REPORT ON

REDUCING BIRTH RELATED NEUROLOGICAL COMPLICATIONS IN MCHINJI

FOR

SKILLED BIRTH ATTENDANTS AND CLINICIANS

8TH APRIL 2024 TO 26 JULY 2024 And Monitoring April 2024 to

FUNDED BY: SONOM

Foundation supporting neurology teaching in Malawi

Reported by: Geoffrey Malizani and

Elias Kantepa

INTRODUCTION

Through support from Foundation Supporting Neurology Teaching in Malawi (SONOM) a team from Safe motherhood program and Mchinji Neural coordinator conducted a training for Skilled Birth Attendants (SBAs) in from Mchinji. The aim of the training was to equip the skilled birth attendants with knowledge, skills and attitudes necessary for reducing number of babies born with birth neurological conditions.

TRAINING OBJECTIVES

Broad objective

To contributed towards the reduction of babies born with neurological complications that come with pregnancy, labor and delivery.

Specific objectives

- 1. To impart skilled birth attendants with knowledge on neurological conditions such as HIE, CP and neural tube defects.
- 2. To teach and refresh skilled birth attendants on identification and management of complicated labor, basic resuscitation there by reducing birth asphyxias.
- 3. To present to the skilled birth attendants with evidence based studies on the management of complicated labor.
- 4. Teach nurse/midwives from antenatal department on the importance of Folic acid in the prevention of neural tube defects.

TEACHING METHODOLOGY

To effectively impart knowledge and skills to the participants, the following teaching and learning methods were utilized:

- a) Lecture
- b) Discussions
- c) LCD presentations

THE TRAINING

The training was conducted in 13 Health facilities around Mchinji District including Mchinji District Hospital and Health Centers from 8th May 2024 to 26 July 2024. The Health facilities are listed in **appendix 2**. The participants included nurse/midwives and clinical officers selected from various departments, namely the antenatal and labor ward. The total number of participants was 116 included nurses and clinical officers. On teaching day we were two facilitators and one logistics personnel/ driver.

Mr. Geofrey Malizani, the district coordinator for the aforementioned organization, officially inaugurated the trainings. During the address, I emphasized the necessity of employing different interventions in the antenatal and labor ward aimed at reducing preventable newborn neurologic complications that comes with low standards of managing pregnancy, labor and actual delivery. I also highlighted data from several facilities within the district where neurological conditions were recorded mainly Cerebral Palsy.

Mr. Elias Kantepa, the district's Safe Motherhood Coordinator, delivered presentations on the Maternal and Neonatal Health (MNH) situation in Malawi, where he pointed out the persistently high rates of neonatal morbidity and mortality. He also presented the

national trend illustrating the performance of the country and the district since 2000 mainly on birth neurological complications like Hypoxic Ischemic Encephalopathy. It was emphasized that by enhancing knowledge, skills, and attitudes towards maternal and neonatal healthcare, it is possible to reduce preventable neurological conditions.

TRAINING SCHEDULE

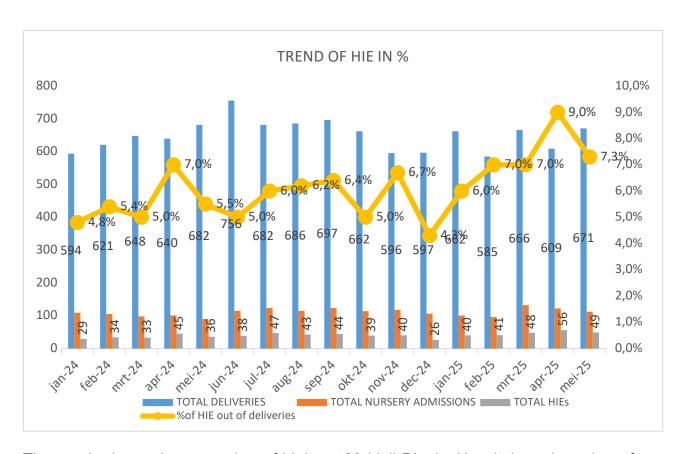
We designed that we should be having 1-day session at each health facility but as for Mchinji District hospital we did 2day as participants were more than anticipated. A total of 13 facilities were visited. The training was designed to include both theoretical and practical sessions. The theory sessions involved micro-teaching, where facilitators presented topics followed by participant questions and comments.

TEACHING DAY

Started with an opening prayer, followed by a review of the meeting objectives and the agenda. Mr. Elias Kantepa delivered a presentation on obstructed labor, emphasizing its potential to cause fetal distress and other complications, ultimately contributing to HIE and cerebral palsy in neonates affected by birth asphyxia. He also presented on hypertensive disorders during pregnancy, highlighting how such conditions can lead to neonatal complications, including fetal distress there after cerebral palsy, which are associated with Hypoxic Ischemic Encephalopathy (HIE).

Mr. Geoffrey Malizani conducted three presentations. The first focused on Hypoxic Ischemic Encephalopathy, Cerebral Palsy (CP) and Neuro tube defects. Throughout the presentations, 10-minute breaks were observed, and refreshments were served. Participants engaged in discussions and were asked questions regarding the best management practices for obstetric complications that can result in the aforementioned neurologic complications.

The teaching was concluded with remarks from the facilitators, who urged the participants to strive diligently in preventing and effectively managing complications that can lead to neural complications in abnormal labor.



The graph above shows number of births at Mchinji District Hospital, total number of admissions and percentage of children with birth asphyxia and HIE.

After conducting the teaching sessions in all the facilities we monitored trend of the occurrence of births and number of HIE. Health centers were doing their best in referring complicated cases of labor but we noted that at district level, department of obstetrics we are not doing our best in managing complicated labor because of attitude issues and inadequate capacity in managing complicated labor. When we started the project incidence compared to number of deliveries was 4.8% and 5.4% by time we ended the percentage has even increased. Though this is so, we are still engaging with obstetrics department.

The other part of the project was reducing children born with neurologic defect through teaching staff on etiology of neuro-tube defects and the importance of folic acid. Almost 100% of targeted number of nurses and clinical officers from health centers were trained combined with HIE topics but we noted that during this time folic acid was not available from government hospitals for mothers who want to become pregnant and during the rest of pregnancy. The incidences remained constant.

Teaching student and intern clinicians during afternoon classes went on well, 36 students and interns were trained in various topics on different topics and different days as ongoing activity until now.

STRENGTHS DURING TEACHING

- 1. Participants appreciated these types of teaching and it was said in most health facilities that it was first of its kind teaching happening in their health facilities.
- 2. Participant were able to reflect their experiences based on what their catchment area meets.
- 3. Instead of 102 participants to be trained, we trained 116 participants, we could not deny the extra participants when they were willing to join.
- 4. All scheduled health facilities were visited except one which does not provide obstetrics.
- 5. Good coordination among facilitators.
- 6. Technical support from district management was good.
- 7. Availability of refreshments.

CHALLENGES

- 1. Some days to find hospital car was being difficult there by cancelling the schedule or visiting the health facilities late in the morning.
- 2. One health facility had no electricity so presentation was not beamed on projector.
- 3. There was clash of activities at one heath facility there by we did not do the teaching, we just turned back and reschedule the visit.

RECOMMENDATIONS

1. Participant asked more of these training to be happening in future as knowledge was updated.

GOING FORWARD.

We will continue with data reviews each month and monitoring the trend of neurological complications of obstetrics for next 6 months and provide feedback to health facilities that are doing well and those that are not doing well.

FINANCIAL REPORT

Total cost of the project 2 635 000

Total budgeted 2 666160

Total given for this project: K3 257 000

For this project minus project 2(students teaching): K2 797 000

Remaining to be used: K175160

From the signing sheet, each participant was allocated K8000 kwacha; K6000 lunch allowance, 2000 kwacha was going towards refreshments.

Below is the summery the expenditures teaching.

ITEM	TOTAL COST SPENT	BUDGETE D	REMAING
Stationary	75000	75000	0
Facilitator allowance	644000	644000	0
102 participants	816000	816000	0
Fuel	428000	435160	7160
logistics/driver	112000	112000	0
data review	48000	72000	24000
Data air time	40000	40000	0
Inter project meeting	144000	144000	144000
Printing posters	128000	128000	0
Facilitator refreshments (miscellaneous)	70000	0	0
Miscellaneous trip collide.	18000	0	0
miscellaneous extra people 14	112000	200000	0
TOTAL	2635000	2666160	175160
Given K3257031.73	For this project K2797000		

Appendix One

TIME TABLE

TITLE OF WORKSHOP

REDUCING NUMBER OF BABIES BORN WITH BIRTH RELATED NEUROLOGICAL COMPLICATIONS

Funded by the Foundation Supporting Neurology Teaching in Malawi (Stichting Ondersteuning Neurologisch Malawi 'SONOM')

Clinical and Midwifery Department.

DATE: 8May 2024 to 26 July 2024

Teaching schedule

reaching schedule			
Time	Activity	Facilitator	
10:00hrs 10:20hrs	Introduction and rationale of the workshop, registration	ALL	
10:20hrs-1140hrs	Obstructed labour and APH	E Kantepa/ Moreen Chisokola	
11:40hrs-12:40hrs	HIE	G Malizani	
Lunch break			
13 40hrs-14:40hrs	Eclampsia	E.Kantepa/Moreen Chisokola	
14:40hrs-15:40hrs	Cerebral palsy	G Malizani	
15:40hrs 16:10hrs	Neural tube defects and importance of folic acid.	G Malizani	

Appendix two

Health facilities visited, number of participants and dates visited.

Treatit Tabilities visited, namber of participants and dates visited.				
NUMBER	HEALTH FACILITY		NUMBER OF	DATE VISITED
			PARTICIPANTS	
1	MCHINJI	DISTRICT	252logistics	8 MAY 2024 AND 9
	HOSPITAL		_	MAY 2024
2	CHIOSYA	HEALTH	5	17MAY 2024
	CENTRE			
3	CHIPUMI	HEALTH	5	30 MAY 2024
	CENTRE			
4	KOCHIRIRA	HEALTH	4	31 MAY 2024
	CENTRE			

5	KAPIRI (OLOMC)	13	5 JUNE 2024
6	KAIGWAZANGA	4	7 JUNE 2024
7	MIKUNDI	6	13 JUNE 2024
8	MKANDA	8	14 JUNE 2024
9	KAPANGA	6	11 JULY 2024
10	MKWAZI HC	7	12 JULY 2024
11	GUILLEME HC	14	19 JULY 2024
12	LUDZI HEALTH CENTRE	12	23 JULY 2024
13	TEMBWE HC	8	26JULY 2024
	TOTAL	116	
		PARTICIPANTS	
		14 OR	
		LOGISTICS	

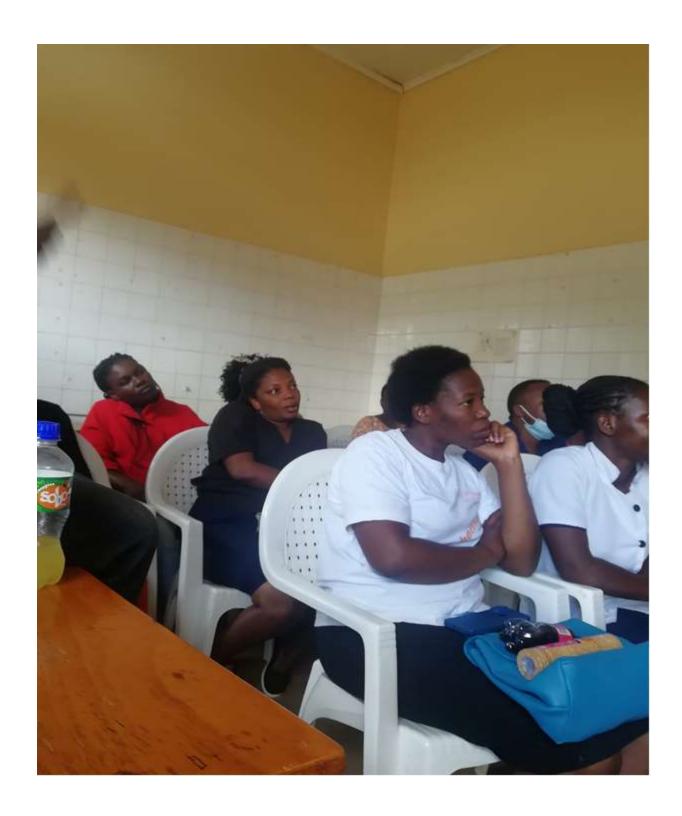
Appendix 3. Updated expenditure all activities

ITEM	TOTAL COST	BUDGETED	REMAING
Stationary	75000	75000	0
Facilitator allowance	644000	644000	0
102 participants	816000	816000	0
fuel	428000	435160	0
logistics/driver	112000	112000	0
data review	65000	72000	0
Data air time	40000	40000	0
Inter project meeting	144000	144000	0
Printing posters	128000	128000	0
facilitator refreshments miscell	70000	0	0
miscellaneous trip collide miscel	18000	0	0
stickers on HIE files for easy identification	10000	0	0
miscellaneous extra ppo 16	112000	200000	0
19/3/2025 audit	12000	0	0
28/3/25 audit	24000	0	0
10/04/2025 audit	22000	0	0
march 2024-march 2025 refreshment for students/interns	420000	0	0
28/04/2025 data review time two	32000	0	0
TOTAL	3172000	2666160	
given for facility based teaching	kwacha 2797000		
from sponsor	2191000		

given for both facilities teaching	Kwacha	85000 kwacha
and student/interns teaching.	3257031.73	

APPENDIX 4

Pictorial view of some of the sessions. Shows pictures of participants listening to the facilitators and the facilitators making their presentations.



Mchinji District Hospital teaching in progress.



Chiosya Heath Centre



Kochirira Health Centre



Kaigwazanga Health Centre



Nkwazi Health Centre



Nkwazi Health Centre



Guilleme Mission Hospital



Ludzi Mission Hospital



Ludzi Mission Hospital



Teaching in Progress at Ludzi Community Mission Hospital.

List of members that attended are attached is a scanned document of signing sheet.

We thank you for all your support.

Yours, Geoffrey Malizani.