Study on Knowledge and Practices of ASHAs Regarding IYCF in Gir Somnath District of Gujarat

By

Nikita K. Jadhav

Dissertation submitted for the partial fulfillment of the

MBA Hospital and Health Management

Academic year, 2015-2017

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INSTITUTE OF HEALTH
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(WHO Collaborating Centre for District Health System Based on Primary Health Care)

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TO WHOMSOEVER IT MAY CONCERN

This is to certify that Dr. Nikita K Jadhav student of MBA Hospital and Health Management from The IIHMR University, Jaipur has undergone internship training at NHM GUJARAT from 1ST February 2017 to 30TH April 2017.

The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.
The Internship is in fulfillment of the course requirements.

I wish her all success in all her future endeavors.

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The certificate is awarded to **DR. NIKITA K JADHAV**, in recognition of having successfully completed her internship in the department of **HEALTH- DISTRICT PANCHAYAT GIR SOMNATH(NHM – GUJARAT)** and has successfully completed her Project on **Knowledge assessment of ASHAs regarding IYCF practicesin GirSomanth District of Gujarat, from date 01/02/2017 to 30/04/2017 in NHM Gujarat.**

She comes across as a committed, sincere & diligent person who has a strong drive and zeal for learning

We wish her all the best for future endeavors

10/5/17
Dr. B.L. Acharya
Chief District Health Officer
District Panchayat- GirSomnath

THE IIHMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **A study of knowledge and practices of ASHAs on Infant and Young child feeding at Gir Somnath district Gujarat** submitted by **Dr.Nikita K Jadhav** Enrollment No. IIHMR-U/01/2015-17/0310 under the supervision of **Dr. Mohan Lal Bairwa** for the award of MBA in Hospital and Health Management of the University carried out during the period from 6th February 2017to 5th May 2017. This embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Signature

THE IIHMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that all ethical issues have been considered while collecting data for my dissertation titled **A study of knowledge and practices of ASHAs on Infant and Young child feeding at Gir Somnath district Gujarat**

Signature

ACKNOWLEDGEMENT

The training started with a vision in my mind so as to be able to learn about the practical aspects of healthcare delivery system in a more detailed manner. The success of any task would be incomplete without the expression of gratitude to the people who made it possible Hereby, I take this opportunity to express my deep sense of gratitude to all those who have been instrumental in successful completion of my dissertation in District Panchayat Health Branch- Gir Somnath, NHM- Gujarat.

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Dr Nikita K Jadhav

IIHMR, Jaipur

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1) List of abbreviations

NHM: National Health Mission

NRHM: National Rural Health Mission

NUHM: National Urban Health Mission

EBF : Exclusive Breastfeeding

BF: Breastfeeding

IYCF: Infant and young child feeding practices

ASHA: Accredited Social Health Activists

NHM: National Health Mission

NRHM: National Rural Health Mission

EBF: Exclusive Breastfeeding

BF: Breastfeeding

AWW: Anganwadi worker

CDHO: Chief district health officer

MO: medical officer

PHC: primary health centre

SC: sub centre

ICDS: integrated child development scheme

2) Introduction

The ideal baby and youthful type nourishing works on amid the initial 2 years of life is of foremost significance as this period is the "basic window" for the advancement of wellbeing, great development, behavioural and subjective improvement. Ideal baby and youthful youngster nourishing practices incorporate start of bosom encouraging inside 1 hour of birth, elite bosom sustaining for the initial 6 months, and continuation of bosom bolstering for a long time or more, alongside healthfully sufficient, safe, age fitting, responsive reciprocal sustaining beginning at 6 months(1)

It has been set up that as a result of the best bioavailable iron in bosom drain, selective bosom bolstering anticipates frailty and diseases especially the diarrheal contaminations in the kid. The need of presenting grain based nourishments in the eating routine of newborn child after the age of 6 months can be connected with the way that catalyst amylase shows up in the seventh month of the infant.(3)

The mother's hazard for abundance baby blues draining is diminished if bosom encouraging is started early, which thus brings down the hazard for paleness. Restrictive bosom nourishing postponements next pregnancy, lifts mother's resistance and decreases the insulin needs of diabetic moms. Bosom encouraging additionally gives security from bosom and ovarian growths and osteoporosis.(4)

Roughly, 1.4 million passings of kids less than 5 years old years worldwide can be credited to imperfect bosom nourishing. In light of confirmation of the adequacy of mediations, accomplishment of general scope of ideal breastfeeding could avoid 13% of passings happening in youngsters under 5 years old globally.(17) While suitable correlative encouraging practices would bring about an extra 6% lessening in less than five mortality(2).

Early nourishing shortages are likewise connected to long haul weakness in development and wellbeing. Lack of healthy sustenance amid the initial 2 years of life causes hindering, prompting the grown-up being a few centimeters shorter than his or her potential tallness (11). There is proof that grown-ups who were malnourished in early adolescence have disabled scholarly performance.(12) They may likewise have diminished limit with regards to physical work (14) .If ladies were malnourished as youngsters, their conceptive limit is influenced, their newborn children may have bring down birth weight, and they have more confused conveyances (15). At the point when numerous kids in a populace are

malnourished, it has suggestions for national improvement. The general utilitarian results of ailing health are along these lines colossal.

The initial two years of life give a basic window of chance for guaranteeing youngsters' proper development and advancement through ideal sustaining (16).

A worldwide methodology for baby and youthful kid sustaining has been contrived by the World Health Organization (WHO) and United Nations Children Fund. In light of these directing standards, the Government of India, in a joint effort with universal offices, has embraced the socially adequate IYCF rules, which were consolidated in the Integrated Management of Neonatal and Childhood Illness Program. (5) These rules perceive suitable newborn child sustaining practices to be vital for enhancing nourishment status and diminishing baby mortality in all nations. WHO offers three proposals for IYCF hones for kids matured 6–23 months: proceeded with bosom nourishing or encouraging with fitting calcium-rich sustenances if not bosom sustained; bolstering strong or semisolid nourishment for a base number of times each day as indicated by age and bosom sustaining status; and including sustenances from a base number of nutritional categories every day as indicated by bosom encouraging status.(5)

Newborn children are especially helpless amid the move time frame when correlative sustaining starts. Guaranteeing that their nourishing needs are met therefore requires that corresponding sustenances be:

● auspicious – implying that they are presented when the requirement for vitality and supplements surpasses what can be given through selective and successive breastfeeding;

● satisfactory – implying that they give adequate vitality, protein and micronutrients to meet a developing tyke's nutritious needs;

● safe – implying that they are cleanly put away and arranged, and bolstered with clean hands utilizing clean utensils and not jugs and nipples;

● legitimately sustained – implying that they are given reliable with a youngster's signs of hunger and satiety, and that supper recurrence and bolstering technique – effectively

promising the kid, notwithstanding amid sickness, to devour adequate nourishment utilizing fingers, spoon or self-encouraging – are reasonable for age.(6)

Endeavors in wellbeing offices should be connected with effort endeavors so that intercessions successfully achieve ladies. This needs to wind up noticeably a higher need inside the medicinal services framework. What is required is finishing the sustenance bundle of tyke wellbeing and convey "newborn child encouraging directing" to all families as an administration. While wellbeing insufficiencies in Vitamin A, press and folic corrosive, iodised salt are being tended to, the baby nourishing part stays out of sight. Treatment for malnourishment is arranged however then the attention ought to be on aversion of malnourishment.(19)

National Rural Health Mission (NRHM) is lead program of the nation, begun in 2005 for guaranteeing wellbeing for all. Certify Social Health Activists (ASHAs) have been enrolled under NRHM as key asset staff for mindfulness creation and request era for wellbeing. ASHAs can assume an essential part in the advancement of bosom encouraging. In such manner, it is relied upon from them to be light bearers of right practices in the group, which can be copied by rest of the general public. (10)

3) Literature review

In 2006 an expected 9.5 million kids passed on before their fifth birthday celebration, and 66% of these passings happened in the principal year of life. Under-sustenance is related with no less than 35% of kid passings. It is likewise a noteworthy disabler keeping youngsters who make due from achieving their full formative potential. Around 32% of youngsters under 5 years old in creating nations are hindered and 10% are squandered. It is assessed that problematic breastfeeding, particularly non-selective breastfeeding in the initial 6 months of life, results in 1.4 million passings and 10% of the illness load in kids more youthful than 5 years.

To enhance this circumstance, moms and families require support to start and maintain proper baby and youthful youngster encouraging practices. Social insurance experts can assume a basic part in giving that support, through affecting choices about nourishing practices among moms and families. In this manner, it is basic for wellbeing experts to have fundamental information and aptitudes to give suitable exhortation, guidance and help understand nourishing challenges, and know when and where to allude a mother who encounters more unpredictable bolstering issues. (1)

Surveys of studies from creating nations demonstrate that babies who are not breastfed are 6 to 10 times more prone to bite the dust in the primary months of life than newborn children who are breastfed.(1)

An epidemiological confirmation of a causal relationship between early start of bosom encouraging and lessened disease particular neonatal mortality has additionally been recorded. (8)

This has a tremendous effect in a creating nation, similar to India, with a high weight of malady and low access to safe water and sanitation. The current reviews led even in created nations have likewise stressed the part of IYCF practices in decreasing youngster mortality.(6)

Newborn child and youthful youngster sustaining hones in India are a long way from ideal. As per NFHS-2, elite breastfeeding falls quickly from 72 for every penny at one month to 20 for each penny at six months (Figure 1). Just around 16 for each penny of all children in India begin breastfeeding inside 60 minutes. Different pointers are likewise disillusioning. For example, integral encouraging practices are extremely poor: just 33 for every penny of youngsters matured in the vicinity of six and nine months are given strong soft nourishments (NFHS-2). Examination with NFHS-1 highlights that we have possessed the capacity to stop the decrease in breastfeeding. (18)

The National Family Health Survey (NFHS-3) has given helpful national-and state-level data on the IYCF hones. Accessible information demonstrated a gross interstate variety. Be that as it may, the NFHS was not intended to give locale level information. The greater part of the reviews led in India have concentrated on basically the bosom nourishing angles and not the dietary assorted qualities and eating routine recurrence perspectives, which are imperative in IYCF. (7)

Least dietary differing qualities (MDD) marker is the extent of offspring of 6–23 months of age who get sustenances from at least four nutrition classes from a sum of seven nutrition types, for example, dairy items, vegetables and nuts, substance nourishments, eggs, vitamin A-rich leafy foods, grains and tubers, and different products of the soil)

Least Meal Frequency (MMF) marker is the extent of bosom nourished and non-bosom encouraged kids matured 6–23 months who get strong, semisolid, or delicate sustenances

(additionally including milk sustains for non-bosom bolstered youngsters) the base number of times or more.For bosom nourished kids, the base number of times changes with age (two times if 6–8 months and three times if 9–23 months). For non-breastfed kids, the base number of times does not fluctuate by age (four times for all kids matured 6–23 months). Least Acceptable Diet (MAD) pointer is the extent of youngsters matured 6–23 months who get in any event the MDD and additionally in any event the MMF as per the definitions specified above.(9)

As per a review, an issue that should be tended to is the impression of moms about deficient bosom drain, which has been refered to as the most widely recognized purpose behind their powerlessness to breastfeed. This discernment as a rule radiates from the absence of information about the recurrence of encourage, right strategy of breastfeeding, indications of lacking bosom drain and on request sustaining. These cases for the most part require persistent tuning in, perception and consolation separated from identifying any veritable reason for deficient drain. ASHAs must be talented to direction such cases for consoling the moms and in addition other relatives. (10)

4) RESEARCH QUESTION

What is the level of knowledge and practices in ASHAs of Gir Somnath district of Gujarat with regards to the Infant and Young Child Feeding practices?

5) RATIONALE

ASHAs represent the pillar of the strategy of NRHM to address the Sustainable Development Goals (SDG) -health related indicators, mainly ones related to the mother and child health. They are expected to spread awareness on health and its factors and also make the community aware towards better health practices.

Gir Somnath district has high number of home deliveries, so the responsibility of assuring that the the baby is breastfed within an hour is of the skilled birth attendant and that also of ASHA, the link between the population and the government health services. She herself should have optimum knowledge of IYCF practices in order to take care of the feeding practices of the home delivered babies.

Gir Somnath district has high number of malnourished children which is a major outcome of improper feeding practices. This district also shows high number of infant deaths, the reasons majorly being low birth weight and malnourishment. It is necessary to know whether the health activists, the ones which are directly in contact with the population are well aware of the feeding practices and promoting the same to reduce the malnourishment amongst the children.

An assessment of their knowledge regarding IYCF, which has been attempted in the present study, would help us identify the gaps in their knowledge as well as the gaps in the translation of knowledge to practice. Because in order to improve on the above indicators it is necessary for the IYCF practices to improve and thus it is necessary first to gauge the knowledge of ASHAs.

6) OBJECTIVES

Primary objective

- To study the knowledge and selected practices of ASHAs in Gir Somnath district regarding IYCF practices.

Secondary objective

- To study the association between knowledge and selected variables.

7) METHODOLOGY

7.1 SETTING

The study was conducted in the Gir Somnath district of Gujarat. Gir Somnath District is a district of Gujarat, India. It is located on the southern corner of the Kathiawar peninsula with its headquarters at the town of Veraval.

Number of Sub District Hospital	1
Number of Community Health Centres	8
Number of Primary Health Centres	25
Number of Sub Centres	173
Number of Urban Centres	4

This district has six talukas namely Girgadhda, Kodinal, Sutrapada, Talala, Una and Veraval. The district has in total of twenty-seven PHCs, eight CHCs and 1 Sub District hospital. Total population of the district is about 12.5 lacs in 2011 census (https://girsomnath.gujarat.gov.in/about-gir-somnath). The number of ASHAs in this district is 871

7.2 RESEARCH DESIGN

DescriptivE study with a Cross Sectional design.

7.3 DURATION OF STUDY

The study was conducted over a period of three months from February 2017 to April2017.

7.4 STUDY POPULATION

The ASHA workers trained and working under NRHM for more than one year in Gir Somnath district.

7.5 SAMPLE SIZE

The sample size taken for the study is 130.

7.6 SAMPLING TECHNIQUE

Convenient sampling was done.The ASHAs from two blocks, namely Veraval and Talala who had come for ASHA meeting purpose in the district headquarters were included.

7.7 STUDY TOOL

A semi-structured interview schedule was used as a tool for data collection. It had two parts: Basic information and Knowledge and selected practices of ASHAs regarding Infant and Young Child Feeding practices. It was translated into the regional language Gujarati.

The IYCF practices were extracted from the Global strategy for infant and young child feeding, WHO, UNICEF.

7.8 DATA COLLECTION TECHNIQUE:

The investigator met with ASHA workers those who attended the ASHA meeting at the district headquarters. ASHAs from two talukas were considered to take part in this study. They were told for the purpose of study and written consent was taken.

7.9 DATA ANALYSIS:

After the collection, the data was entered in SPSS. Most of the data analysis was done on SPSS. However, Microsoft excel was also used for analysis. Frequencies were calculated and graphs were prepared. Chi square test was used to find out the association between knowledge and selected variables.

8) RESULTS

Before assessing the knowledge of the ASHAs with regards to IYCF practices, the variables with which the association of the knowledge levels were to be checked are further simplified and analysed.

Three variables are taken into consideration in this study namely, the education level of the ASHAs, the number of years since she has become an ASHA and the completion of the training of the ASHAs, especially that of Module 6 and Module 7.

8.1.Education level of the ASHAs

Table 1: Education level of the ASHAs

Education level	Frequency	Percentage
Non matric	44	33.8
Matric	39	30.0
12TH	21	16.2
Graduate	23	17.7
Post graduate	3	2.3
Total	130	100.0

Out of the total 130 ASHAs selected for the study, almost thirty four percent had not studied till tenth standard, thirty percent had passed tenth standard, sixteen percent had completed the twelfth standard studies and a small number of ASHAs that is seventeen percent had done graduation and almost as less as two percent had done their post-graduation.

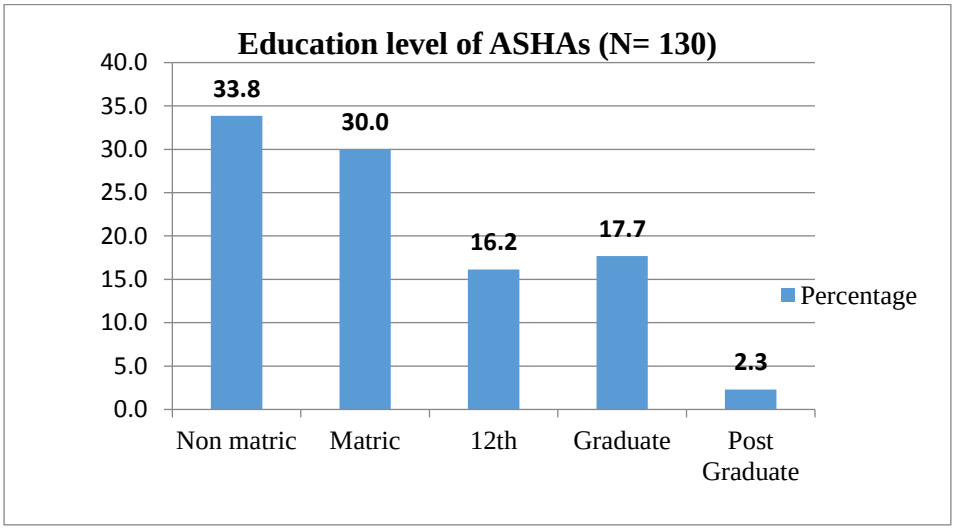

Figure 1: shows the percentages of the Education level of the ASHAs included in the study

8.2. Number of years worked as ASHA

Table 2: Number of years worked as ASHA

Number of years worked	Frequency	Percentage
Less than 2 years	9	6.9
2 to 5 years	34	26.2
More than 5 years	87	66.9
Total	130	100.0

Out of the total 130 ASHAs selected for the study, almost seventy percent of ASHAs had been working as Accredited Social Health Activists for more than five years, twenty six percent of them had worked for a range of two to five years and a few new introductions were present, almost seven percent.

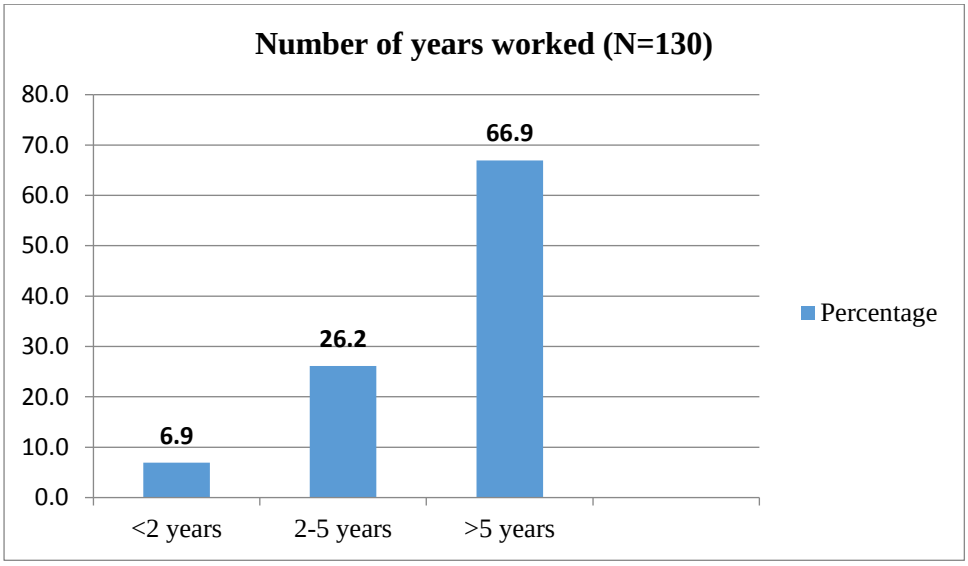

Figure 2: Shows the percentage of ASHAs who have worked as ASHA for less than two years, two to five years and more than five years.

8.3. Completion of Module training of ASHAs

Table 3: Completion of Module training of ASHAs

Training	Frequency	Percentage
Mod training fully incomplete	28	21.5
Mod training partially complete	11	8.5
Mod training complete	91	70.0
Total	130	100.0

Out of the total ASHAs selected for the study, seventy percent of the ASHAs had completed all their trainings, almost nine percent of them had completed them partially, while almost a considerable percentage that is almost twenty two percent of ASHAs had not received any type of training.

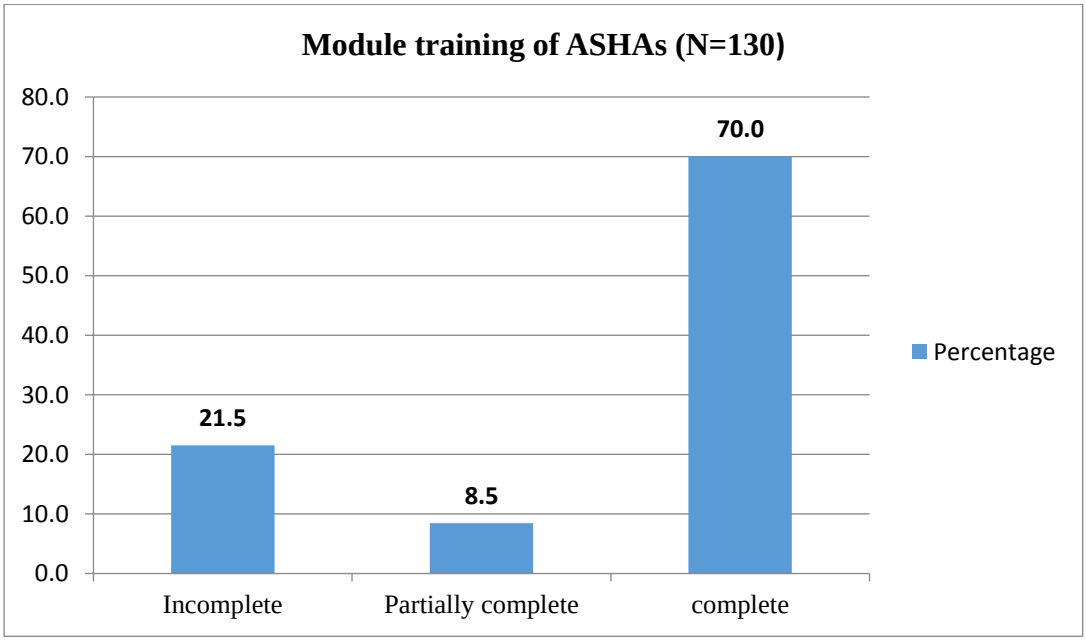

Figure 3: This figure shows the percentage of ASHAs with Module training completed, partially completed and incomplete.

8.4.Analysis of Knowledge indicators regarding exclusive breastfeeding

- Hundred percent ASHAs were aware about the meaning of exclusive breastfeeding, they were aware of the guidelines that the period of exclusive breastfeeding is that of six months, the initiation of breastfeeding should be done within an hour after normal delivery was thoroughly known by all. ASHAs had knowledge about colostrum and its importance and they reiterated on the fact that it should be given to the baby and not discarded away. The pre lacteal feeds like honey, jaggery or sugar should not be given was answered by hundred percent of ASHAs and water also is not given in this period was known by all.
- Varied response was seen on the indicator of the time of initiation of breastfeeding after caesarean delivery.

Table 4: Knowledge about period within BF initiated in mothers undergone Caesarean delivery

Knowledge about period within BF initiated in mothers undergone Caesarean delivery	Frequency	Percentage
Within 4-5 hrs	114	87.7
Within 24 hours	14	10.8
More than 24 hours	2	1.5
Total	130	100.0

Out of the total 130 ASHAs selected for the study majority of them that is eighty eight percent knew that the breastfeeding should be initiated within four to five hours. Almost eleven percent answered within twenty four hours and the remaining answered anytime the mother is comfortable to feed depending on her health condition.

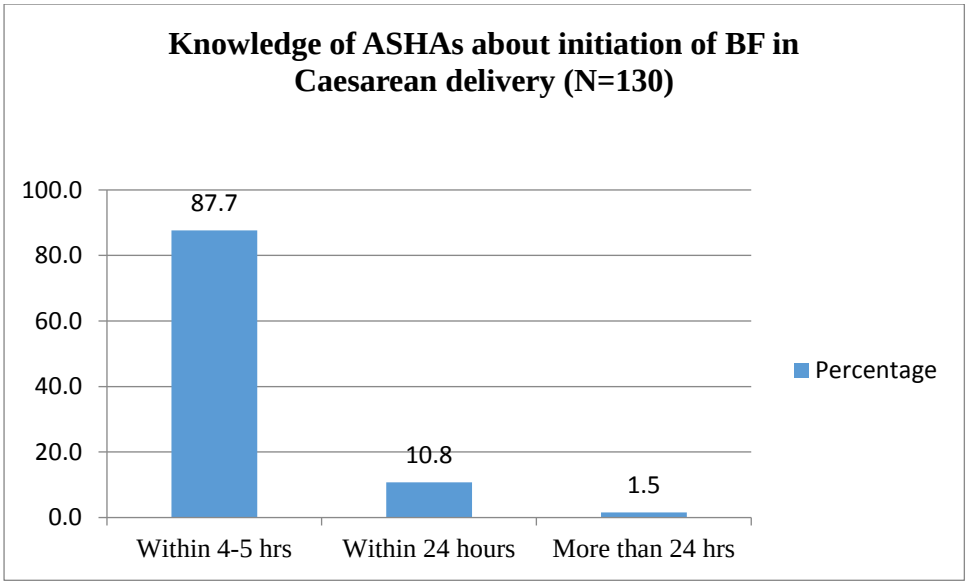

Figure 4: This figure shows the percentage of ASHAs with respect to knowledge about the period in which initiation of BF should be done after caesarean delivery.

- Variation was also seen in the indicator knowledge about the exceptions to exclusive breastfeeding.

Knowledge about exceptions to breastfeeding	Frequency	Percentage
2-3 exceptions	60	46.2
More than 3 exceptions	70	53.8
Total	130	100.0

Table 5: Knowledge about exceptions to breastfeeding

Almost fifty four percent of the ASHAs knew three and more exceptions to exclusive breastfeeding out of ORS, Medicines for sickness, vitamins and syrups and Mineral supplements. The remaining knew two to three exceptions to exclusive breastfeeding.

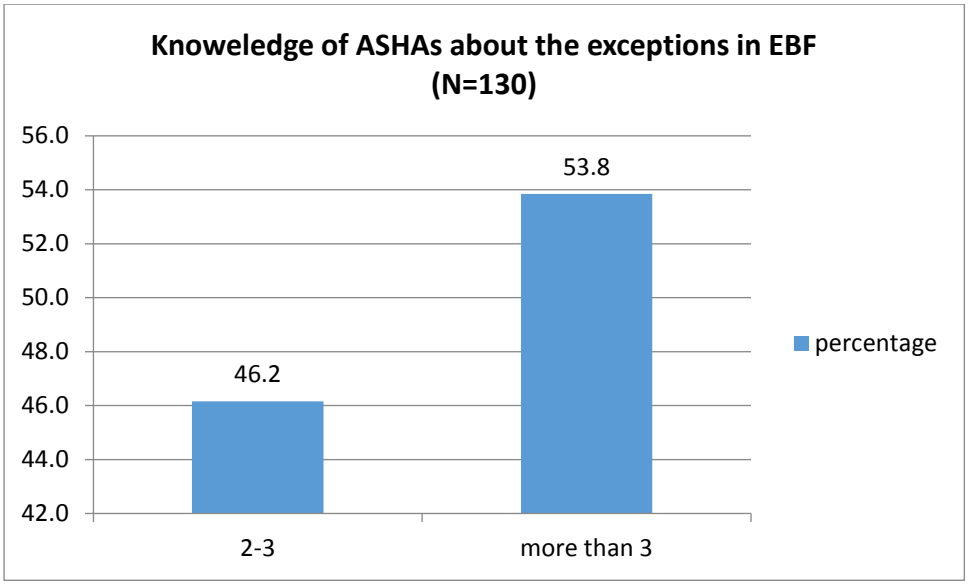

Figure 5: This figure shows the percentage of ASHAs knowing more than three or two to three exceptions to exclusive breastfeeding.

All the ASHAs knew that ORS and medicines can be given to the baby during the period of exclusive breastfeeding. Almost half of the ASHAs were aware of Vitamin supplements and minerals and syrups can also be given during this period.

- Hundred percent of ASHAs were aware that the adequate number of feedings to be given in the daytime are at least eight times per day and that during the night are at least twice per night.

8.5 Analysis of knowledge indicators regarding complementary feeding

- The introduction of the complementary feeding should be done at the age of 6 months was known to hundred percent of ASHAs
- All the ASHAs were aware of the consistency of food to be semi solid
- All the ASHAs knew that the complementary feeding should be given through bowls and spoons as containers and bottles should not be used for the same.
- All ASHAs responded that minimum years of breastfeeding is at least two years.

8.6. Analysis of knowledge about advantages of breastfeeding

Analysis of knowledge about advantages of breastfeeding in mothers.

Table:6.1 Knowledge about advantages of breastfeeding in mothers.

Number of ASHAs	Advantages
92	Reduces anaemia
40	Prevents breast and ovarian cancer
32	Delay in pregnancy
0	Early uterine involution

Out of the total 130 ASHAs, Ninety two of them knew that breastfeeding reduces anemia in the mothers, forty of them were knowledgeable of the fact that it can prevent breast and ovarian cancer, thirty two of them knew that it can delay pregnancy and none knew that it helps in early uterine involution.

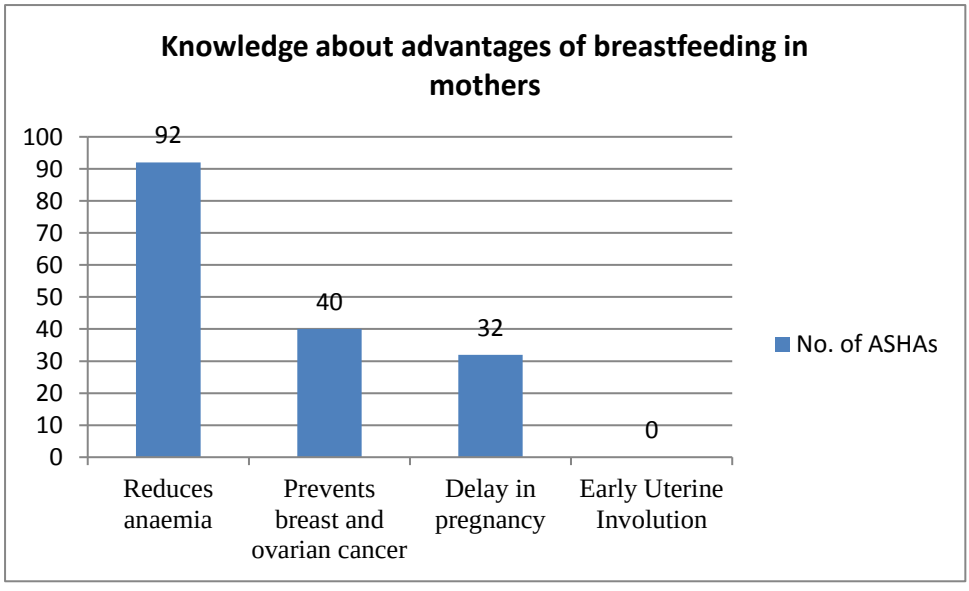

Figure: 6.1 This figure shows the knowledge about advantages of breastfeeding in mothers.

Analysis of knowledge about advantages of breastfeeding in children.

Table:6.2 Knowledge about advantages of breastfeeding in children.

Number of ASHAs	Advantages
130	Helps in growth
103	Prevents infection
41	Easily digested
8	High IQ

Out of the total 130 ASHAs, allof them knew that breastfeeding helps in growth in the children, hundred and three knew of the fact that it can prevent infections, forty one of them knew that it can get easily digested and eight knew that it results in higher IQ of the children.

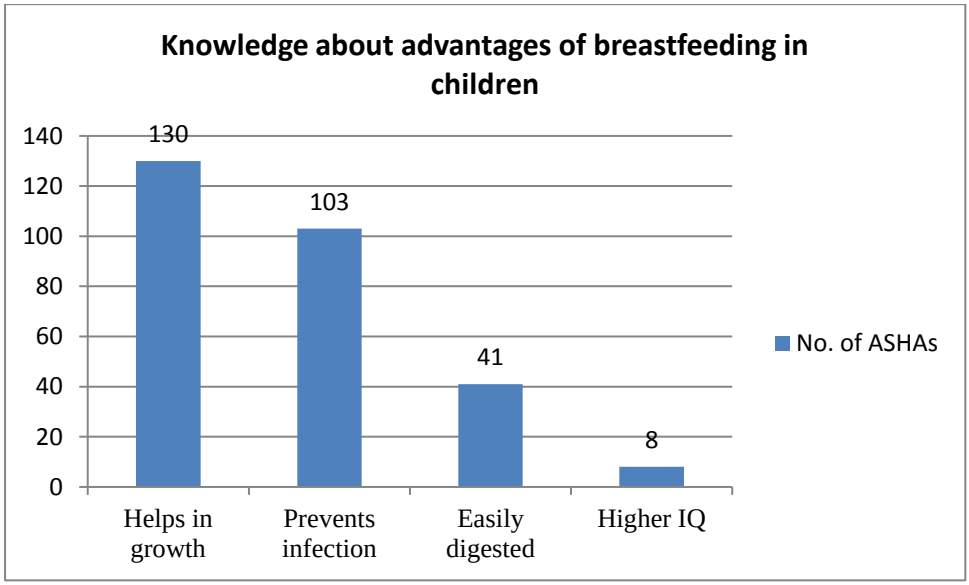

Figure 6.2: This figure shows the knowledge about advantages of breastfeeding in children

There was a significant relationship seen in between the training and knowledge about initiation of feeding in mothers undergone Caesarean delivery, advantages of BF to mothers, advantages of BF to children.

8.7.1 Bivariate analysis-Training and knowledge of initiation of feeding in mothers undergone Caesarean delivery

Table 7.1: Bivariate analysis-Training and knowledge of initiation of feeding in mothers undergone Caesarean delivery

		Knowledge of initiation of feeding in mothers undergone Caesarean delivery			Total
		within 4-5 hrs	within 24 hours	More than 24 hours	
Mod 6- 7 training fully incomplete	Count	21	7	0	28
	% within training	75.0%	25.0%	0.0%	100.0%
Mod 6-7 training partially complete	Count	8	2	1	11
	% within training	72.7%	18.2%	9.1%	100.0%
Mod 6-7 training complete	Count	85	5	1	91
	% within training	93.4%	5.5%	1.1%	100.0%
Total	Count	114	14	2	130
	% within training	87.7%	10.8%	1.5%	100.0%

	Asymp. Sig. (2-sided)
Pearson Chi-Square	**.008**

- The knowledge of ASHAs regarding the period of initiation of breastfeeding in mothers undergone Caesarean delivery improved with the completion of the module training.
- The percentage of ASHAs who replied within four to 5 hours is lowest in the group that has not completed their training (75%)and increases in the group which has fully completed the training (93.4%).
- Vice versa is seen where the ASHAs have replied within 24 hours has decreased from 25% to 5.5%.
- The association is significant with p value- 0.008

8.7.2 **Bivariate analysis- training and advantages of BF to mothers**

Table 7.2 : Bivariate analysis- training and advantages of BF to mothers

TRAINING		Advantages of breastfeeding to the Mothers			Total
		none of the above	mentioned at least 1	2-3	
Mod 6- 7 training fully incomplete	Count	7	20	1	28
	% within training	25.0%	71.4%	3.6%	100.0 %
Mod 6-7 training partially complete	Count	1	7	3	11
	% within training	9.1%	63.6%	27.3%	100.0 %
Mod 6-7 training complete	Count	0	66	25	91
	% within training	0.0%	72.5%	27.5%	100.0 %
Total	Count	8	93	29	130
	% within training	6.2%	71.5%	22.3%	100.0 %

	Asymp. Sig. (2-sided)
Pearson Chi-Square	**.000**

- The knowledge of ASHAs regarding the advantages of breastfeeding in mothers improved with the completion of the module training.
- The percentage of ASHAs who replied none of the above is highest in the group that has not completed their training (25%) and decreases in the group which has fully completed the training (0%)
- Vice versa is seen where the ASHAs have replied two to three advantages has increased from 3.6% to 27.5%.
- The association is significant with p value- 0.000

8.7.3 **Bivariate analysis- training and advantages of BF to children**

Table 7.3: Bivariate analysis- training and advantages of BF to children

TRAINING		Advantages of breastfeeding to the child			Total
		Mentioned at least 1	2-3	more than 3	
mod 6- 7 training fully incomplete	Count	12	15	1	28
	% within training	42.9%	53.6%	3.6%	100.0%
mod 6-7 training partially complete	Count	2	9	0	11
	% within training	18.2%	81.8%	0.0%	100.0%
mod 6-7 training complete	Count	5	79	7	91
	% within training	5.5%	86.8%	7.7%	100.0%
Total	Count	19	103	8	130
	% within training	14.6%	79.2%	6.2%	100.0%

	Asymp. Sig. (2-sided)
Pearson Chi-Square	.000

- The knowledge of ASHAs regarding the advantages of breastfeeding in children improved with the completion of the module training.
- The percentage of ASHAs who replied atleast one is highest in the group that has not completed their training (42.9%)and decreases in the group which has fully completed the training (5.5%)
- Vice versa is seen where the ASHAs have replied more than three has increased from 3.6% to 7.7%.
- The association is significant with p value- 0.000

Practices of ASHAs

- Breastfeeding is promoted during antenatal period by all the ASHAs .
- All the ASHAs had knowledge that in order to initiate early breastfeeding skin to skin contact should be initiated in about 5 minutes.
- All ASHAs knew that the new mothers need help to position the baby rightly for the breast feeding

LIMITATIONS

- Due to resource constraints the sample size was arbitrarily decided upon and the sampling technique used is Convenience sampling.
- Only three variables compared with the knowledge indicators.
- Complementary feeding and positioning of the baby during breastfeeding were not questioned in detail.

CONCLUSION

- The overall basic knowledge of ASHAs regarding IYCF practices was good in the Gir Somnath district of Gujarat.
- Majority of the ASHAs did not have adequate knowledge with respect to the advantages of the breastfeeding practices.
- ASHAs practice level of promotion of IYCF practices is satisfactory.
- Training is an important variable and shows increase in the knowledge level with completion of training. Training is associated with the knowledge level in ASHAs

RECOMMENDATIONS

- Training is needed in period of time for refreshing the knowledge. As also the ASHAs who have not received training at all are to be given training on priority.
- The indicators where low knowledge level is seen those indicators should be focussed on the further trainings so that ASHAs will be able to disseminate the knowledge to the community.

References

1) World Health Organization. Infant and Young Child Feeding: Model Chapter for Textbooks for Medical Students and Allied Health Professionals. France: World Health Organization, 2009
2) Black RE, Morris SS, Bryce J. Where and why are 10 million children dying every year? Lancet 2003; 361:2226–34.
3) Butte NF, Lopez-Alarcon MG, Garza C. Nutrient Adequacy of Exclusive Breastfeeding for the Term Infant during the First Six Months of Life. Geneva: World Health Organization, 2002.
4) Jones G, Steketee RW, Black RE, Bhutta ZA, Morris SS. Bellagio Child Survival Study Group. How many child deaths can we prevent this year? Lancet 2003; 362:65–71.
5) Government of India. National Guidelines on Infant and Young Child Feeding. Ministry of Human Resource development, New Delhi; Department of Women and Child development, 9–10, 2006.
6) WHO. Implementing the Global Strategy for Infant & Young Child Feeding. Geneva, 3–5 Feb, 2003.
7) Assessment of infant and young child feeding practices with special emphasis on IYCF indicators in a field practice area of Rural Health Training Centre at Dabhoda, Gujarat, India Haresh Chandwani, Arpit Prajapati, Bhavik Rana, Kantilal Sonaliya Department of Community Medicine, GCS Medical College, Ahmedabad, Gujarat, India. Correspondence to: Haresh Chandwani, E-mail: harsh1012@yahoo.co.in Received April 07, 2015. Accepted April 24, 2015.
   Chandwani H, Prajapati A, Rana B, Sonaliya K. Assessment of infant and young child feeding practices with special emphasis on IYCF indicators in a field practice area of Rural Health Training Centre at Dabhoda, Gujarat, India. Int J Med Sci Public Health 2015;4:1414-1419

8) Edmond KM, Kirkwood BR, Amenga-Etego S, Owusu- Agyei S, Hurt LS. Effect of early infant feeding practices on infection- specific neonatal mortality: an investigation of the causal links with observational data from rural Ghana. Am J ClinNutr 2007;86:1126–31.
9) Indicators for Assessing Infant and Young Child Feeding Practices: Conclusions of a Consensus Meeting Held 6–8 November 2007 in Washington, DC, USA. World Health Organization, 2008. Available at: http://whqlibdoc.who.int/ publications/2008/9789241596664_eng.pdf (last accessed on Apr 29, 2012).
10) Vartika S., Ranjeeta K.Infant and Young Child Feeding – Knowledge and Practices of ASHA workers of Doiwala Block, Dehradun District. INDIAN JOURNAL OF COMMUNITY HEALTH / VOL 26 / ISSUE NO 01 / JAN – MAR 2014.

11) Martorell R, Kettel Khan L, Schroeder DG. 3. Reversibility of stunting: epidemiological findings in children from developing countries. European Journal of Clinical Nutrition, 1994, 58 (Suppl.1):S45–S57.
12) Pollitt E et al. Nutrition in early life and the fulfilment of intellectual potential. The Journal of Nutrition, 1995, 125:1111S–1118S.
13) Grantham-McGregor SM, Cumper G. Jamaican studies in nutrition and child development, and their implications for national development. The Proceedings of the Nutrition Society, 1992, 51: 7179.
14) Haas JD et al. Early nutrition and later physical work capacity. Nutrition reviews, 1996, 54(2, Pt2): S41–48.
15) Martin RM et al. Parents' growth in childhood and the birth weight of their offspring. Epidemiology, 2004, 15:308–316.
16) World Bank. 8. Repositioning nutrition as central to development: a strategy for large scale action. Washington DC, The World Bank, 2006.
17) Jones G et al. How many child deaths can we prevent this year? Lancet, 2003, 362:65–71.
18) National Family Health Survey (NFHS) – 2, IIPS, Mumbai, 1998-99, Ministry of Health and Family Welfare, Government of India.
19) Gupta A. Infant and Young Child Feeding An 'Optimal' Approach. Economic and Political Weekly August 26, 20063666.
20) Taksande A, Tiwari S, Kuthe A. Knowledge and attitudes of anganwadi supervisor workers about infant (breastfeeding and complementary) feeding in gondia district. Indian J Community Med. 2009 Jul;34(3):249-51. doi: 10.4103/0970-0218.55294. PubMed PMID: 20049306; PubMed Central PMCID: PMC2800908. [PubMed]
21) Sharma P, Dutta AK, Narayanan I, Mullick DN. Attitudes of medical and nursing personnel to breast feeding practices. Indian Pediatr. 1987 Oct;24(10):911-5. PubMed PMID: 3448012. [PubMed]
22) Kapil U, Bhasin S. Perception towards breast feeding amongst working women teachers of a public school in Delhi. Indian Pediatr. 1992 Jun;29(6):753-6. PubMed PMID: 1500136. [PubMed]

ANNEXURE

STUDY TOOL

1) Reference Number: 2) Date of Interview:

3) Village: 4) Tehsil:

5) District: 6) State:

Personal Information

7) Name of ASHA:_____

8) Age: _____

9) Marital status: Unmarried/ Married/ Widowed/ Divorced/ Separated

10) Education: _____

11) Literate: R / W/N

12) Religion: Hindu/ Muslim/ Other_____

13) Caste: Brahmin / OBC/ SC/ ST/Other

14) Household income: Rs_____/m

15) No. of members in your household: _____

16) Husband‘s occupation: _____

17) Household type: Nuclear/ Extended nuclear/ Joint

18) Does the ASHA work for same village/ village Panchayat she stays in? Y/N

19) Month and year of joining ASHA programme: ___, ____ (mm/yy)

1) Do you know what is exclusive breast feeding ?
    a) Yes
    b) No

2) For how many months according to you exclusive breast feeding should be done?
    a) Less than 6 months
    b) 6 months
    c) More than 6 months

3) In within how many hours after the normal delivery the baby should be breastfed?
    a) Within 1 hour
    b) More than 1 hour

4) In within how many hours after the caesarean delivery the baby should be breastfed?
    a) Within 4 to 5 hours
    b) Within 24 hours
    c) Other

5) What are the pre lacteal feeds that should be given to the baby just after birth?
    a) Honey
    b) Sugar
    c) Jaggery
    d) Glucose water
    e) No pre lacteal feed

6) Should the baby younger than 6 months be given water in summers?
    a) Yes
    b) No

7) What are the exceptions to exclusive breast feeding (when can any liquid be given to the baby apart from breast milk)? (ORS, Vitamin drops or syrups, Minerals supplements, Medicines when sick)
    a) Mentioned atleast one of the above
    b) Mentioned 2-3
    c) More than 3

8) Do you know what is colostrum ?
    a) Yes
    b) No

9) Should the colostrum be given to the baby or should be discarded away?
    a) Yes
    b) No

10) What should be the frequency of breastfeeding during day for babies under 6 months ?
    a) Less than 8 times
    b) 8 to 10 times
    c) More than 10 times

11) What should be the frequency of breast feeding during night?
    a) 1 time
    b) More than or equal to 2 times

12) After how many months should other complementary food items be introduced in the baby's diets?
    a) Less than 6 months
    b) 6 to 7 months
    c) More than 7 months

13) What should be the consistency of the complementary feed?
    a) Liquid
    b) Semi solid
    c) Solid

14) What are the food items that the baby should be fed as complimentary food items ?
    a) Staples
    b) Fats and sugars
    c) Foods of animals (non-vegetarian)
    d) Vegetables and fruits
    e) All of the above

15) How should the complimentary food given to the baby?
    a) Katori and spoon
    b) Bottle

16) For how many months should the baby be breastfed?
    a) 1 year
    b) 2 years
    c) More than 2 years

17) What are the signs or indications that are to be taught to pregnant women to identify that the baby is hungry?
    a) Sucking movements
    b) Sucking sounds
    c) Hand to mouth movements
    d) Soft cooing or sighing sounds
    e) Crying

18) What are the advantages of breast feeding to the mother? (Reduces anemia-reduced post-partum bleeding, Promotes early uterine involution, Prevents breast and ovarian cancer, Helps in delaying another pregnancy)
    a) None of the above
    b) Mentioned atleast one of the above

c) Mentioned 2-3
d) More than 3

19) What are the advantages of breast feeding to the baby? (Helps in growth, Higher IQ, Easily digested, prevents diarrhea, Contains protective factors and are less likely to develop infection)
    a) Mentioned atleast one of the above
    b) Mentioned 2-3
    c) More than 3

20) Are you aware of any contraindications of breastfeeding?(Maternal drugs , Maternal infectious diseases, Baby's condition)
    a) Mentioned atleast one
    b) Mentioned more than one
    c) None
21) What should be done to initiate early breastfeeding?
    a) skin to skin contact should be initiated in about 5 minutes of birth
    b) Don't know

22) Do you promote breast feeding during the antenatal period?
    a) Yes
    b) No

23) Do you teach the mother the right way to position the baby while breast feeding ?
    a) Yes
    b) No