

TWIN INNOVATIVE STRATEGY TO SUSTAIN CHOLERA PREVENTION: EVIDENCE FROM KILIFI HDSS.

**PRESENTED TO:
INDEPTH ISC, 24TH-27TH
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PRESENTATION OUTLINE

1. Background
2. Objectives
3. Methods
4. Results
5. Discussions
6. Conclusion
7. Recommendations
8. Acknowledgement



BACKGROUND

- Cholera is an acute enteric infection caused by the ingestion of bacterium *Vibrio cholerae*
- The bacteria is present in faecally contaminated water or food
- Africa contributes 42% to the global burden and Kenya is not exceptional in this major public health emergency



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BACKGROUND

- Kilifi District had two waves of cholera outbreak; June, 2009 to March, 2010, with 125 total cases
- Second outbreak was from April, 2010 to May, 2010, with 90 total cases
- District funded by UNICEF in November, 2010 to implement cholera communication strategy.
- Strategy implemented in 25 villages with most cases referred to as cholera hotspot areas.



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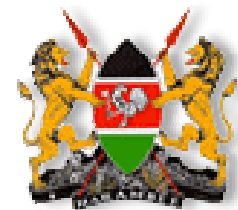


BACKGROUND-CONT.

- Strong collaboration between the Ministry of Public Health and Sanitation (MOPHS) Kilifi district and the Kilifi Health and Demographic Surveillance system (KHDSS)
- A twin innovate strategy was used: Geographical information system (GIS) and a new cholera communication strategy



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OBJECTIVES

1. To show geographical distribution of cholera cases
2. To describe a new cholera communication strategy.
3. To demonstrate how the new strategy protects the community in subsequent outbreaks



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METHODS

- Reviewed case reports from Health facilities within KHDSS and samples sent for laboratory confirmation- June, 2009 to May 2010
- Performed GIS spatial analysis on the data showing the distribution of cholera cases-positives, negatives and epi-linked
- Applied GIS and cholera communication strategy to control cholera
- Then its impact assessed within the same outbreak and in subsequent outbreaks



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METHODS

You Can STOP Cholera!

How is Cholera spread?
The Cholera germ is spread through eating food or drinking water contaminated with faeces containing Cholera germs. Cholera can also be spread through:

- Defecating in the open
- Not washing hands with soap and running water after using the latrine.

What are the Signs of Cholera?
A person suffering from Cholera develops the following signs:

- Frequent passing of watery diarrhoea.
- Vomiting.
- General body weakness due to excessive loss of water.
- Feeling thirsty and stops urinating due to reduced body fluids.

How can Cholera be prevented?

1. Always use a toilet to dispose all faeces, including children's faeces and ensure the toilet is clean all the time.
2. Always Wash hands with soap and running water:
 - After using the toilet
 - Before preparing and eating food
 - Before feeding a child
 - After handling a child's faeces
3. Protect source of drinking water and ensure the water you drink is boiled or treated in order to kill germs. To avoid contaminating sources of drinking water do not take a bath or wash clothes, pots and utensils at the source of drinking water. Store drinking water in a clean container and keep it covered all the time. Do not dip the drinking cup into the container.
4. Cook food thoroughly and eat it while it is still hot. To avoid food contamination by dust, flies and cockroaches, cover and store safely all remaining food. Wash fruits and vegetables thoroughly with clean running water before eating and cooking. Avoid communal feasting at social gatherings especially during cholera out-breaks.

Always use a Toilet, Wash Hands and Drink Safe Water to Prevent Cholera

MINISTRY OF PUBLIC HEALTH AND SANITATION
unicef

Pamphlet showing key cholera messages

Implementation team customized these messages with the tradition and practices of the people of Kilifi



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METHODS

Stakeholders forum

Capacity development

Coordination
and
supervision

Community road shows

Community dialogue
meetings



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METHODS



Local theater group performing during road shows



Community dialogue meeting in session

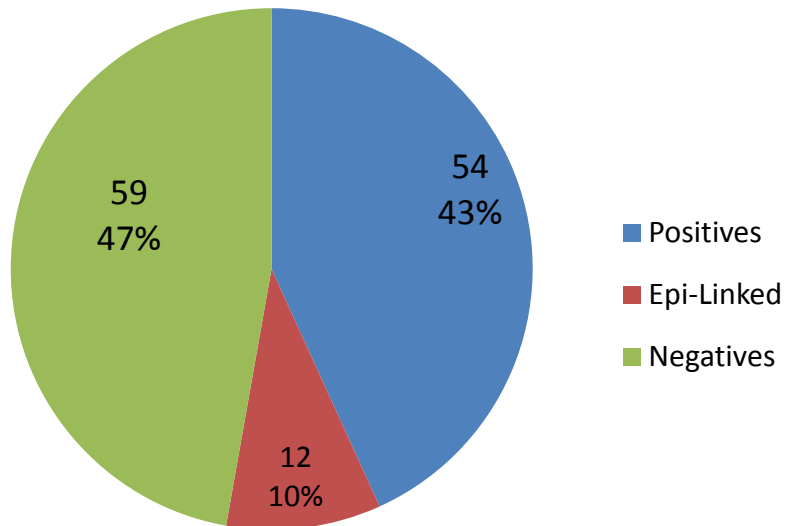


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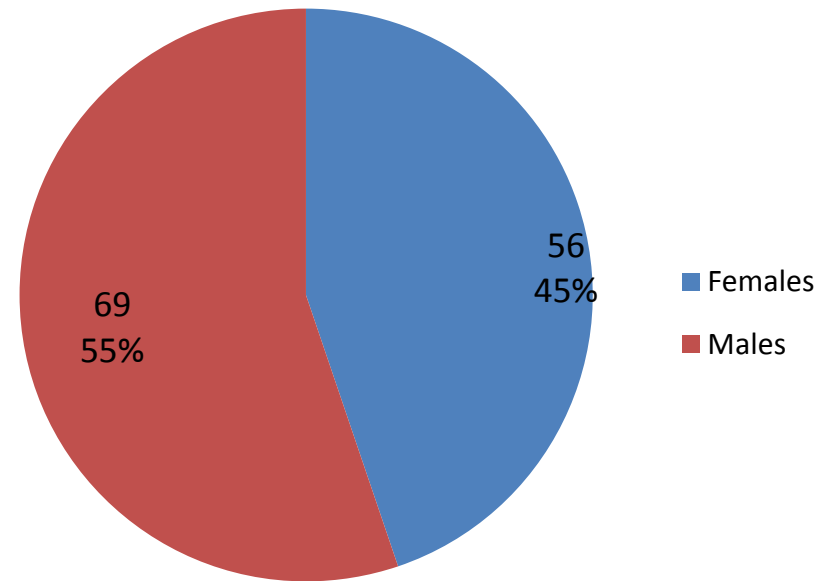


RESULTS

Laboratory results



Sex Distribution

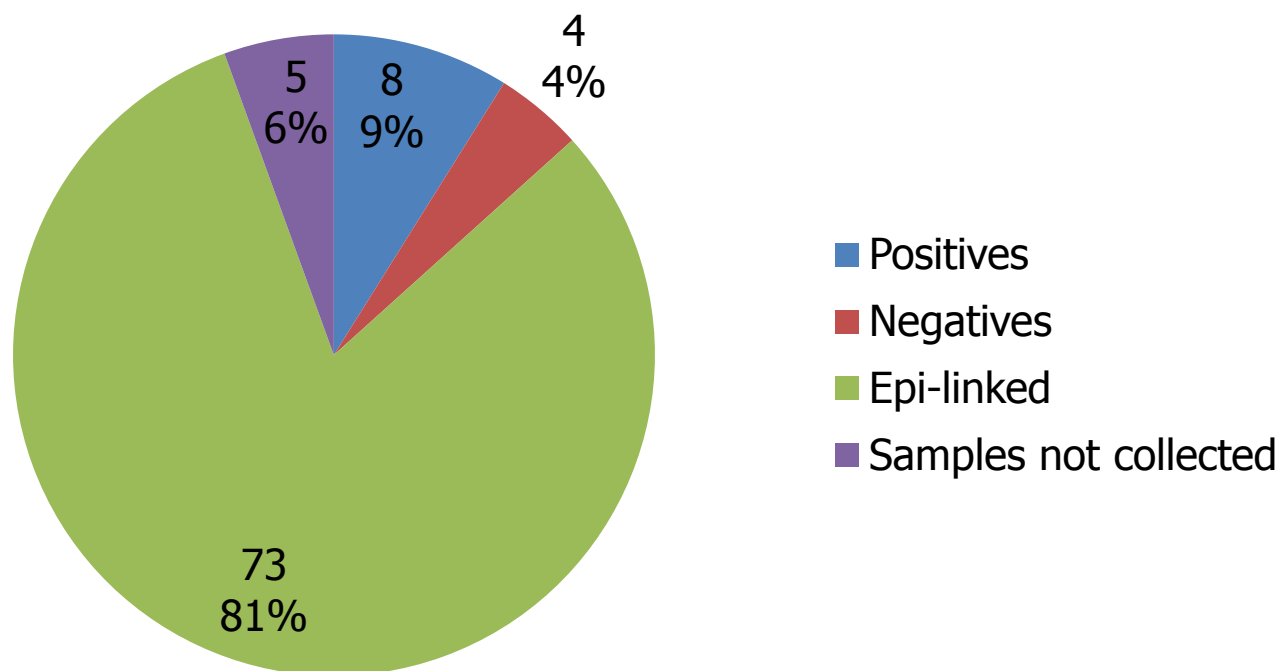


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RESULTS

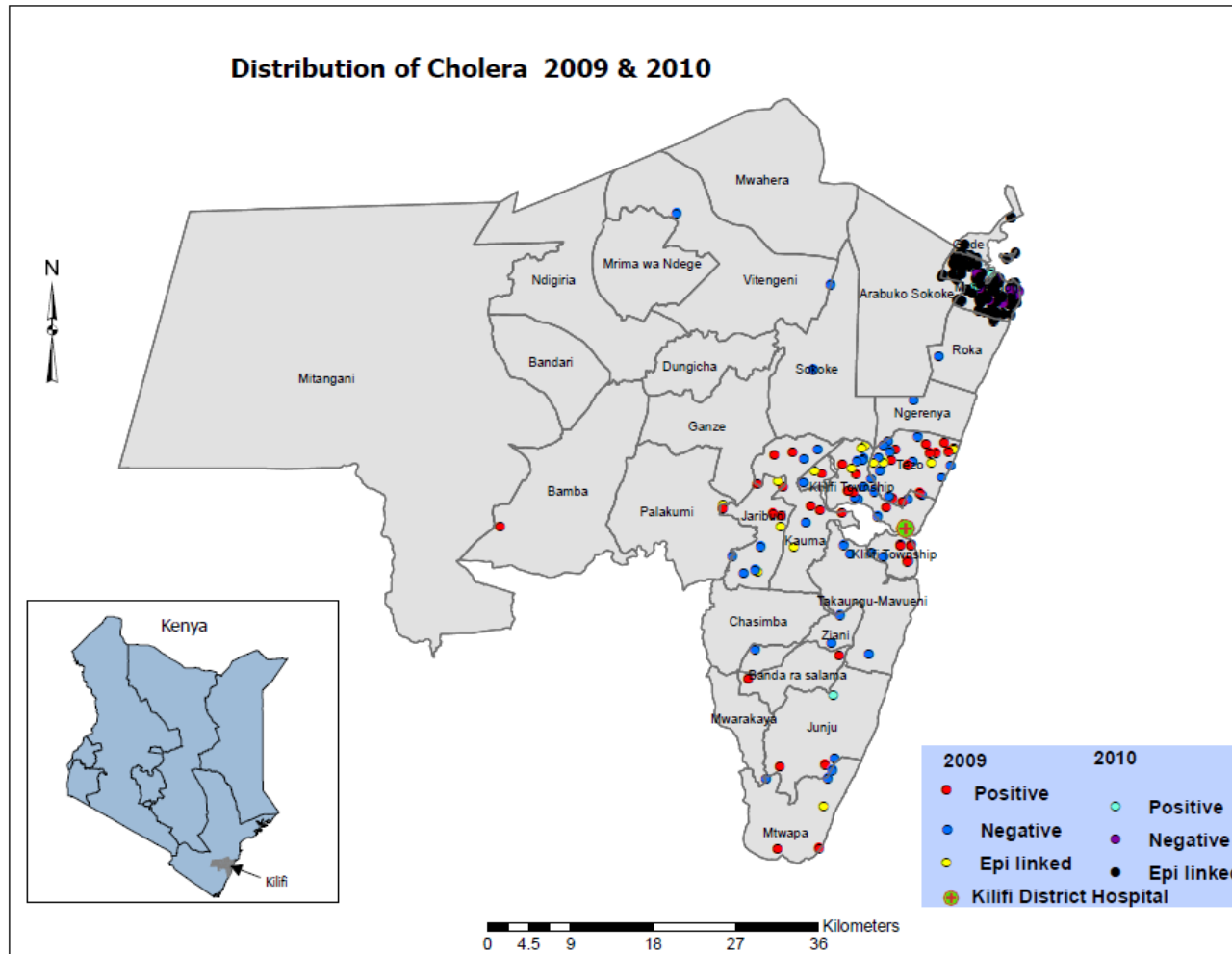
Subsequent outbreak between April 2010 and May 2010



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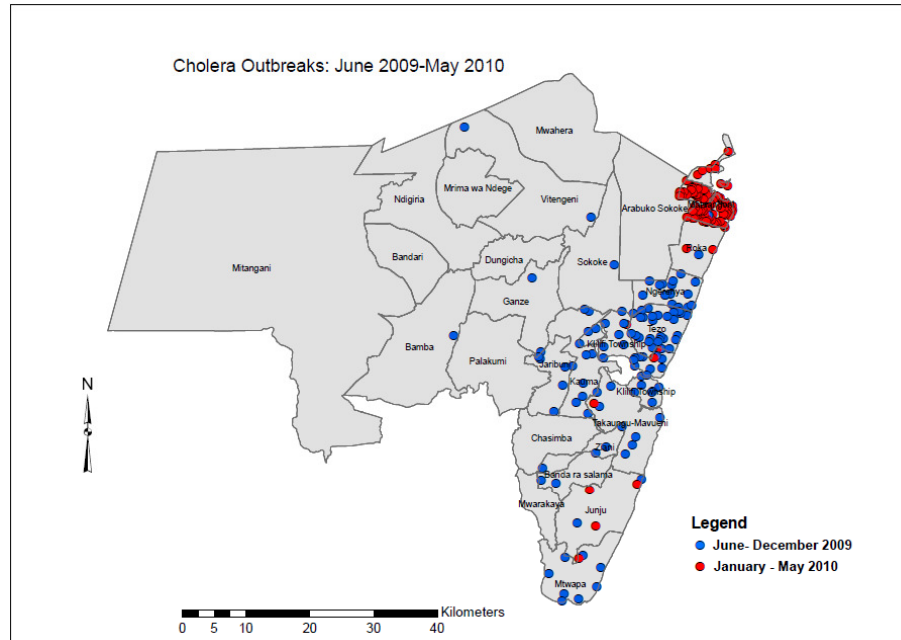
RESULTS



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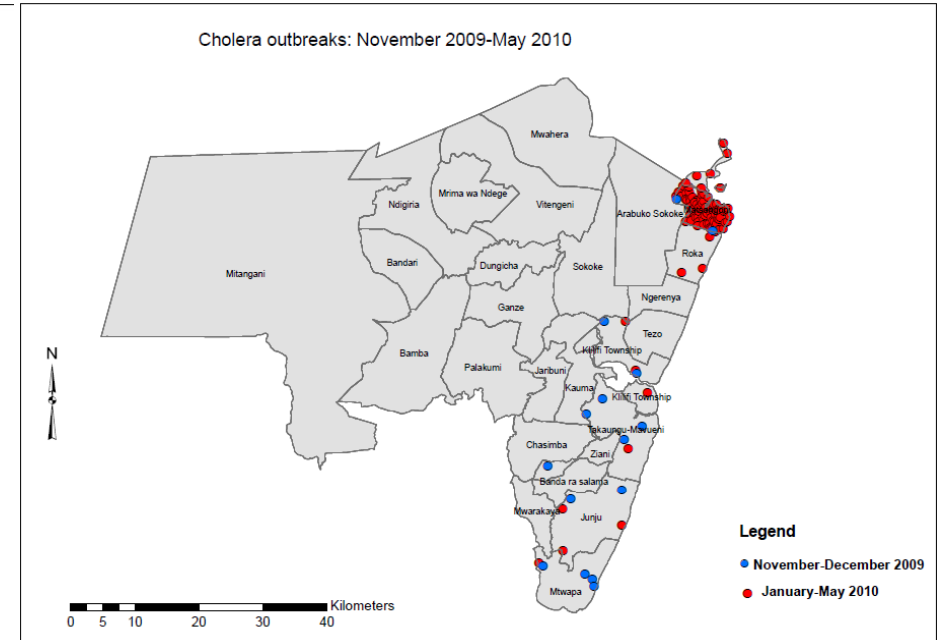


Cholera cases; 2009 & 2010



Note the concentration of cholera cases referred to as cholera hotspot areas

Cholera after the strategy



Absence of cases in the cholera hotspot areas after the strategy



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DISCUSSIONS

- While this strategy worked well in a cholera outbreak situation, can it be successful;
- In an area with the same environmental characteristics where there are no cholera cases, to prevent cholera outbreaks
- Do people from the cholera hotspot areas still practice good hygienic behaviours to prevent cholera, or stopped when cholera was controlled



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STUDY LIMITATIONS

- We did not do a knowledge, attitude and practice assessment
- Stock out of laboratory reagents in the subsequent cholera out break



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CONCLUSION

- No cases were reported in the hotspot areas where the twin strategy was implemented within the same outbreak and in the subsequent outbreak



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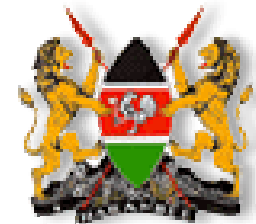


RECOMMENDATIONS

- Our intervention worked well in a HDSS setting suggesting a replicable approach in other epidemic prone areas



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