Future GBS vaccines: Perspectives from pregnant and lactating people, healthcare providers, community members, and policymakers in Kenya

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INTRODUCTION

Maternal vaccination is an important strategy to prevent maternal, neonatal, and infant disease. However, maternal acceptance of vaccination is influenced by many factors. Maternal GBS vaccines are under development. We spoke with various stakeholders in Kenya to characterize attitudes related to forthcoming maternal GBS vaccines.



Figure 1. Study population distribution among Nakuru and Mombasa counties. Note: Surveys were evenly distributed between counties. PLP-pregnant and lactating people; HCP-healthcare providers; PM-poliycmakers, CM- community members

METHODS

This multi-methods study administered surveys to 100 healthcare providers and conducted 50 in-depth interviews with pregnant and lactating people (PLP), community members, healthcare providers (HCPs), and policymakers. Participants were recruited from health facilities in two counties (see Figure 1).

Excerpt read to every participant at the start of the interview: "Group B streptococcus (GBS) is one of the many bacteria that live in the body. In women, GBS most often is found in the vagina and rectum. This means that GBS can pass from a pregnant woman to her fetus during labor. This happens to 1 or 2 babies out of 100 when the mother does not receive treatment with antibiotics (medicines to treat infection) during labor. The chance of a newborn getting sick is much lower when the mother receives treatment. Even though it is rare for a baby to get GBS, it can be very serious when it happens. Babies with GBS may be born too early (premature birth). Babies who get GBS may also be seriously ill, with inflammation of the covering of the brain or spinal cord (meningitis), infection of the lungs (pneumonia), infection in the blood (sepsis), lack of energy, irritability, poor feeding, or high fever. GBS can lead to stillbirth or to death in the first few weeks of life. GBS can also cause serious illness in the mother after she gives birth."

RESULTS

Cross-sectional survey among healthcare providers (n=100)



of HCPs were confident that vaccines recommended during pregnancy are safe for the pregnant person



of HCPs were confident that vaccines recommended during pregnancy are safe for the fetus and baby



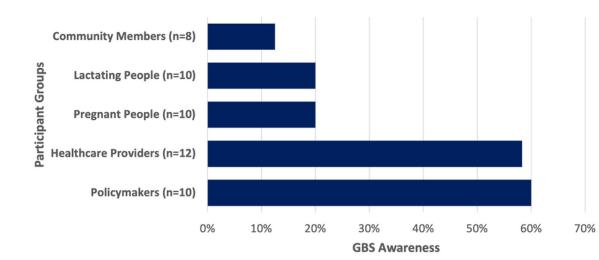
97% of HCPs were likely to recommend a GBS vaccine if recommended by the Ministry of Health



of HCPs were likely to recommended a GBS vaccine if recommended by the head doctor at their facility

In-depth interviews among PLP, community members, HCPs, and policymakers (n=50)

After listening to the description of GBS, participants were asked if they had heard of the disease. Healthcare providers and policymakers had higher awareness compared to community members, pregnant people, and community members.



GBS Disease Knowledge

"We learned it in medical school but when we come here we forget about it...We concentrate on the five big killers." Healthcare provider,

Mombasa

GBS Testing and Treatment

"We are not able to actually diagnose it.
We don't have a laboratory way of
diagnosing it." **Healthcare provider**, **Nakuru**

GBS Vaccine Acceptability

"Some people will say that vaccine is not good, it will cause babies to die so because of that there will be a lot of concerns about that new vaccine. I am ready because it may help us to give birth well and also our babies not to be infected with diseases."

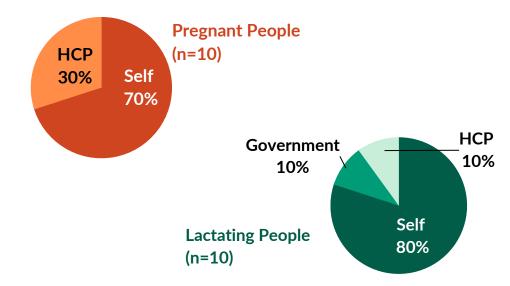
Lactating person, Mombasa

Top 5 Questions about GBS Vaccine from Participants from PLP, HCP, PM, CM

- 1 What are the side effects of the GBS vaccine?
- What are the benefits of the GBS vaccine?
- 3 How does the GBS vaccine work, for the mother and baby?
- 4 Who will receive the GBS vaccine, and when?
- 5 How effective is the GBS vaccine?

Vaccine Decision-Making Influences

Participants were asked who they believe should be in charge of making the decision for a pregnant woman to receive a GBS vaccine:



LIMITATIONS

Findings were dependent on cross-sectional design and are not generalizable. Social desirability bias may have impacted interview results

CONCLUSIONS

- GBS knowledge and awareness are low among pregnant and lactating people and community members
- Even without knowledge about GBS disease or GBS maternal vaccines, pregnant and lactating people are willing to accept GBS vaccines if safe and effective
- Pregnant and lactating people value autonomy and would like to make decisions for themselves and their babies
- We are at an opportune moment to build demand for future maternal GBS vaccines through community sensitization, engagement with health care providers, and advocacy with policymakers

