A study to assess the impact of counselling by FLWs for weak newborn in Bahadurpur block, Darbhanga district in Bihar

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Introduction

The Government of India recommends that the presence of any one of the following criteria should identify a neonate at high risk of death:

- Birth before 37 completed weeks of pregnancy.
- Birth weight less than or equal to 2000 grams.
- Baby not feeding strongly from Day-1 of birth.

- Babies born with these characteristics are referred to as the ‘Weak New Born’. Babies who later develop signs of severe infection may be referred to as ‘Sick New Born’.
- Once a baby is identified as preterm/LBW, the concerned ASHA/AWW/ANM can be notified and expected to follow up closely through home visits until the baby starts breastfeeding normally and gain weight at home using provisions of existing HBNC (Home Based New Born care) guidelines for ASHA and ICDS MIS guidelines for AWW.

- **Title**

A study to assess the impact of counselling by FLWs for weak newborn in Bahadurpur, Darbhanga in Bihar

- **Research question**

What is the effect of counselling done by the FLW on the weight of the new weak born?

- **Research Objective**

To measure the impact of counselling done by FLW to increase the weight of the weak new born

N.B-From the Incremental Learning Approach module 8 of Poshan Abhiyan guideline, it is noted that a normal infant of age group 0-3months should gains 200gms weight per week.

Literature Review

- To increase the weight of the infant admitted in intensive care unit by usage of expressed milk. The plan of the study includes counselling of would be mother by showing educational videos and brochures during antenatal care, reminder calls were given to the mothers to follow certain good practices in postnatal period to improve the weight of the infants, kangaroo mother care were given to the infants. The results show that low birth weight infants started expressing more breast milk than before.
- 467 infants were selected on the basic of randomized control trial from an intensive care unit. In one group pre term low birth weight infants were given kangaroo mother care in the time of breast feeding while the other group was consisting of pre term low birth weight infants who were kept on incubator. The result shows that the infants who received kangaroo mother care can initiate breastfeeding more easily and frequently than the infant kept in incubator.

- **Study Area**

The study was conducted in a block of Darbhanga district called Bahadurpur. Darbhanga is a district of northern Bihar. The population of Bahadurpur is 263539.

- **Study Design**

The cross-sectional study was used for assessment of this study. The cross-sectional study is those that takes a subset of the population as the entity of the study. It is an observational study.

- **Interview Method**

Data were collected by interviewing family of the newborns born in the PHC in the month of March. Data was collected from 20 families by visiting them personally and interviewing them from time to time (4 visit for each family and 1 telephonic interview to each family). On the end of the month telephonic call was made to them to interview for the last and final time.

The weight of the newborns was recorded after a month.

Interview Schedule

1st Interview	Second day after infant was discharged from the hospital
2nd Interview	After 5th day baby was discharged from the hospital.
3rd Interview	After a week baby was discharged from the hospital
4th Interview (Telephonic Interview)	After 15days baby was discharged from the hospital
5th Interview	After 30 days infant was discharged from the hospital. Weight of the infant is also recorded.

- **Inclusion criteria**

1. The babies who have birth weight of 2000gms or less.
2. The babies who were born on 37 weeks (preterm babies)
3. The babies who cannot suck breastmilk properly after birth.

- **Exclusion criteria**

1. Newborn who died within 24 hours after delivery.
2. Family who left the block before 30days after delivery.

- **Sample Size**

A sample size of 20 is taken for the study. All newborn born in the month of March in Bahadurpur PHC, who were referred to as weak newborn are taken as a subject for the study, that is, the whole sample was taken as the sample size except those who were excluded in the exclusion criteria.

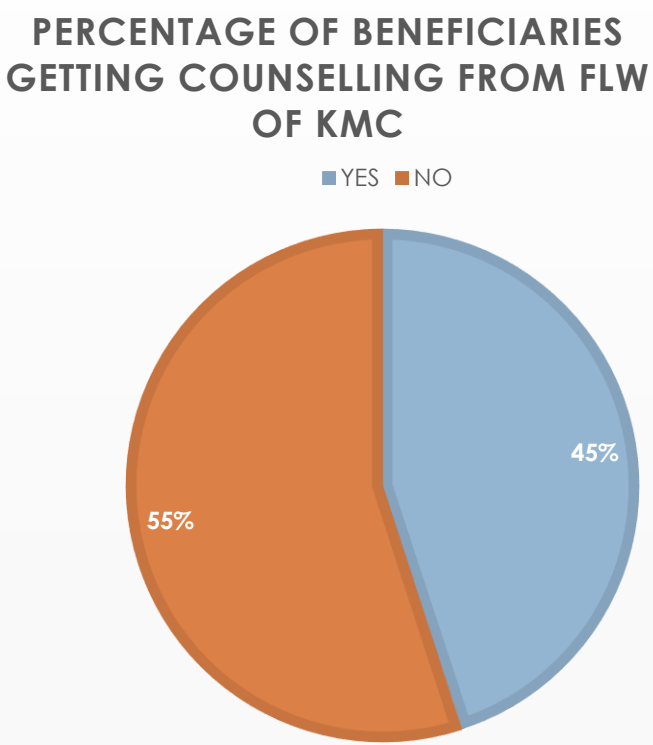
Data Analysis

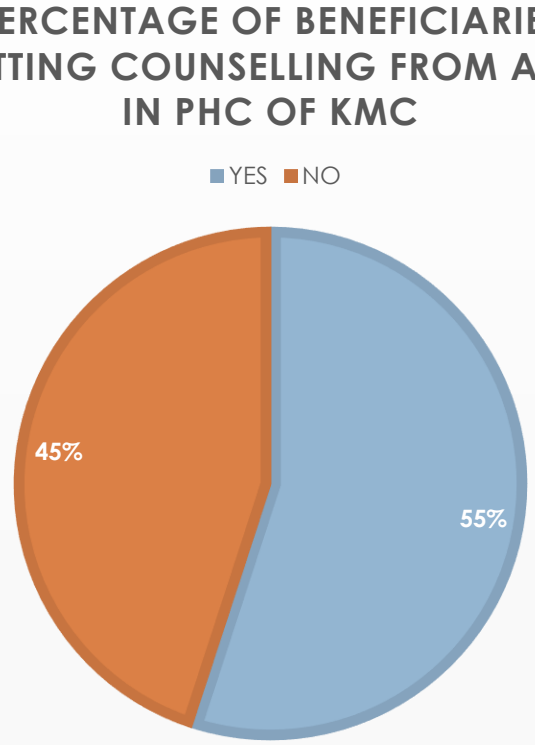
Counselling done by FLW

Total Counselling by FLW in the period of 1month after discharge of the infant	Frequency
5th time	3
4th time	6
3rd time	6
2nd time	1
1st time	4

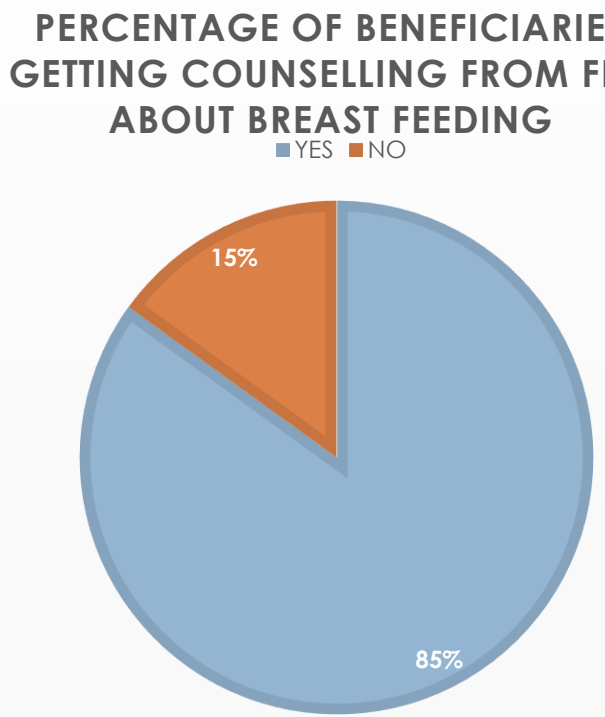
Table :Total number of FLW counselling of family member of WNB in the period of 1month

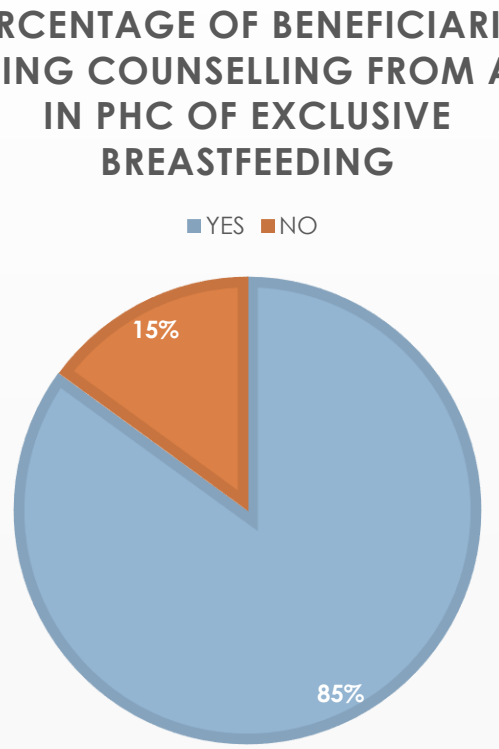
Counselling provided for KMC by FLW and ANM



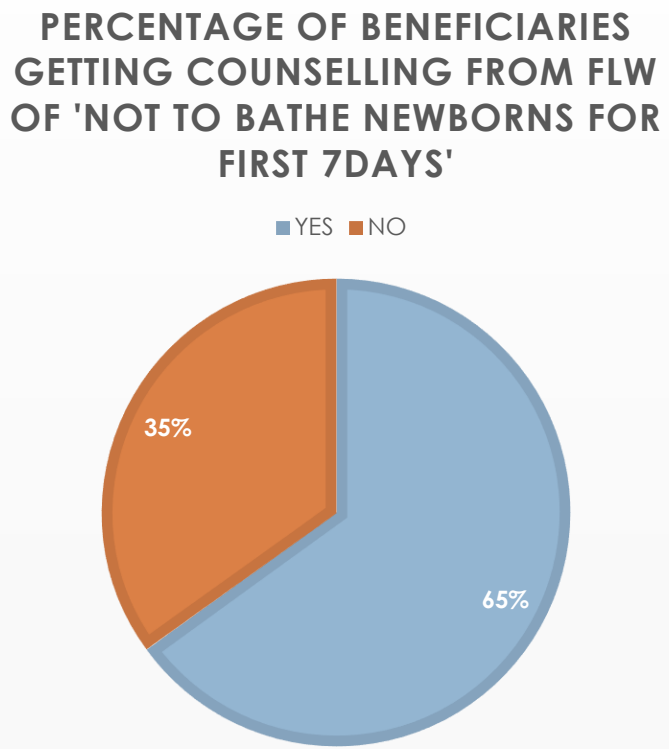


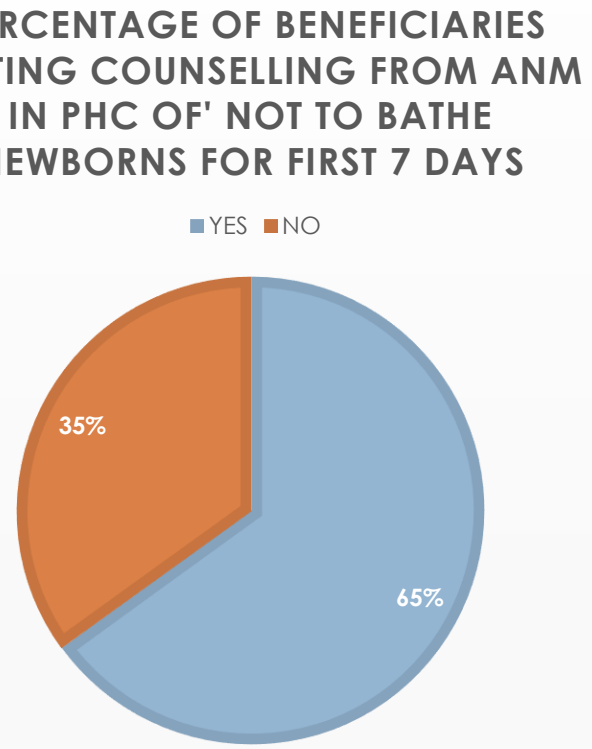
Counselling about breast feeding by FLW and ANM



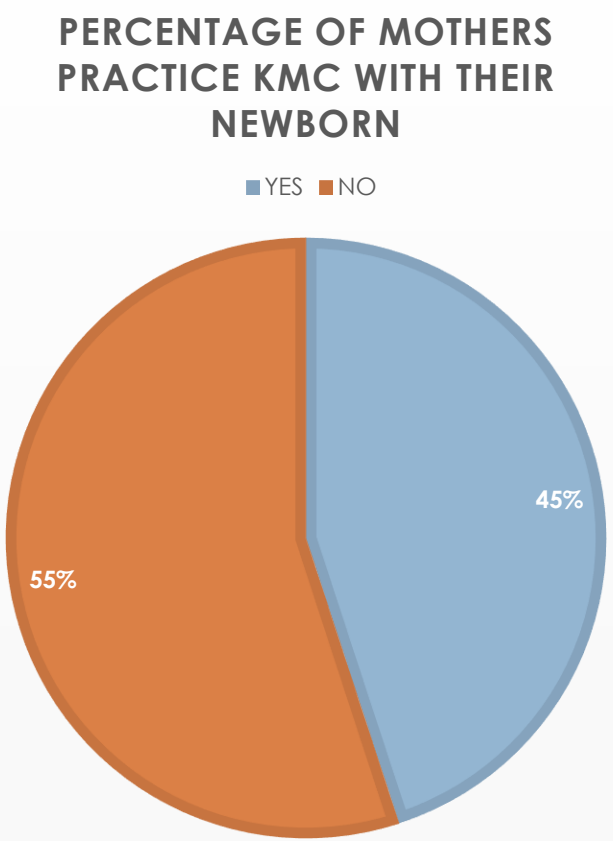


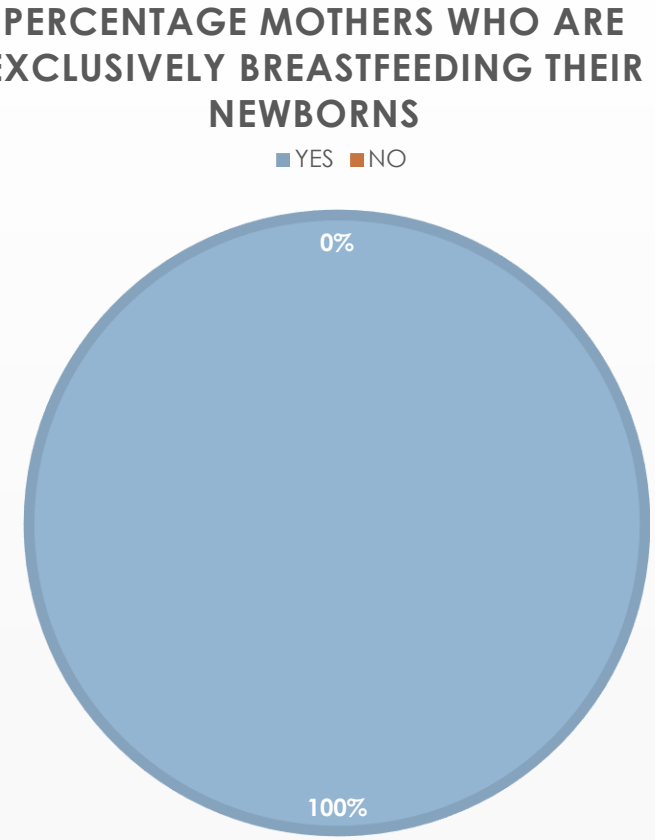
Counselling about ‘not to bathe the infant for first 7 days’ by FLW and ANM





Practices practiced at home





Number of times newborn is breastfed in 24hours	Average Gain in weight(in grams)
10 or more than 10 times	1340.38
less than 10 times	675.83

Table: Gain in weight of WNB with respect to the number of times newborn is breastfed in 24hours.

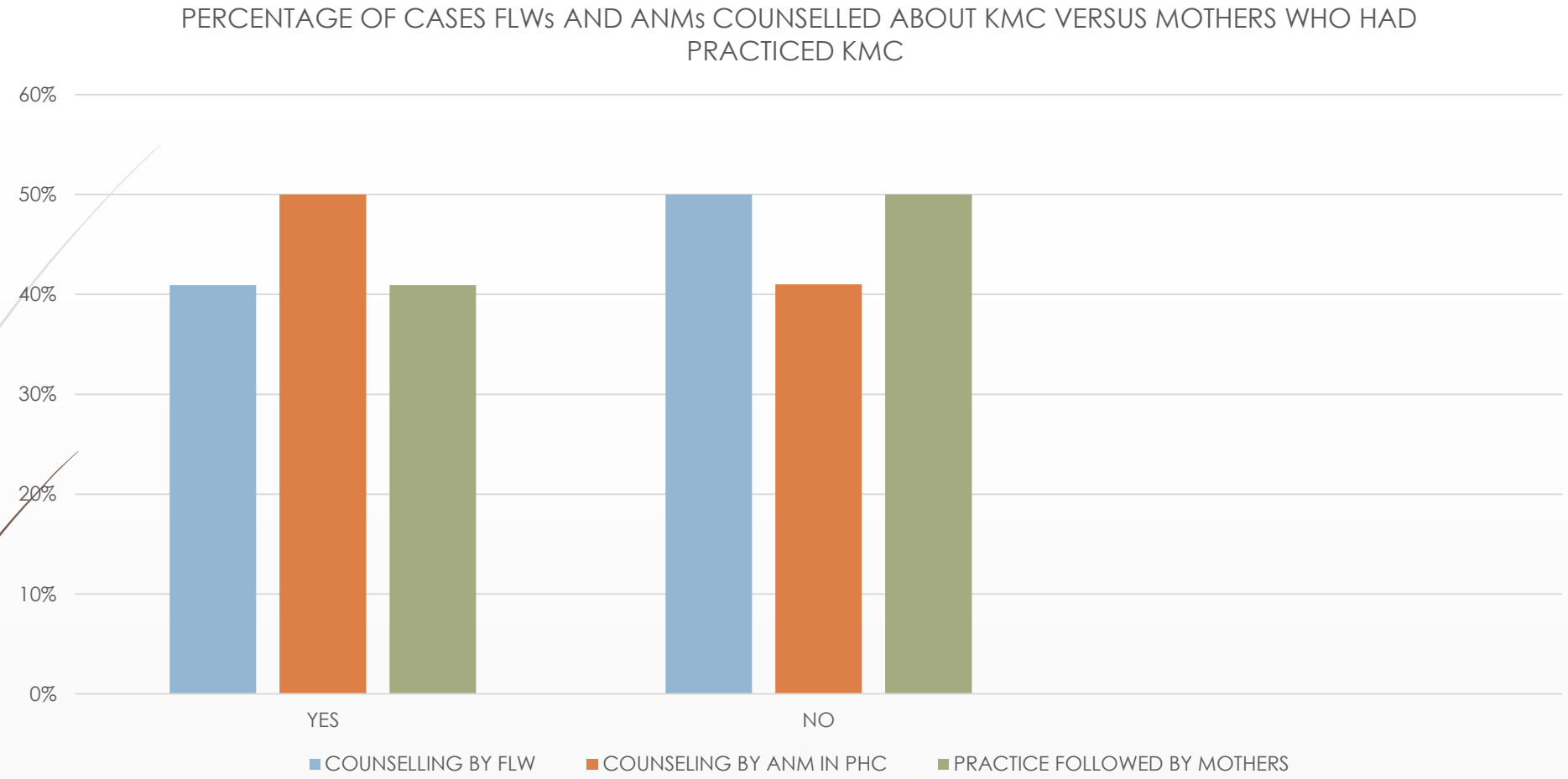
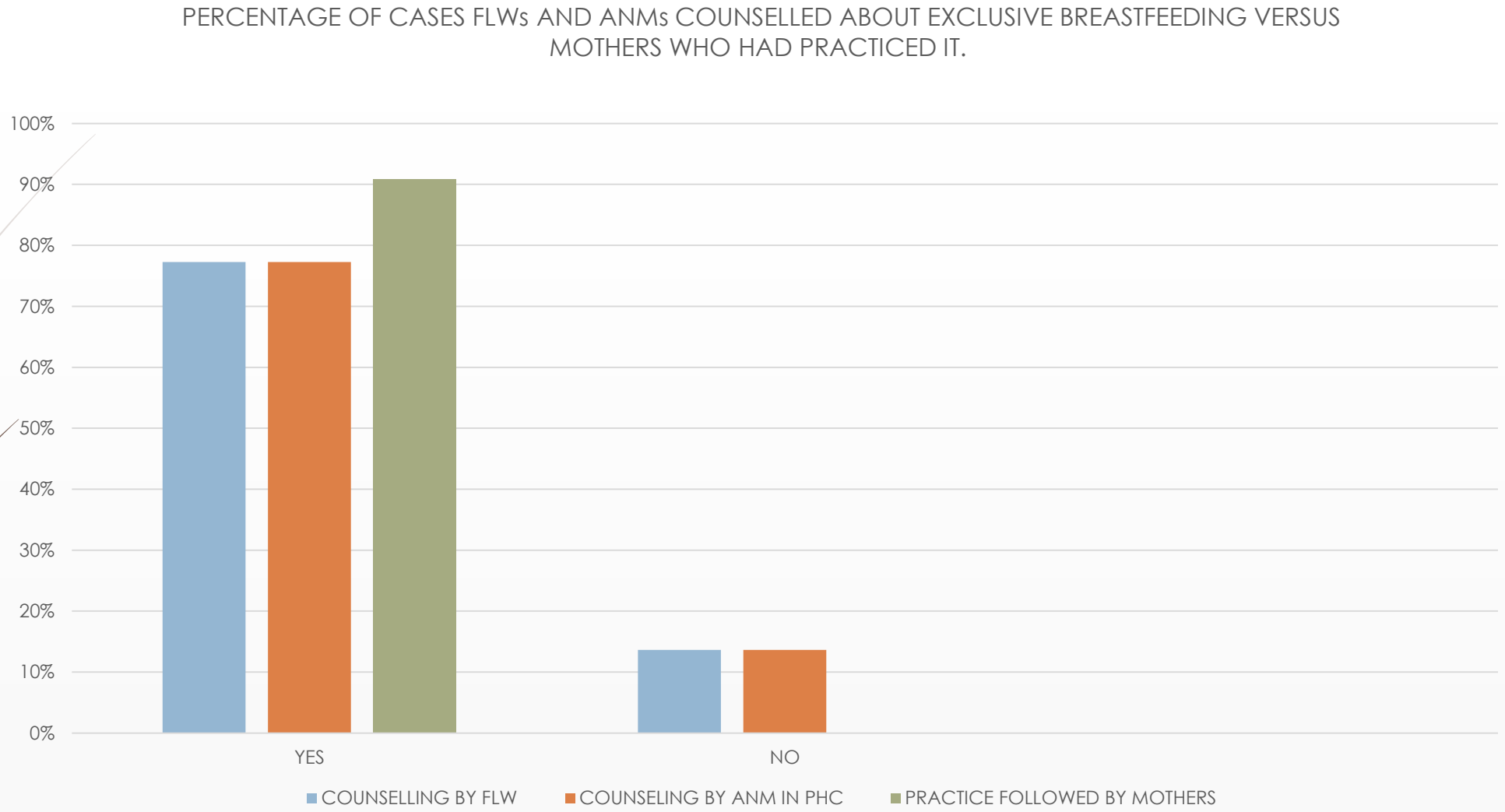


Fig : Data showing percentage of cases FLWs and ANMs counselled about KMC versus mothers who had practiced KMC



Data showing percentage of cases FLWs and ANMs counselled about exclusive breastfeeding versus mothers who had practiced it.

Change in weight of the infant after a month from date of birth

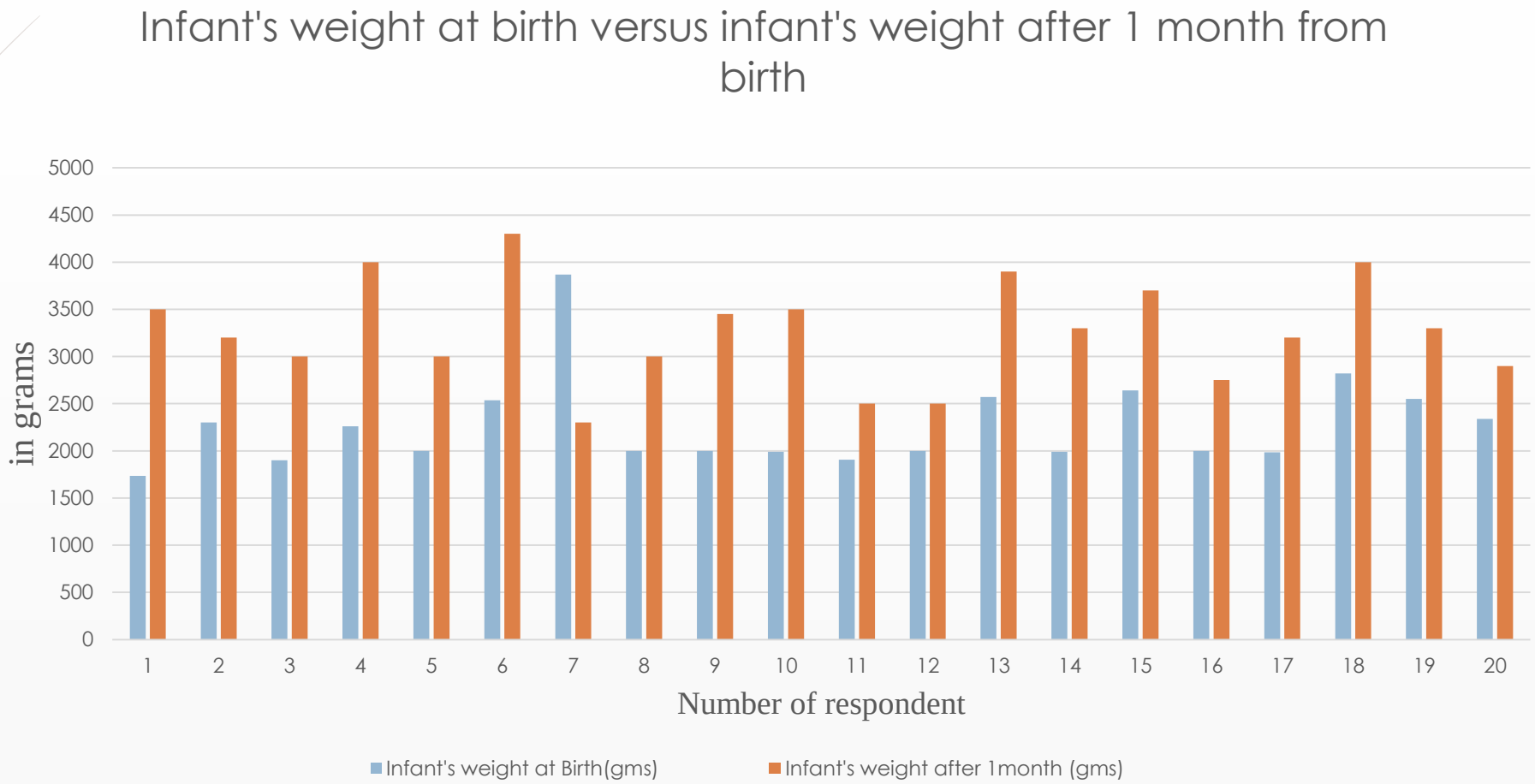


Fig: Infant's weight at birth versus infant's weight after 1 month after birth

Average gain in weight by the WNB in the period of 1month with respect to total counselling by FLW.

Total Counselling by FLW	Average gain in weight of the infant in the period of 1month from the date of birth (in grams)
5th	1151.67
4th	1207.5
3rd	1065.83
2nd	1000
1st	846.25

- **Limitation of the study**

The sample size of the study is limited to one block of Darbhanga, that is, Bahadurpur. Hence generalization of the study to all of the blocks in the Darbhanga is not possible.

- **Conclusion**

FLW is one of the people from the community so their advice is highly regarded by the other people in the community. The study suggests if counselling is given to the beneficiaries in the timely manner by the FLW then the improvement or betterment in the condition of the infants can be noticed.

Very low birth weight infant can lead to morbidity even mortality of the infant. FLW can spread awareness among the family members of the weak newborns about the condition of the newborns. She can also suggest the practices like frequent and exclusive breastfeeding, KMC, cleanliness, etc. to improve the condition of the infant. At least

5 home visits need to be made by the FLW to counsel the beneficiaries about the practices need to be practiced during post-natal care.

- **Recommendation**

To ensure home visits by Anganwadi workers and ASHA for counselling the family members about the intensive care of the newborn.

To ensure counselling of the family of the weak newborn within 24hours after delivery by FLWs

Proper documentation of the weak newborn in the hospital to increase the counselling of the family members by ANM.

Questionnaire

Institution	**Date of Delivery**
	Place of Delivery
	Gender
	Birthweight
	Breastfeed within 1 hour
	Any Prolacta practice was given?
	Weak baby identified at facility & advised for extra care
	Counselling at facility :
	a. KMC
	b. More frequent breast feeding
	c. Not to bathe the newborn for first 7 days

Follow up	**Any FLW visited in last week**
	If yes, counselling about the following was provided?
	a. KMC
	b. More frequent exclusive breast feeding
	c. Not to bathe the newborn for first 7 days
Practice at home	a. KMC
	aa. time (minutes) in 24 hrs.
	b. Exclusive breast feed
	bb. How many times in 24 hrs.
	Is baby Alive? (Yes / No)
	If No, Date of death (or age of death (days))
	Baby weight (recent)
	Date when weight was measured (age (days))

References

- Thakur A e. Impact of Quality Improvement Program on Expressed Breastmilk Usage in Very Low Birth Weight Infants. - PubMed - NCBI [Internet]. Ncbi.nlm.nih.gov. 2019 [cited 7 May 2019]. Available from: https://www.ncbi.nlm.nih.gov/pubmed/30345975
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Thank You