

Final Report - Maternal antenatal screening for Group B Streptococcus

Description of activities

During the period September 2018 to February 2019 we engaged midwifery staff and pregnant women at Mulago hospital, to understand the acceptability and uptake of Group B Streptococcus (GBS) screening by rectovaginal swabs in pregnancy to prevent neonatal GBS disease and whether it is acceptable to take cord blood at delivery and infant blood if the infant becomes unwell. We initially invited users of Kawempe Hospital (including family members of pregnant women and community leaders) to a public meeting to introduce the study and give some initial information about it. This was followed by focus groups with healthcare workers, pregnant women and community leaders we also sought to understand if a woman and her family would accept a minimally invasive autopsy if her infant was stillborn or if the infant died from infection so that we could better understand the causes. We followed up these focus groups with key informant interviews to understand in depth views on swabbing, cord blood collection and minimally invasive autopsy. In addition, we asked five women to provide biographies of their journey through antenatal clinic including the information they received from their midwives regarding tetanus vaccination and their feelings about vaccination itself and barriers to uptake of the tetanus vaccine. We also asked two midwives to complete biographies of their experiences of providing information to pregnant women about the tetanus vaccine and potential barriers to offering the vaccination.

All focus groups and key informant interviews were tape recorded for later transcription. We were unable to engage the dance troupe due to conflicting schedules.

Outcomes, deliverables and impact

1. Community meeting

The initial community meeting was attended by 120 members of the community, pregnant women, their families, local leaders and hospital staff. There was general agreement that more needed to be done to protect pregnant women against infection but there was a general fear about safety of interventions and a small amount of distrust of hospital staff. Volunteers from the meeting consented to join the focus groups.

2. Focus Groups and Key Informant interviews

a) Pregnant women

Four focus groups and five key informant interviews were undertaken with pregnant women, each with 8 participants:

- Young mothers below 21yr.
- Low education levels, lower than P.7.
- Educated beyond P.7.
- Mixed group of all ages and levels of education.

i) Engagement with antenatal services

Women presented to antenatal care from as early as one month to as late as 7 months. The majority presented at 5 months of later. For some women they did not perceive the need to attend unless there was a problem.

“I had no problem and I didn’t have HIV so I just came towards delivery time”

ii) Antenatal testing

Many of the women interviewed demonstrated good knowledge of the services available during antenatal clinic. Most were aware of testing for HIV, hypertension and tetanus vaccination. Some women mentioned malaria treatment and testing for gestational diabetes, syphilis and cervical cancer. Women with education below P7 did not know about specific infections in pregnancy.

“They gave me tetanus injection and they checked for other diseases”

Inter: “Which diseases?”

“For me at first they checked for blood sugar, HIV and pressure”

iii) Decision-making in pregnancy

Women consulted a range of sources to assist with decision-making in pregnancy. The most frequent source was their husband, however relatives, healthcare workers and community elders were also prominent. Some women were autonomous decision makers.

“My husband and my neighbor because she is an elder who has ever given birth. If anything happens she can tell me to go and consult the health worker”

iv) Perceptions regarding immunization

The majority of women had accepted tetanus vaccination during pregnancy. Perceptions about a new vaccine were mixed. Some women would accept a new vaccine.

“I would want it because I would be protecting my baby against those bacteria.”

However, others were more cautious about accepting a new vaccine.

“I would want it, but it is not easy to accept , it is not easy to just accept”

“I would want but I stay questioning in my heart, now if my child gets a problem because the vaccine is just being tried, what if my child gets a problem because of that vaccine.”

Some were influenced by reports of children negatively affected by immunisation in Uganda.

“There was something that happened some years back when they immunized children and got problems, most of them died.”

v) Knowledge of GBS

There was no knowledge of Group B Streptococcus in any group. After describing the disease, most women felt that treatment would be a good option. One woman likened GBS to the Guerilla leader Koni.

“the problem is not far across the road but already in the house”

All women were willing to be tested but the majority would prefer swabs taken by male midwives. When probed further this was because male midwives were thought to be kinder than female midwives.

b) Healthcare workers

Two focus groups and four key informant interviews were undertaken with healthcare workers.

i) Understanding of vaccines

There was a good understanding of the tetanus vaccine.

“we give tetanus to protect the baby”

ii) Barriers to providing information and vaccines

The lack of staff in the antenatal clinic were cited as the most common reasons for not providing information on the vaccines. Midwives felt that women would probably get information from their families and were afraid of litigation if they gave the wrong advice. Frequent stockouts of the vaccine were also highlighted by all staff. This co-incided with the restructuring of the hospital and move to independence from Mulago and the subsequent withdrawal of government staff from the labour wards and the vaccine centre meaning that both staff and supplies were in short supply. Both factors were highlighted in the midwife biographies.

iii) Ideas to give more information

In the key informant interviews, midwives suggested using the televisions in the waiting areas to provide health information. They also suggested posters with pictures of babies with neonatal tetanus to remind women what happens if you are not vaccinated.

“Women wait long time here, the TV has adverts, why not vaccine adverts”

iv) Knowledge of GBS

None of the midwives knew about GBS. When told about the disease, midwives felt that a vaccine should be given as soon as possible.

c) Community leaders

We held one focus group for community leaders, fathers and other members of the public. The group had 9 members.

The focus group discussed vaccination and several members were hesitant about vaccination in pregnancy. This was mainly due to fear of death of the mother, stillbirths or miscarriage or lameness in the infant.

“my cousin’s child is lame. All was fine but then the mother got the shot (of tetanus vaccine) and gave birth to the boy. His legs do not work”.

When asked what would make vaccine uptake more likely it was felt that information from healthcare workers and teachers would be most useful. At the same time, there was some mistrust of healthcare workers expressed.

'Health workers must be answerable in case of any harm''

Deliverables

1. We will develop a webpage on the Imperial Centre for International Child Health site that highlights research findings of importance

– a webpage has been set up at St. George's University of London as Dr. Le Doare has now moved to St. George's. <https://www.sgul.ac.uk/igbs>

The study findings will be published on the site when complete.

2. We will develop and make freely available tools for use in low literacy populations to investigate public perceptions of vaccination following the focus groups and patient biographies.

- We have developed several posters on vaccination, meningitis and lumbar puncture with the feedback from these groups.

3. We will develop an independently evaluated report of the programme results that will be available on the Imperial Centre for International Child Health webpage

- The final report will be available on the website above.

Impact

Following on from the initial work we have now developed a community advisory group who are helping to develop community sensitization for our current and proposed future vaccine work. The initial results were presented to Dr. Richard Okwi at the Ugandan Department of Health Centre for Public Communications and he is keen for us to progress testing a short film and further posters which are the subject of a follow on funding application.

Ideas for improvement for future projects

We would wish to have held more focus groups but time and resources were too limited.

We plan to engage a full time social scientist to work on this project in the future.

Actual expenditure: £4785.00