



UNIVERSITY of MARYLAND

SAFE MOTHERHOOD NEEDS ASSESSMENT

Chikhwawa District
August 2012

Outline

- Introduction
- Background
- Safe Motherhood Needs Assessment
- Survey Results
- Discussion

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Background

- An assessment of maternal health utilization practices in the Chikhwawa district of Malawi.
- Students utilized the WHO's Safe Motherhood Needs Assessment (SMNA) to survey health care providers, expectant mothers, and delivery records to better understand the delivery and utilization of maternal health care services.

SMNA Survey

- To describe the availability, use and quality of antenatal and delivery care provided to women and newborn babies at all levels within the health care system.¹
- To identify gaps in the provision of this care.¹

Safe Motherhood Needs Assessment



World Health Organization

- SMNA: Safe Motherhood Needs Assessment

SMNA Survey Components

Survey Form		Planned	Planned #	Completed Surveys
DHT	District health team interview	1	1 X 1 = 1	1
FAC	Facility management	12	1 X 12 facilities = 12 surveys	12
NMW	Interview with midwife or maternity nurse	Up to 5 at each facility	5 (max) X 12 facilities = 60 surveys	21
ANC	Antenatal client exit interview	At least 15 at each facility	15 X 12 facilities = 180 surveys	126
ANR	Antenatal record review	At least 15 at each facility	15 X 12 facilities = 180 record reviews	126
DRR	Delivery record review	At least 15 at each facility, but ideally more at the 2 hospitals	15 X 12 facilities = 180 record reviews	442



Delivery Record Review

District Health Team Survey

Facility Management Survey



Antenatal Passport Review

Antenatal Client Exit Interview

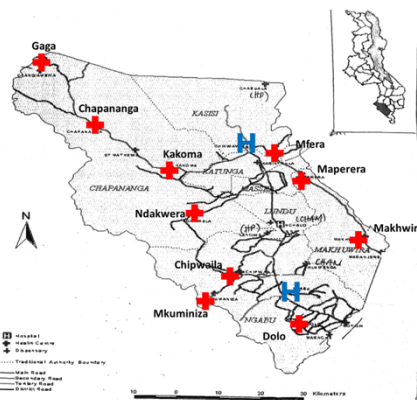


Nurse-Midwife Survey



Survey Population

- 2 Hospitals
 - Chikhwawa
 - Ngabu
- 10 out of 11 health centers that provide maternity services
 - Chapananga
 - Chipwaila
 - Dolo
 - Gaga
 - Kakoma
 - Makhwira
 - Maperera
 - Mfera
 - Mkumaniza
 - Ndakwera
- Note: we only visited government facilities, not CHAM, hospitals and health centres.



Survey Results

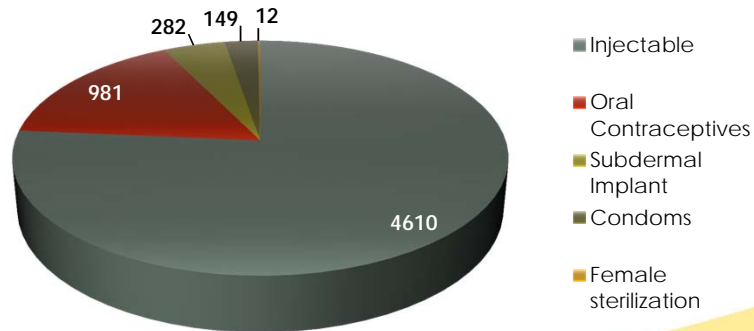
- Family Planning
- Nurse-Midwife Perspectives
- Unsafe Abortion
- Record Keeping
- Antenatal Client Perspectives

Family Planning

A nurse midwife raised her hand and said:
*"I have my implant in here and I am all for
family planning."*

Family Planning

Family Planing Methods Used In The Chikhwawa District
(April-June 2012)



Family Planning

- Family planning was provided over 6,000 times in the course of 3 months (April-June 2012).
- Injectable contraceptives were most popular (76%), followed by oral contraceptives at (16%).
- Impressive family planning educational programs as well



Volunteer at Dolo Health Centre leading songs about Family Planning

Nurse-midwife (NMW) Perspectives: Facility Issues

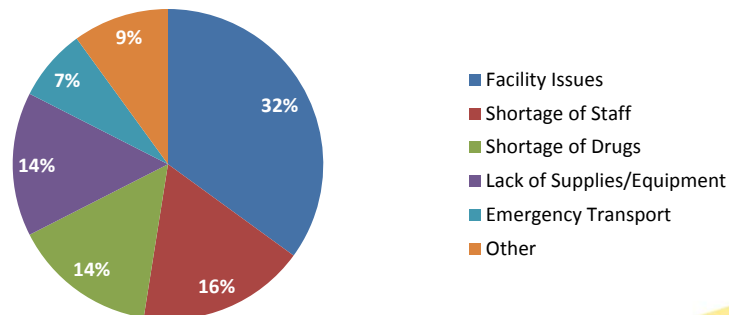
	Chikhwawa	Ngabu	Chapananga	Chipwaila	Dolo	Gaga	Kakoma	Makwira	Maperera	Mfera	Mkumaniza	Ndakwera
Infrastructure & Equipment	Toilet Facilities	Green	Yellow	Green	Yellow	Green	Red	Yellow	Green	Green	Green	Yellow
	Delivery/Labour bed w/ lights	Green	Green	Yellow	Yellow	Red	Green	Green	Red	Green	Yellow	Yellow
	Running water	Yellow	Green	Red	Red	Red	Red	Green	Green	Green	Red	Yellow
	Telephone/Radio	Green	Green	Green	Red	Yellow	Red	Red	Green	Green	Yellow	Yellow
	Ambulance/Emerg.	Green	Green	Green	Red	Red	Yellow	Red	Yellow	Red	Green	Red

■ Available & Satisfactory
 ■ Available but not satisfactory
 ■ Not available

- *Voices from the field:*
 - Poor water supply: One nurse midwife reported being “forced to use the river”
 - Need new water pumps
 - Space: Not enough room for moms who are waiting to deliver and post-natal moms sleep on floor with babies in arms.
 - No running water or electricity: One nurse midwife reported using torches at night because there was no electricity.

Nurse-midwife (NMW) Perspectives

“In your opinion, what are the two greatest problems facing this health facility right now?”



n = 21

*Other includes: training, abortions, and general resources

Nurse-midwife (NMW) Perspectives: Shortage of Staff

- Voices from the field:
 - According to the nurse midwives, attrition is an issue and the district health management team needs strategic ways to retain staff.
 - According to nurse midwives, there should be better housing for employees to help improve morale and encourage others to stay.
 - It is also important to have a diverse group of staff.
 - Nurse midwives would like the Chikhwawa district health management team to find better ways to keep employees local.

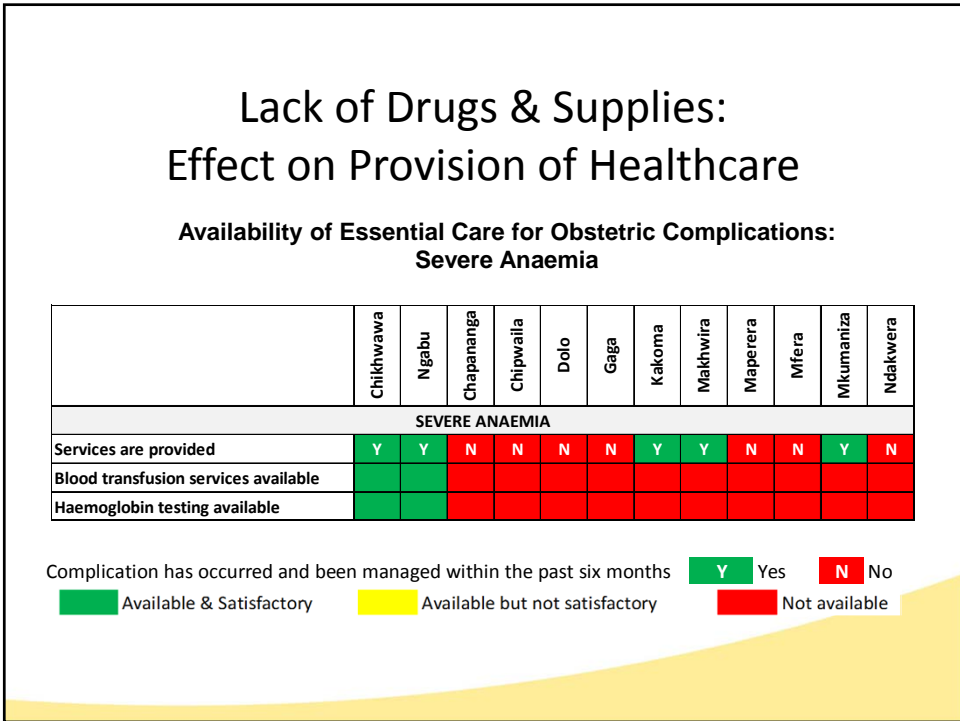
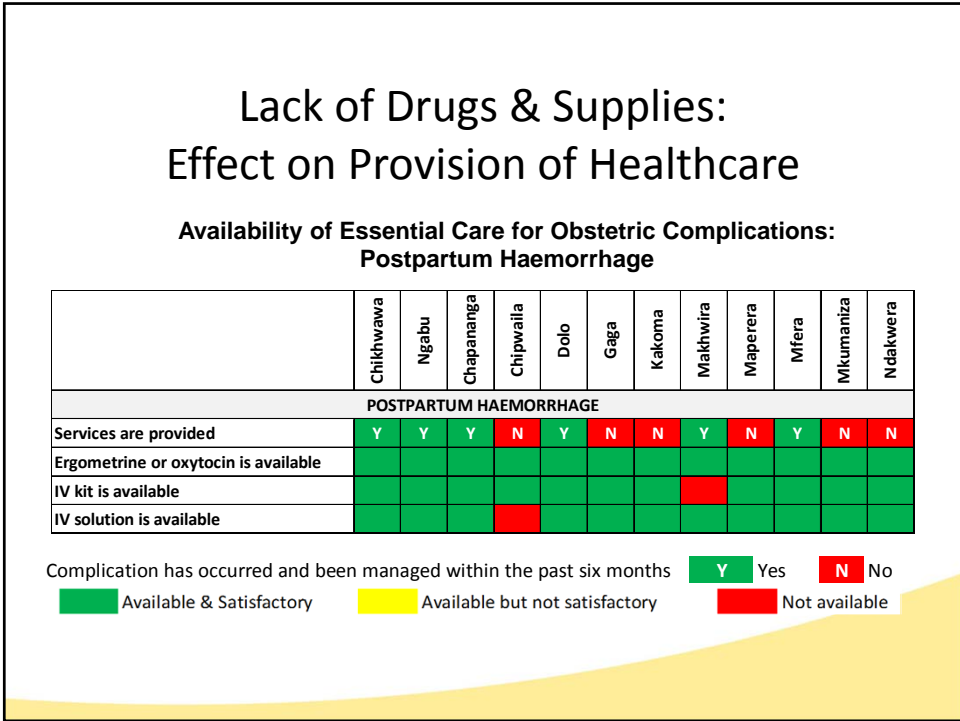
Nurse-midwife (NMW) Perspectives: Lack of Drugs & Supplies

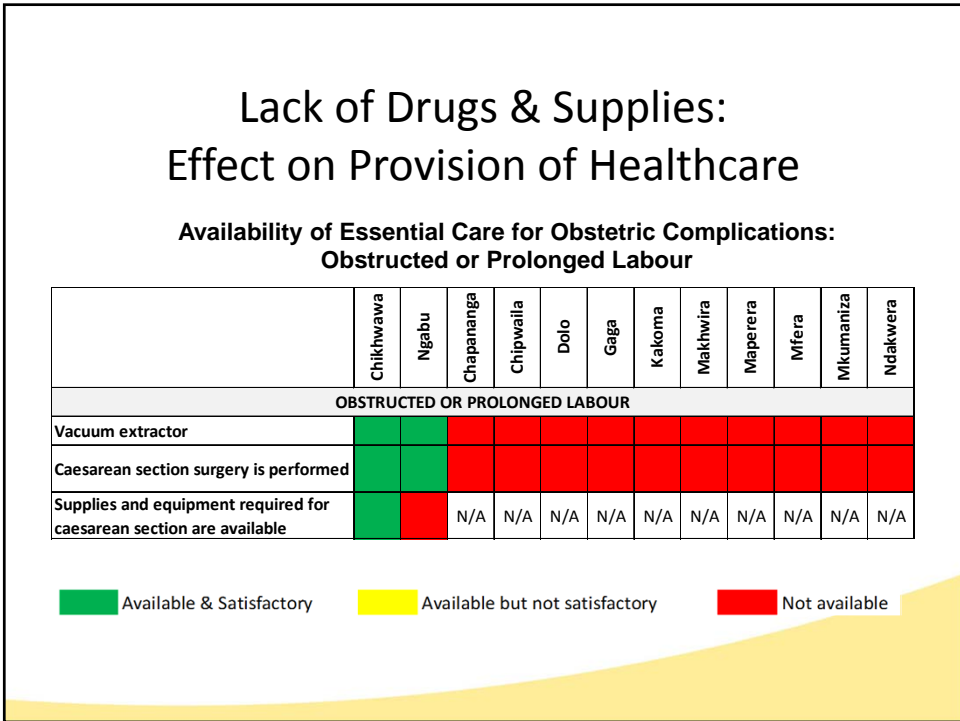
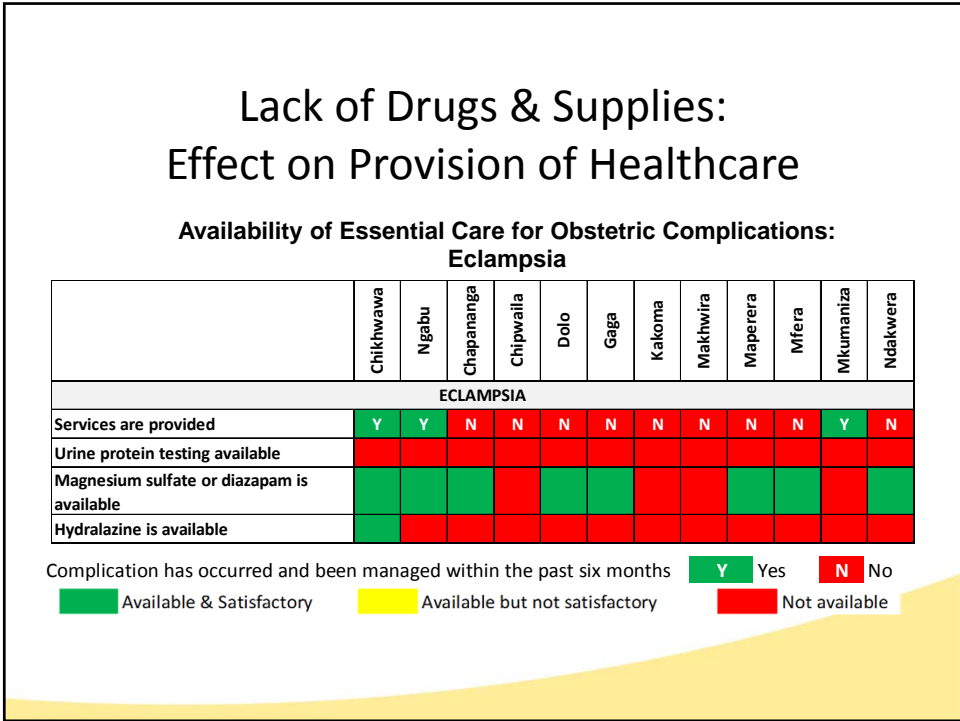
- Voices from the field*
- According to nurse midwives in the district:
 - There should be better procurement methods because they can no longer get private medication.
 - Central medical stores must have adequate supplies.
 - Need an adequate supply of drugs to last.
 - Provide essential equipment regularly.



Pharmacy Students checking out the drug supply room at Chikhwawa District Hospital

*Responses compiled from all nurse-midwives in the district





Lack of Drugs & Supplies: Effect on Provision of Healthcare

Availability of Essential Care for Obstetric Complications: Sepsis

	Chikhwawa	Ngabu	Chapananga	Chipwaila	Dolo	Gaga	Kakoma	Makhwira	Maperera	Mfera	Mikumaniza	Ndakwera
SEPSIS												
Services are provided	Y	Y	N	N	Y	Y	N	N	Y	Y	N	Y
Benzylicillin is available												
Ampicillin is available												

Complication has occurred and been managed within the past six months Y Yes N No
■ Available & Satisfactory ■ Available but not satisfactory ■ Not available

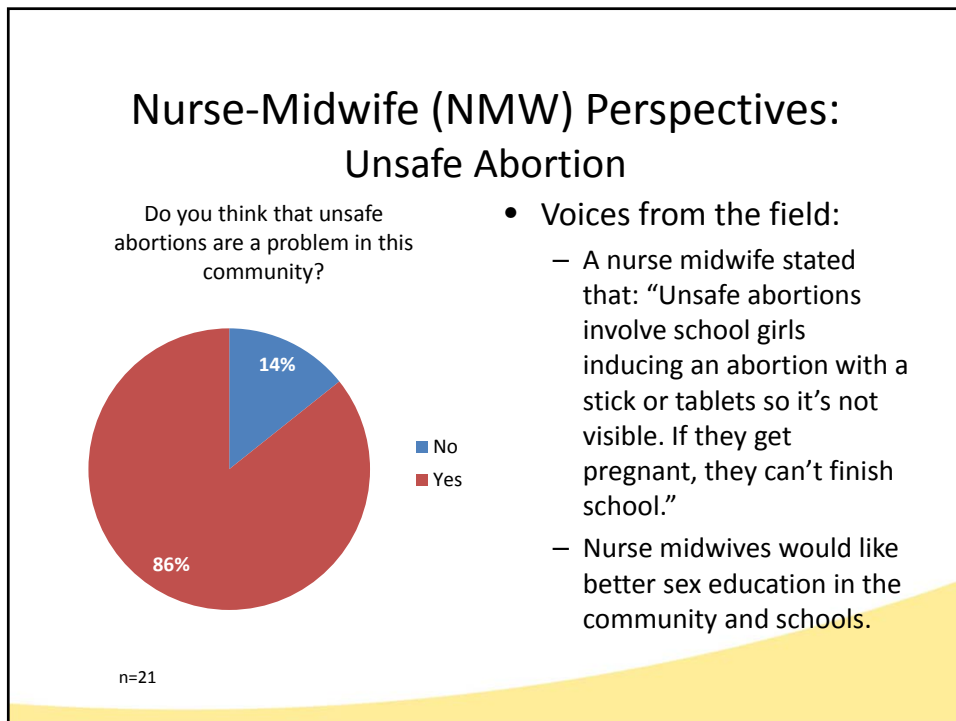
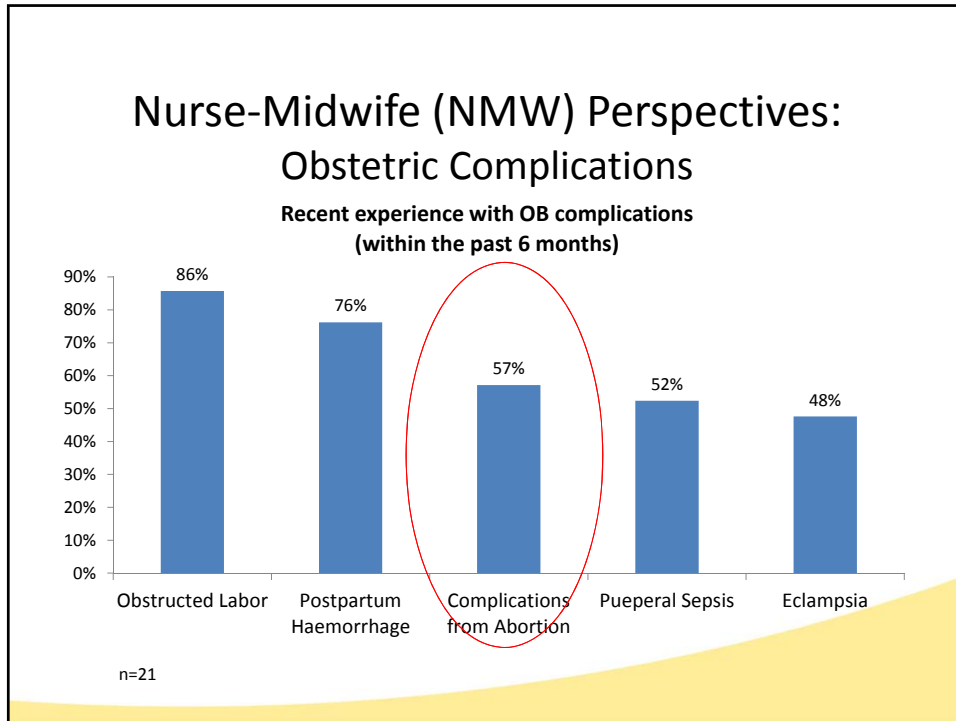
Nurse-Midwife (NMW) Perspectives: Emergency Transport

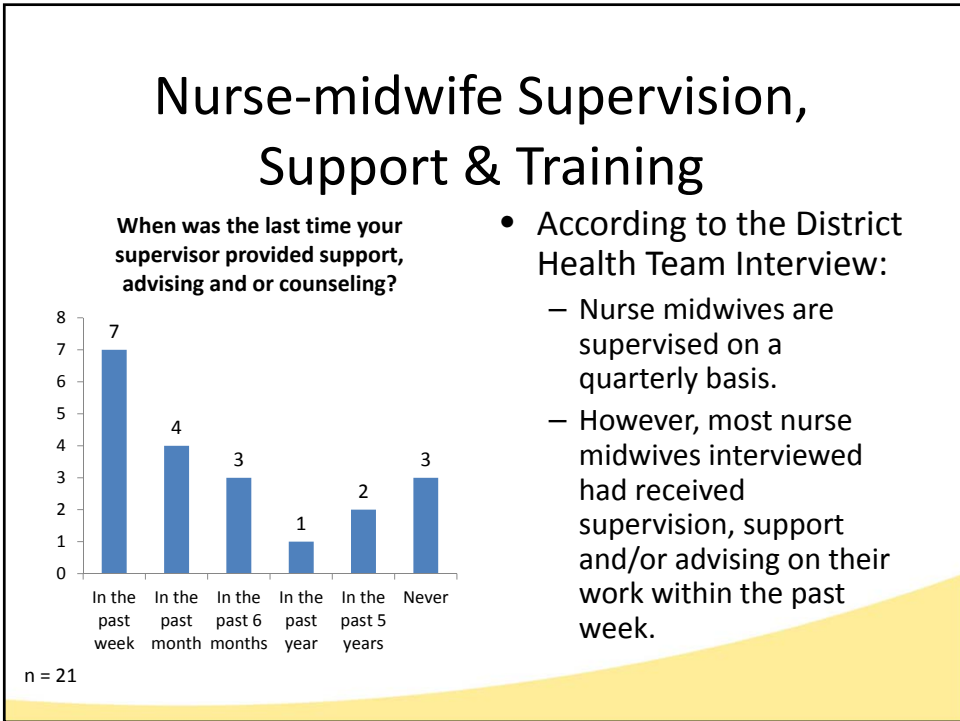
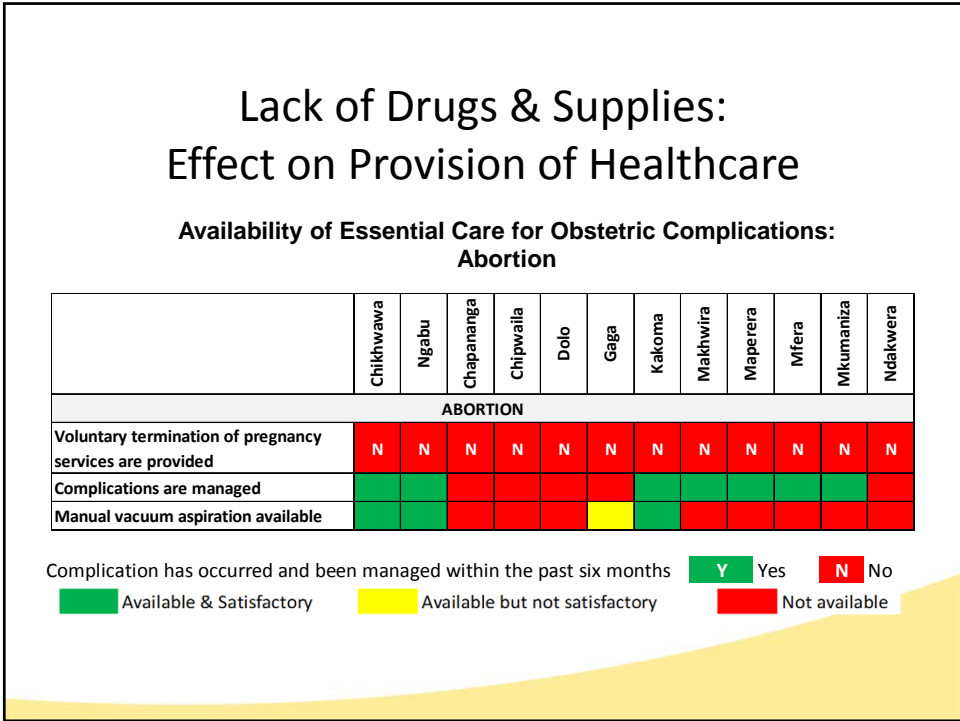


- Voices from the field:
 - Nurse midwives stated that: “It takes too long to refer patients; there is no ambulance”
 - “Need a local ambulance”









Record Keeping

- Antenatal Passport Review
- Delivery Record Review
- Registers Review

Quality of the Antenatal Record (ANR) Review

ANC Services	Chikhwawa	Ngabu	Chapananga	Chiywalia	Gaga	Kakoma	Makhwira	Mapereira	Mtera	Mkumamha	Ndaberwa
Gravida recorded	100%	93%	38%	50%	100%	75%	93%	100%	100%	92%	91%
Parity recorded	71%	93%	88%	50%	100%	67%	93%	89%	50%	92%	82%
Results of a Hb recorded	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Iron/folic acid supplementation recorded	100%	47%	100%	100%	100%	100%	80%	100%	100%	0%	100%
Provision of malaria tx or prophylaxis recorded	64%	100%	100%	88%	83%	92%	73%	100%	100%	92%	100%
HIV status recorded	36%	100%	38%	56%	50%	75%	27%	100%	100%	0%	73%
Results of syphilis test recorded	21%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total Records	14	15	8	16	12	12	15	9	2	12	11

Recorded ≥ 75% of the time
 Recorded < 75% of the time

Delivery Record Review (DRR)

	"Norm"	Chikhwawa District Hospital	Ngabu Rural Hospital	Chapananga	Dolo	Gaga	Kakoma	Makhwira	Maperera	Mfera	Mkumaniza	Ndakwera
Vaginal Exam	Once/4 hrs	85%	79%	71%	73%	100%	90%	67%	87%	100%	100%	57%
Fetal Heart Rate	Hourly	52%	19%	36%	82%	81%	60%	44%	60%	73%	20%	29%
Blood Pressure	Hourly	24%	4%	0%	36%	8%	0%	0%	0%	0%	7%	0%
Birth Weight of Baby	Always	98%	100%	86%	55%	100%	10%	78%	87%	100%	100%	86%
Apgar Recorded	Always	98%	100%	86%	55%	100%	10%	78%	87%	100%	100%	86%
Number of Records		100	210	14	11	36	10	9	15	15	15	7

For columns displaying percentages: # ≥ 75% Recorded # < 75% Recorded

Total n = 442

Note: Chipwaila not included.

Registers Review

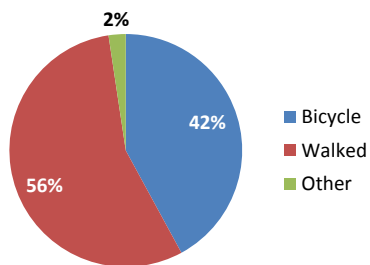
- Registers included
 - Flow charts for maternal care
 - Delivery register
 - Antenatal care register
 - Family planning register
- Nearly all health centres reported that all of the registers were **“Available and satisfactory”**
- From our perspective:
 - We were extremely impressed with all the record keeping, especially since all records are maintained manually and on paper

Antenatal Client (ANC) Perspectives

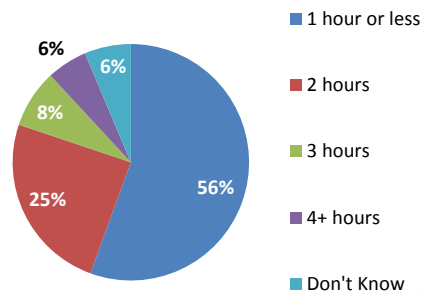
- ANC survey
- ANC vs ANR
- Education

ANC Survey: Transport

Mode of Transportation to Clinic



Time to Reach Facility



n = 126

Timing of First ANC Visit

Time of 1st ANC visit	Chikhwawa	Ngabu	Chapananga	Chipwaila	Gaga	Kakoma	Makhwira	Maperera	Mfera	Mkumaniza	Ndakerwa
< 3 months	1	0	0	0	0	0	0	0	0	0	1
3 - 6 months	13	15	7	13	12	12	11	8	2	11	9
> 6 months	0	0	1	3	0	0	2	0	0	0	1
Don't Know	0	0	0	0	0	0	2	1	0	1	0
Total Records	14	15	8	16	12	12	15	9	2	12	11

n = 126

Note: Dolo not included.

Average Number of ANC visits Per Live Birth in a Health Facility

Number of ANC Visits	SMNA 2012, Chikhwawa District*	Demographic and Health Survey ² 2010, Malawi**
None	-	2%
1	23%	3%
2-3	53%	50%
4+	21%	45%
Don't Know/ Missing	3%	1%

* n = 126

** % distribution of women aged 15-49 who had a live birth 5 years preceding the survey by number of ANC visits for the most recent live birth, n = 13,443

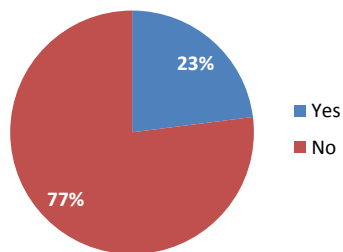
Quality of ANC Visits

During any of your ANC visits, did the staff....	SMNA Survey 2012, Chikhwawa District	Demographic Health Survey ² 2010, Malawi
.... Give iron supplements?	85%	91%
.... Take a blood sample?	71%	82%
... Take a urine sample?	12%	28%
... Give you advice on diet and nutrition?	75%	81%
... Advise you on what to do if there is a problem during your pregnancy?	73%	80%
... Give malaria medicine	88%	-
<i>Total Records</i>	126	13,443

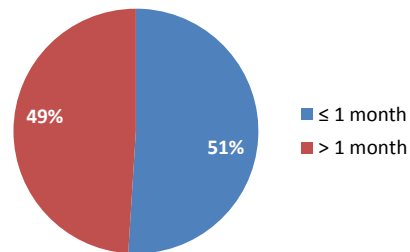
Client vs. Record Data

Client vs. Record Data

Does gestational age in passport match the mother's report of gestational age at the 1st ANC visit?



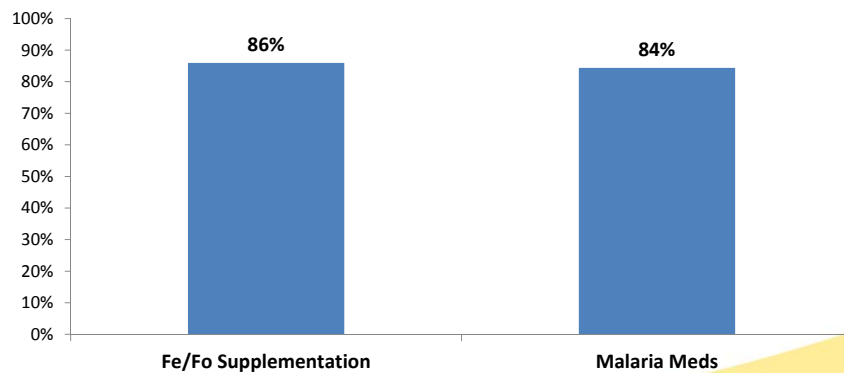
Of the women whose gestational age at first visit did not match, the degree of discrepancy of recorded answers.



n = 126

Client vs. Record Data

% of Congruency between Fe/Fo supplementation and malaria medication provisions



n = 126

Blood Pressure: Client information vs. BP apparatus availability

	# of Women Interviewed	% of patients that believed a blood pressure was taken	Was a blood pressure apparatus available at the time of this interview?
Chikhwawa	14	0%	Yellow
Ngabu	15	20%	Yellow
Chapananga	8	0%	Red
Chipwaila	15	7%	Yellow
Dolo	-	-	Green
Gaga	12	25%	Green
Kakoma	12	0%	Yellow
Makhwira	15	93%	Green
Maperera	9	100%	Green
Mfera	2	0%	Green
Mkumaniza	12	92%	Green
Ndakwera	11	45%	Red

Educational Materials



What We Learned

- Resourcefulness of health centres and hospital staff in the face of frequent shortages
- Exceptional family planning clinics
- Maximizing opportunities for health education
- Strong commitment to accurate record-keeping

Discussion



References

- (1) World Health Organization. (2001). *Safe Motherhood Needs Assessment (Version 1.1)*. Geneva, Switzerland: Department of Reproductive Health and Research.
- (2) National Statistical Office (NSO) and ICF Macro. (2011). *Malawi Demographic and Health Survey 2010*. Zomba, Malawi, Calverton, Maryland, USA: NSO and ICF Macro.

Zikomo Kwambiri!!!