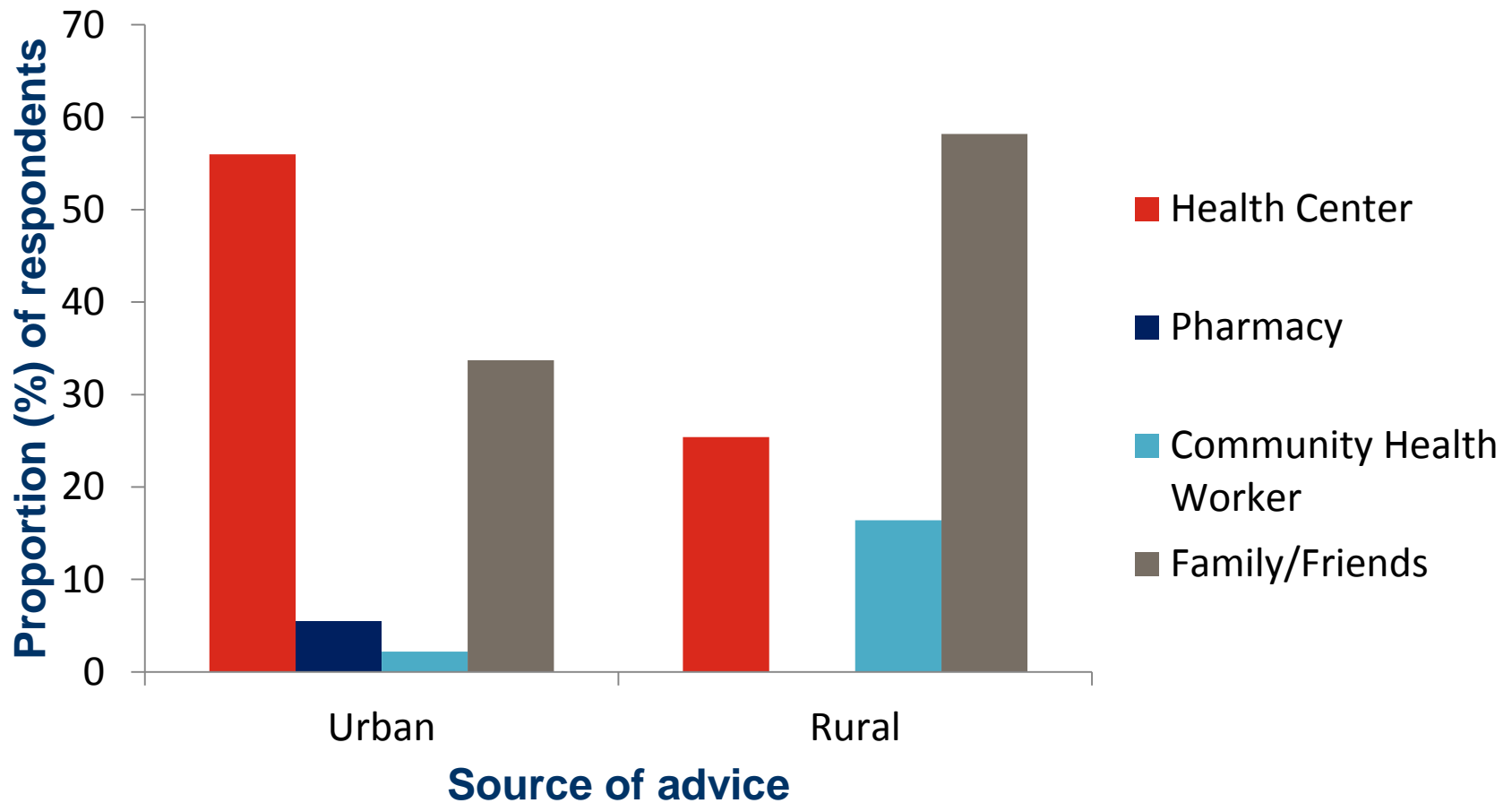
# Zinc and ORS/ORT use



# Benin: Source of advice on diarrhea management

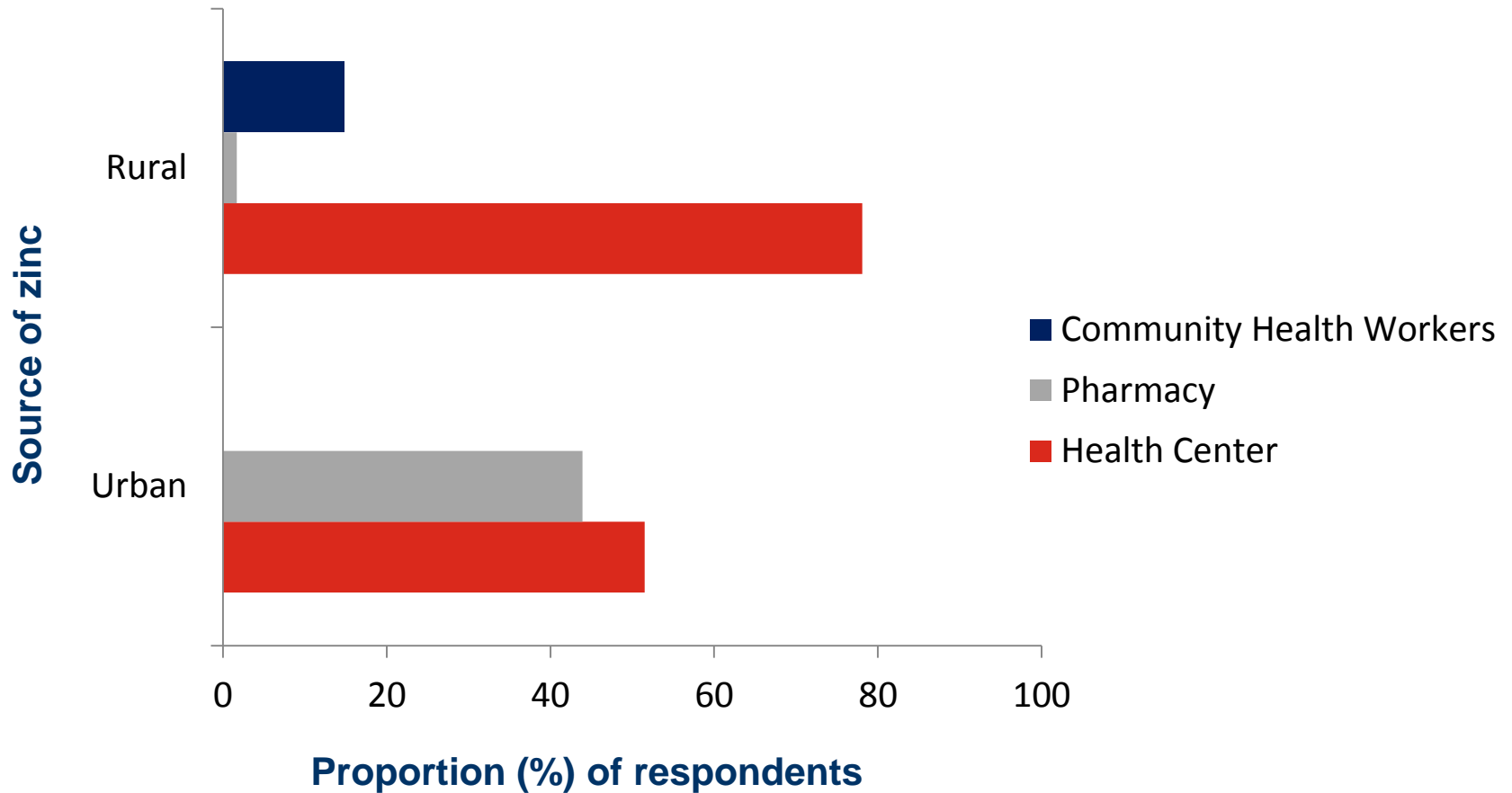


# Benin: Rural caregivers more likely to seek advice from community resources (2009)

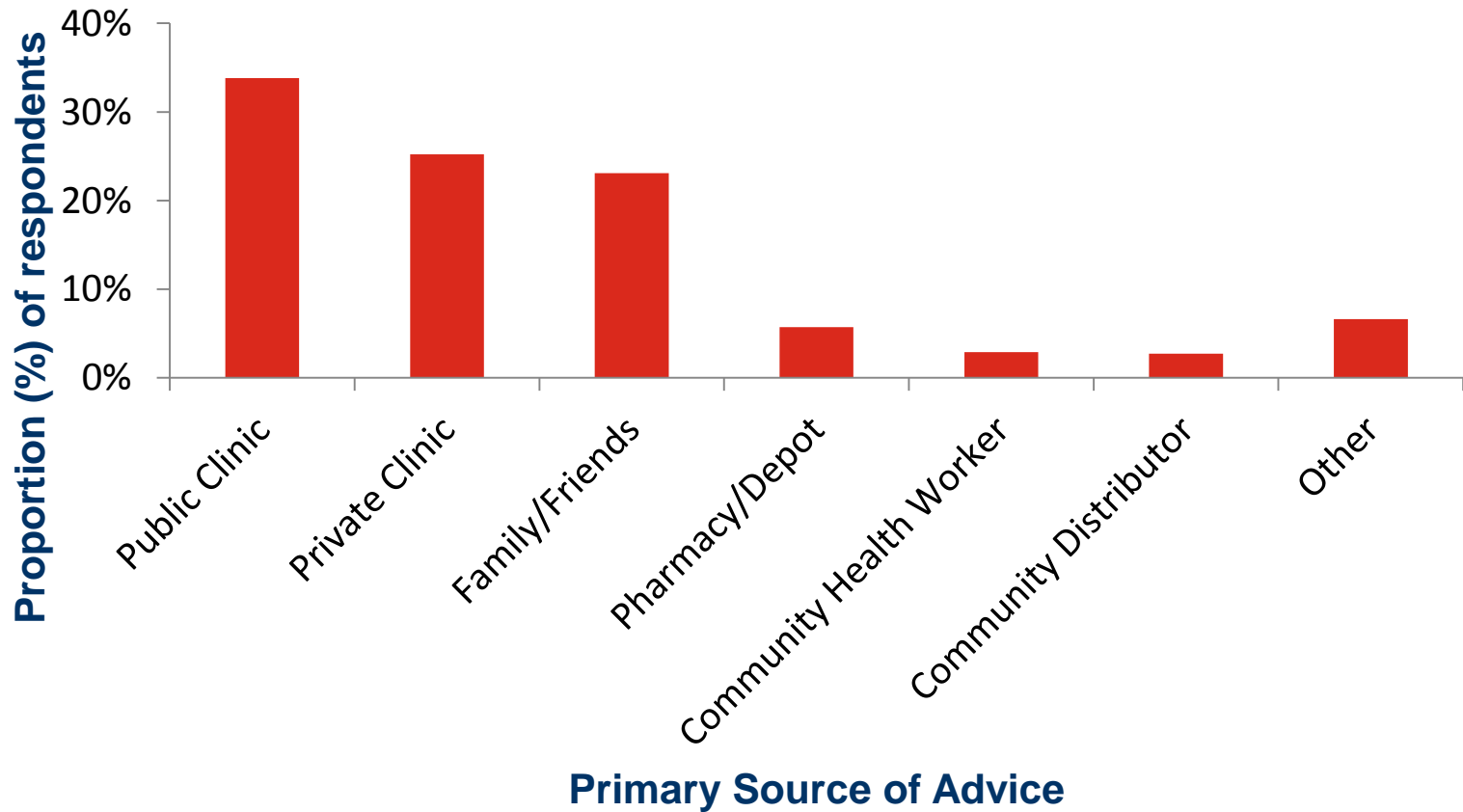




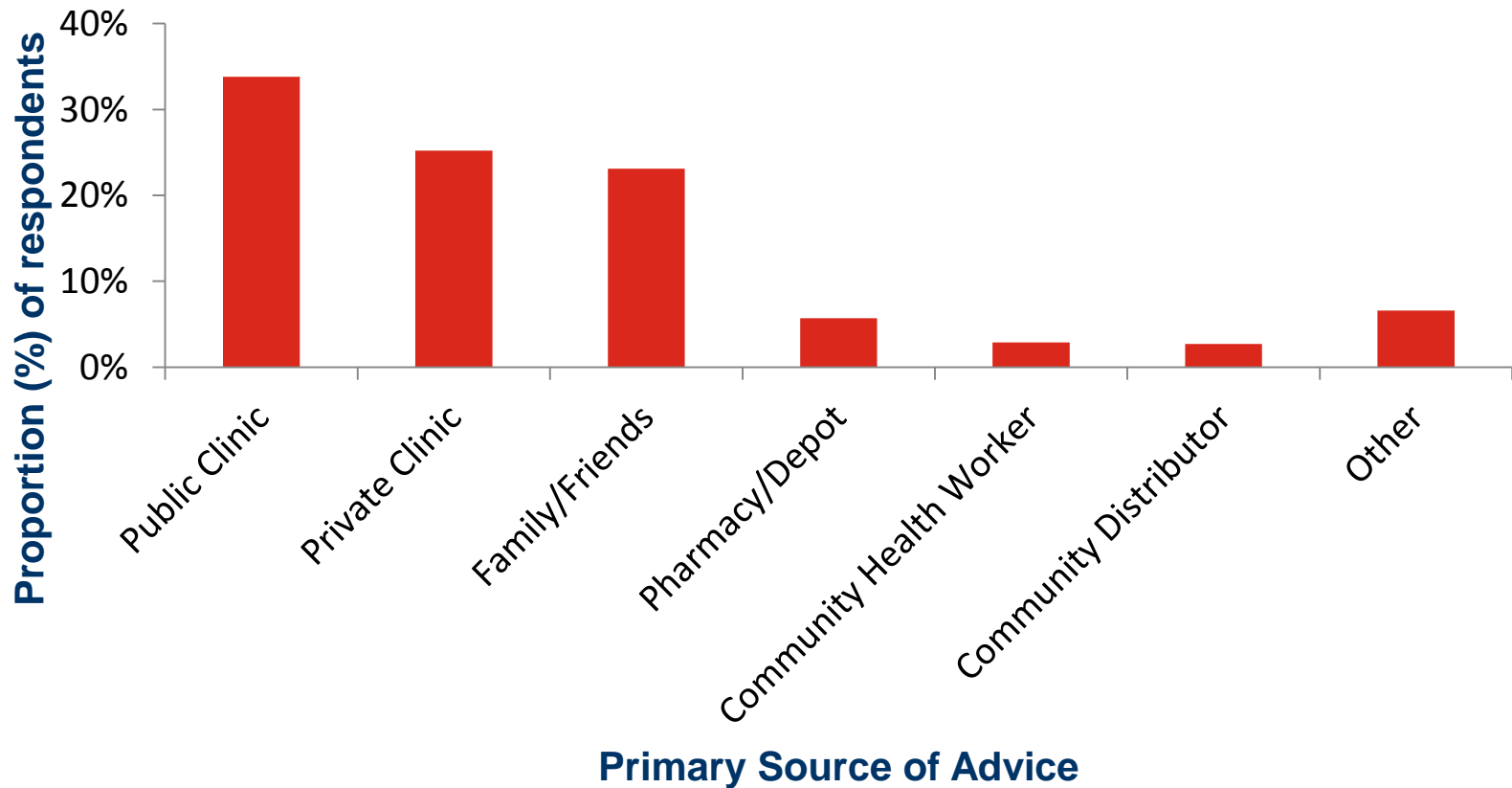
**Benin: Rural zinc users procured zinc from health centers and community sources while urban users procured from health centers and pharmacies (2009)**



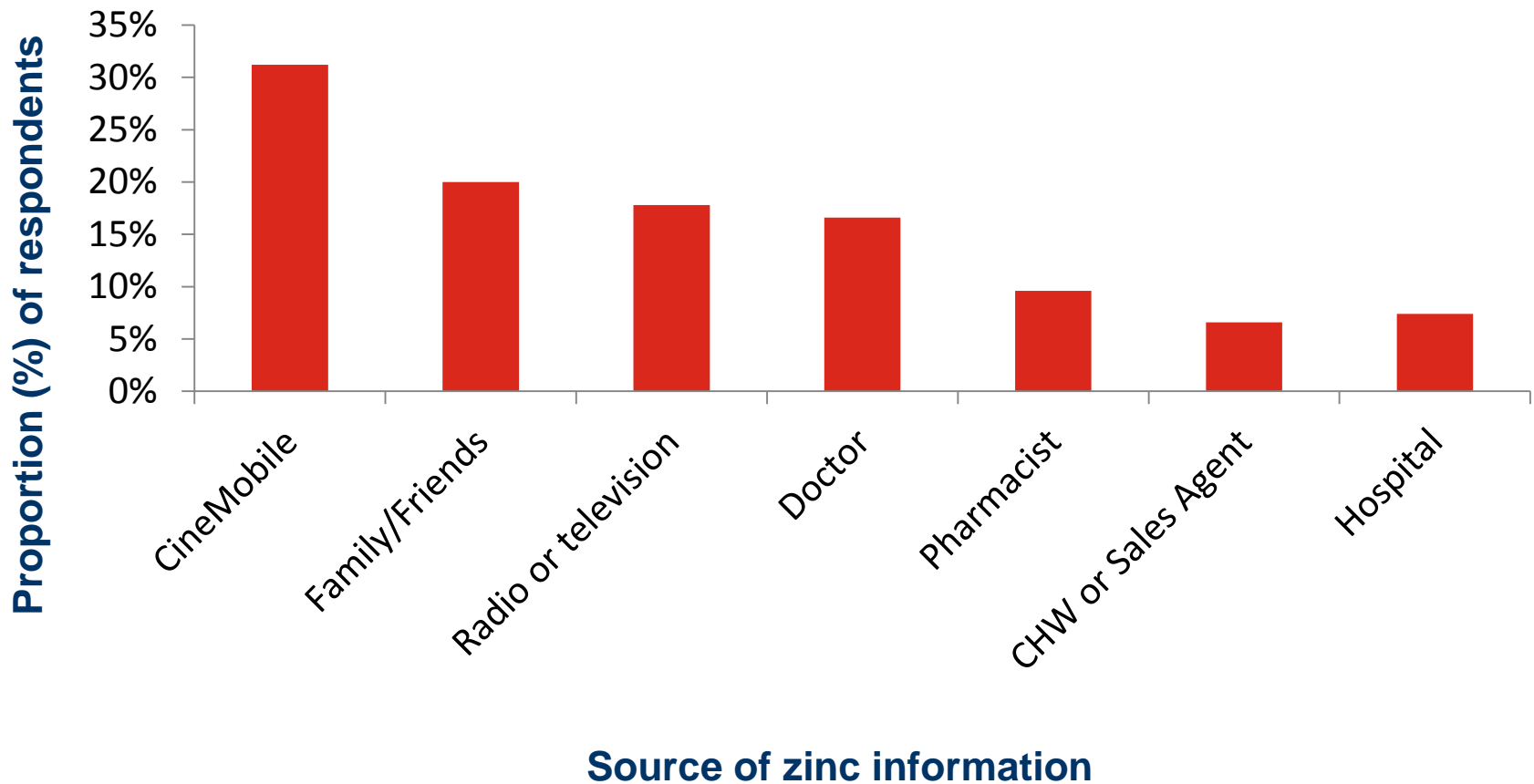
# Madagascar: Primary sources of advice or treatment



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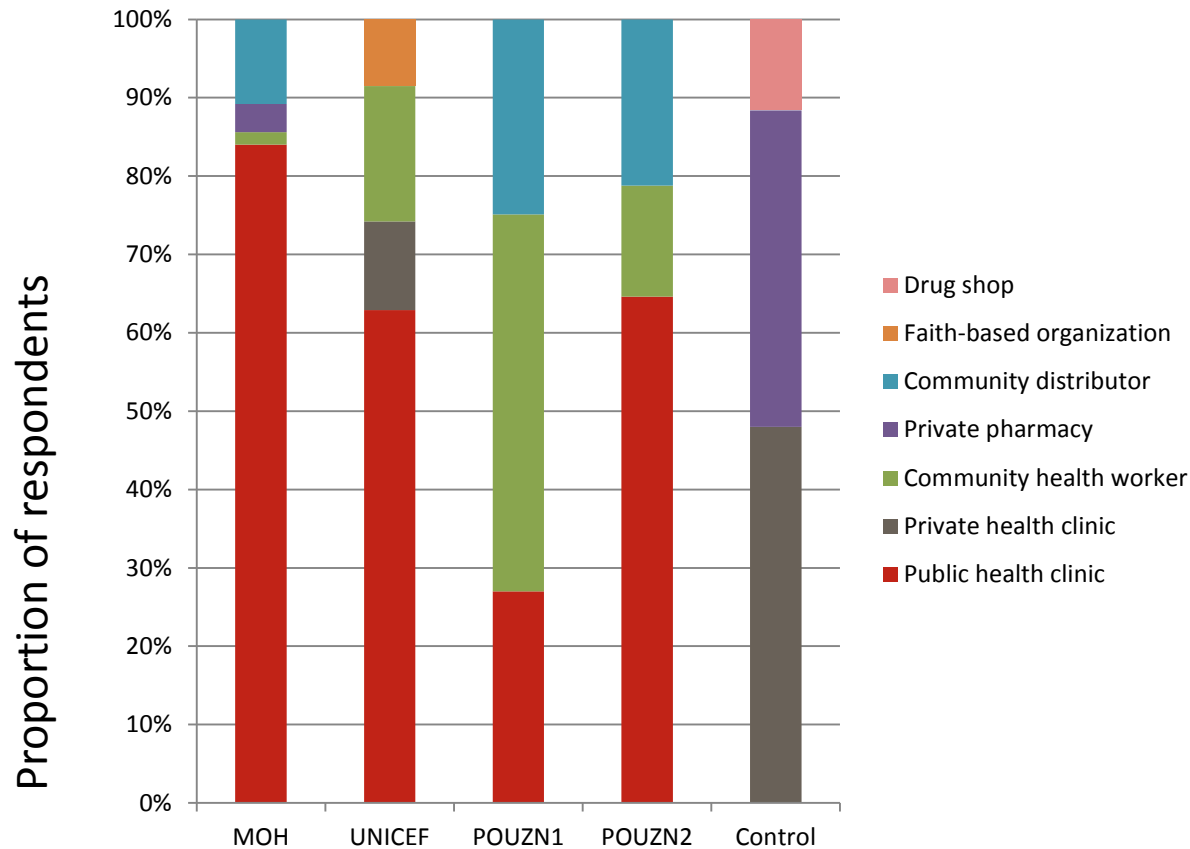
# Madagascar: Sources of Information about Zinc (Zinc Users)



# Madagascar: Source of zinc



Source of zinc treatments by type of program district



# Summary conclusions



- Community sources are highly sought for advice and treatment about diarrhea
- Partnerships with community-based organizations can increase awareness and access to products and encourage correct zinc and ORS use
- Assuring that program strategy includes interpersonal channels of communication in Africa is essential to improving home diarrhea treatment



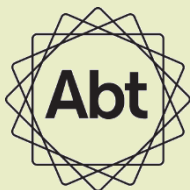
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Strengthening Health Outcomes  
*through* the Private Sector

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**www.shopsproject.org**



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