Assessment of Infant Young Child Feeding Practices and Knowledge of Mothers of Vidisha District in Madhya Pradesh

By

Shampa Koley

Dissertation submitted for the partial fulfillment of the

MBA Hospital and Health Management

Academic year, 2016-2018

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

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TO WHOMSOEVER MAY CONCERN

This is to certify that Miss Shampa koley student of MBA Hospital and Health Management from The IIHMR University, Jaipur has undergone dissertation at Fortis Escort hospital, Jaipur from 20-February-2018 to 24-March-2018 and National Health Mission, Madhya Pradesh from 5-April-2018 to 25-May-2018.

The Candidate has successfully carried out the study designated to her during dissertation training and her approach to the study has been sincere, scientific and analytical.

The dissertation is in fulfillment of the course requirements.

I wish her all success in all his future endeavors.

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National Health Mission

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The Certificate Is Awarded To

SHAMPA KOLEY

In Recognition of Having Successfully Completed Her Internship in The Department of

IIHMR
University Jaipur

And Has Successfully Completed Her Project

On

KAP survey of IYCF Practies among frontline service providers and mothers of Vidisha District,Madhya Pradesh

Under The Guidance Of

Dr. Pragya Tiwari

(Dupety Director-Child Health Nutriction)

NHM, Bhopal

Internship :- (5th April – 26th May)

NATIONAL HEALTH MISSION

Madhya Pradesh

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

(Dr. Durgesh Gour)
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15th May 2018

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Shampa Koley** worked as a **Trainee** with us in the **Dept. of Quality Assurance and FOS** from 20th February 2018 to 24th March 2018.

Her performance during the period in the department was good. She comes across as a willing, sincere and intelligent person who has a strong drive and zeal for learning.

We wish her the best for all her future endeavors.

Fortis Hospitals Limited JAIPUR

Authorized Signatory

IIHMR UNIVERSITY

THE IIHMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled Assessment of Infant Complementary Feeding practices and Knowledge of mothers and submitted by (Name) Shampa Koley Enrolment No. 0191 under the supervision of Dr. Sandeshkumar Sharma for award of MBA in Hospital and Health/ Pharmaceutical / Rural Management in Health and Hospitals of the University carried out during the period from 20th Feb-2018 to 25th May-2018 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.

Shampa Koley

Signature

Abstract

Title: Assessment of Infant Young Child Feeding Practices (IYCF) and knowledge among the mothers of Vidisha District in Madhya Pradesh.

Shampa Koley

Advisor: **Dr. Sandesh Kumar Sharma**

Background: Infant and young child-feeding (IYCF) practices are crucial for nutritional status, growth, development, health and ultimately the survival of infants and young children. The World Health Organization (WHO) recommends exclusive breastfeeding(EBF) for the first six months of life and the addition of complementary feeds(CF) from six months onwards, with continued breastfeeding till at least two years of age. The early introduction of complementary feeds before the age of six months can lead to displacement of breast milk and increased risk of infection , besides the babies being physiologically immature.

Objectives:

1) To identify the existing feeding practices among the mothers of 0-23 months old children
2) To assess the knowledge of mothers regarding IYCF practices having children 0-23 months old
3) .To assess the adequacy of diet in children aged 6-23 months.

Methodology: **. 1. Study type:** Descriptive cross sectional study

2. Study area: The study was carried out in two blocks of district Vidisha in Madhya Pradesh.

3. Study period: 2 months

4. Sampling:

a) Sampling Technique: Convenient Sampling.

- ✓ Out of the total block in district **2 blocks were selected.**
- ✓ From two blocks 12 villages were selected
- ✓ From 12 villages 14 anganwadi centers were selected.
- ✓ A list of children who have been delivered in the past two years were obtained from the selected anganwadi center.
- ✓

b) Sample size: 60 mothers having children under 0-23 months from each Block.

c) Respondent: Mothers or caregiver having children 0-23 months old.

d)Tools and Techniques:- Semi structure questionnaires for face to face interview was used for collection of sample.

e) Analysis:- Data was interpreted through Ms-excle

Results: The study found that out of 120 samples 59% only timely initiate breastfeeding to their children, 63.5% exclusively breastfed under 6 months ,28.5% children 6-23 months age receive minimum dietary diversity and only 51.5 % children receive minimum number of meals and 60% children feed with bottle.

Conclusion : The study has shown that there are some gaps in terms of knowledge and Practice about exclusive and complimentary breastfeeding feeding. This study underscores need to improve knowledge regarding exclusive and complimentary breastfeeding by conducting comprehensive Information Education Communication(IEC) activities among the caregivers or mothers.

Key words: **Infant Young Child Feeding Practices (IYCF), Initiation of breastfeeding(IBF) , Exclusive breastfeeding(EBF) , Complementary feeding (CF)**

Acknowledgement

"Vital to every operation is cooperation"–

A wonderful quotation put forth by Mr. Frank Tyger.

The dissertation opportunity I had with National Health Mission Madhya Pradesh was an enriching experience; it was a great chance for learning and professional development. It helped me develop an ability to understand healthcare issues from various perspectives.

Bearing in mind the previous, I would like to take this opportunity to express my deepest gratitude and special thanks to my mentor, Dr. Sandesh Kumar Sharma, Associate Professor , IIHMR University, Jaipur, for guiding and keeping me on the correct path throughout the three months of dissertation.

It is my radiant sentiment to place on record my best regards, deepest sense of gratitude and indebtedness to Shri S. Viswanathan, Mission Director, NHM Madhya Pradesh, for his immense support and faith and for allowing me to carry out the study with ease at his esteemed organisation during the internship.

I would like to gratefully acknowledge Dr. Pragya Tiwari , Deputy Director Nutrition, whose deep sharing, and cooperation has moved me many levels beyond our own thinking.

Special thanks to the State as well as District Health Officer of Vidisha for supporting me through the whole project with travelling.

I perceive the opportunity as a big milestone in my professional development. I will strive to use the gained skills and acknowledgement on the best possible way, and will continue to work on their improvement, to attain the desired career objectives.

Sincerely,

Miss Shampa Koley

MBA-HM

2016-2018 Batch

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ABBREVIATION

ANM-Auxiliary Nurse Midwife

ASHA-Accredited Social Health Activist

AWW-Aanganwadi Worker

BCC-Behaviour Change Communication

BMO-Block Medical Officer

BPMU- Block Program Management Unit

DPM- District Program Manager

DPMU- District Program Management Unit

HPD-High Priority District

HR-Human Resource

IEC-Information Education Communication

IYCF-Infant Young Child Feeding Practices

IBF- Initiation Of Breastfeeding

EBF- Exclusive Breast Feeding

CF- Complementary Feeding

FLW- Frontline Workers

CSR- Corporate Social Responsibility

FRU- First Referral Unit

NRHM-National Rural Health Mission

NUHM- National Urban Health Mission

PFMS-Public Finance Management System

PH-Public Health

PHC-Primary Health Centre

RBSK-Rashtriya Bal Swasthya Karyakram

SHC-Sub-Health Centre

SPM-State Program Manager

Assessment of Infant Young Child Feeding practices and knowledge of mothers of Vidisha District in Madhya Pradesh

1.INTRODUCTION

1.1Backround: "Optimal infant and young child-feeding(IYCF) practices are crucial for nutritional status, growth, development, health and ultimately the survival of infants and young children. Worldwide, suboptimal breastfeeding still accounts for deaths of 1.4 million children aged less than five years (under-five mortality)". "If 90% infant covered by IYCF practices, almost one-fifth of overall under-five mortality can be averted". "The poor complementary feeding practices mean that many children continue to be vulnerable to irreversible outcomes of stunting , poor cognitive development , and significantly increased risk of infectious diseases, such as diarrhoea and acute respiratory infection". " This has a tremendous impact in a developing country, like India, with a high burden of disease and low access to safe water and sanitation". "Even in developed countries, recent studies have underscored the role of IYCF practices in reducing child mortality". "The mother infant relationship is the most vital formative relationship for the child". "From the very first moment of life , a baby begins interacting with its mother". "Thus mother's health, her education , her beliefs & attitude regarding child rearing are important milestones on the road of child's health right from in utero period". "Also, faulty breast-feeding and weaning practices have their roots, in socioeconomic and educational status of the parents, their cultural beliefs, number spacing of siblings and the employment status of mother". "The World Health Organization (WHO) recommends exclusive breastfeeding for the first six months of life with early initiation and continuation of breastfeeding for two years or more together with nutritionally-adequate, safe , age- appropriate complementary feeding starting at six months". "The WHO and United Nations Children Fund (UNICEF) have articulated a global strategy for infant- and young child-feeding. Based on these guiding principles, the Government of India, in collaboration with international agencies, has adopted the culturally-acceptable IYCF guidelines, which were incorporated in the Integrated Management of Neonatal and Childhood Illness (IMNCI)Program" . "Need for educating mothers for promotion of proper infant-feeding practices and other aspects of childcare has also been felt". "MAA- Mothers' Absolute Affection, a nation- wide programme for promoting breastfeeding was launched by the Hon'ble Union Minister of Health and Family Welfare on 5th August in New Delhi". "MAA is an intensified programme of the Ministry of Health and Family Welfare, Government of India, for creating enabling environment to ensure that others, husbands and families receive adequate information and support for promotion of breastfeeding".

1.2 Problem Statement: "The most recent estimates of the global burden of malnutrition according to Global Nutrition report 2017 reveals that among under 5 children 155 million children are stunned, 112 million children are underweight , 52 million children are wasted (of which 17million suffer from severe acute malnutrition) and 13 million children are born each year with intrauterine growth retardation". "It is estimated that 5.6 million children worldwide under the age of 5 years die each year, of which 1.83 million deaths occurs in India alone". "More than half of these deaths are attributable to under-nutrition. An important underlying determinant for under- nutrition is the care provided to the child". "According to NFHS-4 in India, 41.6% of the children under the age of three years were breastfed within one hour and over 54.9% are exclusively breastfed and 42.7% of children of age 6-8 months are receiving semi solid food along with breast milk and similarly in MP 34.5% of the children were breastfed within one hour and 58.2% are exclusively breastfed and only 38.1% are receiving complementary food".

1.3 Rationale:-" Vidisha District is a district of Madhya Pradesh state in central India". As per 2011 census, Vidisha has a population of 1458875. Male constitute 52.75% of population and female 47.24%. Vidisha has an average literacy rate of 70.53%, male literacy rate 79.14% and female literacy rate 60.85%.

"In India while the infant mortality rate has declined to 34 as per SRS 2016, then in MP it is 47 as per SRS 2016". "There still remains the need for improvements in infant and neonatal survival to further reduce IMR". "Infant 0-6 months who are not breastfed have increased risk from diarrhoea and pneumonia, respectively compared to the infants who are exclusively breastfed".

"From the birth to two years of age is the "critical window" for the promotion of good growth, health, and behavioural and cognitive development". "The main goal of IYCF practice is to reduce child mortality and morbidity through optimal feeding of infants and young children".

"In the first ever Health index released by the National Institution for Transforming India(NITI)Aayog, Madhya Pradesh has been placed at 17th position". It has figured in the list of 'least improved' state. The 115 districts were identified as aspiration district in a transparent manner by Government of India, in consultation with state officials using a composite index of key data sets that included deprivation enumerated under the Socio-Economic caste census, key health, education sectors performance and state of basic infrastructure. Among 115 districts Vidisha is one of the aspiration and high priority district in Madhya Pradesh. After several rounds of consultation with various stakeholders,49 key performance indicators have been chosen to measure progress of the districts. Out of 115 aspiration districts Vidisha has been placed at 98th position. According to NFHS-4 in Vidisha institutional birth is 73.7% and institutional birth in public facility is 68.5% and the percentage of breastfeeding within one hour is only 46.6%, exclusive breast feeding is, 71.7 and adequate diet is 8.8% that is very poor than state level. "The National Family Health Survey (NFHS-4) has provided useful national- and state level information on the IYCF

practices". "Available data showed a gross intra-state variation. However the NFHS-4 was not designed to provide block level data". "With this background , the present study was undertaken to assess the IYCF practices among children aged less than two years in two block Vidisha and Basoda in Vidisha district of Madhya Pradesh".

1.4 Literature Review:-

"As discussed by Siddarth Ramji in 2009 on nutritional health status of U5 children in Delhi have found that improvement in child care and feeding practices could positively impact nutritional status of children. According to his study mother is one of the main determining factors for feeding practices" ...(.1)

"As discussed by Apurba Singhababu et al on Infant- and Young child- feeding Practices in Bankura District, West Bengal in 2008, India found that late initiation of breastfeeding , low rates of exclusive breast feeding, and inappropriate complementary feeding practices, were the main problems revealed from the study" .....(.2)

"Another cross sectional study by Khan AM et al in2012 was done in children less than 24 months of age coming to immunization clinics were studies". According to this study early initiation of breastfeeding emerged out to be the main determining factor for preventing malnutrition.....(3)

Another study done by Arifeen etal in 2001 in Dhaka Slums revealed the importance of exclusive breastfeeding in preventing the deaths due to respiratory acute infections and diarrhoea.....(4)

As discussed by Dadhich and et al published in Indian Paediatric in 2009 prove the exclusive breastfeeding as an important factor for child survival.....(5)

"MAA-"Mother's Absolute Affection" is a nationwide programme of the Ministry of Health and Family Welfare in an attempt to bring undiluted focus on promotion of breastfeeding and provision of counselling services for supporting breastfeeding through health systems".

"The main goal of IYCF practice is to reduce child mortality and morbidity through optimal feeding of infants and young children". "The Dastak Abhiyan is considered a pioneer program of Government of Madhya Pradesh and was pilot tested in the month of November 2016 and the program offers 10 core activities focused on the reduction of under 5 mortality". "In the first phase It was implemented in 168 blocks of the state which had poor full immunization coverage between 16th- 30th November 2016". The Dastak Abhiyan is one initiative that focuses on concept of locating and identifying the active critical case. Once identified then the benefits are provided to the child at the door step by ASHA, Anganwadi workers and ANM. The entire process of implementation has been started from 15th June 2017. Under Dastak campaign anaemia check- up of children between 0-5 years of age, identification of severely malnourished children between 6 months to 5 year age,

identification of children suffering from diarrhoea, pneumonia and other diseases, usefulness of mother's milk, Iron folic acid and Vitamin A supplementation proposed as per guideline of the state government. In this programme all the frontline health workers go door to door to aware about above information.

1.5 Objectives:-

1. To do the KAP survey regarding IYCF practices among the frontline health service providers and mothers having children 0-23 months..
2. "To assess the adequacy of diet in children aged 6-23 months".
3. To recommend strategies for improvement in compliance of target cohort

2.Methodology

2.1 Study area: "The study was carried out in district Vidisha in Madhya Pradesh".

2.2 Study period: 2 months

2.2 Sampling

a) Sampling Technique: Convenient Sampling

Out of the total block in district 2 blocks VIdisha block and Basoda block were selected .

From two blocks 12 villages were selected .

From 12 villages 12 anganwadis centers were selected .

A list of children who have been delivered in the past two years were obtained from the selected anganwadis centers according to the populations of the village..

b) Sample size: 60 mothers having children under0-23 months of Vidisha block and 60 mothers having children under 0-23 months of Basoda Block at Vidisha District of Madhya Pradesh.

c)Tools and Techniques:-A special designed semi structured questionnaires for face to face interview was used for collection of quantitative information from the sample.

d)**Analysis:-**Data is interpreted through Ms-excel**.**

ANALYSIS AND RESULT

"3.1 Socio-Demographic Characteristics of mothers":

"The respondents were having the following socio-demographic characteristics as given in table 1 below":

'Table1: Socio-Demographic Characteristics of the respondents of Vidisha Block'

'Socio-Demographic Characteristics'	Frequency(n)	Percentage
House Condition	19	31.67
Pucca	25	41.67
Kutcha	26	43.33
Semi Pucca		
Education Level of Mother		
Primary	19	31.67
Middle	37	61.67
Secondary	04	10.81
Graduate	0	0
Illiterate	10	16.67
Occupation of Mother		
Working	3	5
Non working	57	95

Table2: 'Socio-Demographic Characteristics of the respondents of Basoda Block'

Socio-'Demographic Characteristics'	Frequency(n)	Percentage
House Condition		
Pucca	25	41.67
Kutcha	27	45
Semi Pucca	8	13.33
Education Level of Mother		
Primary	17	28.33
Middle	36	60
Secondary	2	3.33
Graduate	0	0
Illiterate	5	8.33
Occupation of Mother		
Working	0	0
Non working	60	100

Interpretation: In this the majority of the respondents, about 12 % were illiterate, and 30 % were having education upto primary, 60 were having upto middle, 7% were having secondary respectively. Most of the mothers about 90% were house wife. Among all the respondents 36% had pucca house, 43% had kutcha house and 28% had semi pucca house.

3.2Feeding practices among the mothers

3.2.1Indicators for assessing the feeding practices of mothers

"In this study the following indicators were used to assess the feeding practices among the mothers":

Core indicators:

1. 'Timely initiation of breastfeeding'.
2. 'Exclusive breastfeeding under 6 months'.
3. 'Timely complementary feeding'.
4. 'Introduction of solid, semi solid food'.
5. 'Continued breastfeeding at 1 year'.
6. 'Minimum dietary diversity'
7. 'Minimum meal frequency'.
8. 'Bottle feeding'.

"Each indicator has been calculated as per the respective formula . Each indicator defined the existing feeding practices among the mothers of infant and young children".

3.2.1.1**Timely initiation of breastfeeding:**

"Definition: Proportion of children 0-23 months who were put to the breast within one hour of birth".

$$\frac{\text{"Children 0-23 months who were put to the breast within one hour"}}{\text{"Children 0-23 months"}}$$

"**Calculation"**: "In this indicator all the children 0-23 months were included and the mother were asked "How long after birth did you first breastfed your child?" and the responses were recorded accordingly e.g. if the mother fed her child within one hour after birth "Yes" was recorded".

"In this study only 39 children 0-23 months of age were put to the breast within one hour of birth out of total 120 from Vidisha block and 34 children from Basoda block as shown in the Table 3".

Table 3 " Initiation of breastfeeding within one hour of birth in Vidisha Block".

Number of breastfed children within one hour(n)	Percentage	Number of breastfed children after one hour	Percentage
39	63%	23	37%

Graph 1:

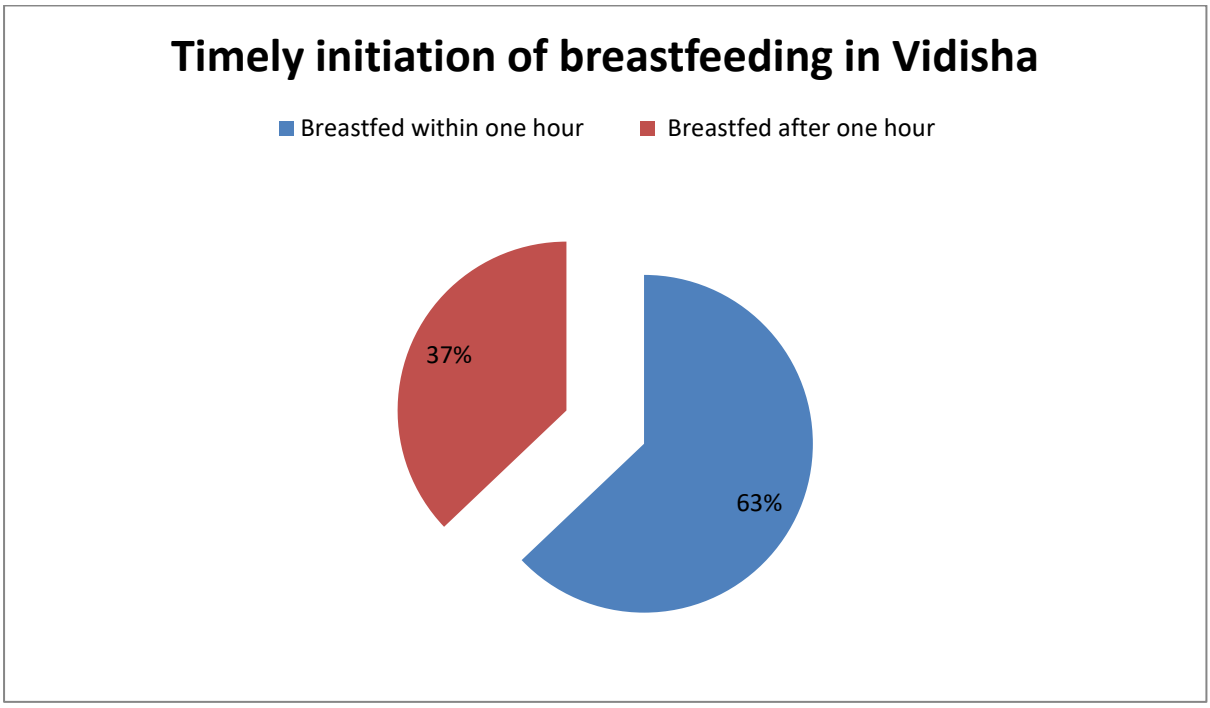
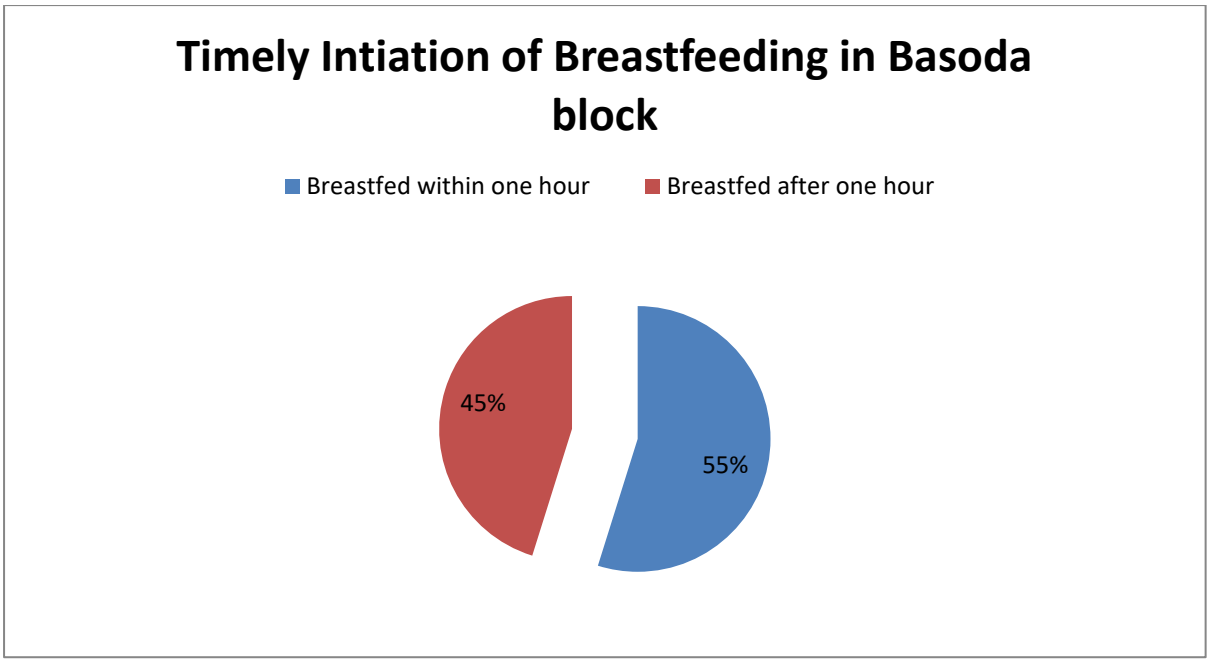


Table 4 Initiation of breastfeeding within one hour of birth in Basoda Block.

Number of breastfed children within one hour(n)	Percentage	Number of breastfed children after one hour	Percentage
34	55%	28	45%

Graph 2:



Interpretation:- So average 59% children were timely breastfed within one hour in the district.

3.2.1.2 "Exclusive breastfeeding under 6 months"

Definition:-"Proportion of infants 0-5 months who were exclusively breastfed".

"Infant 0-5 months who received breast milk exclusively till 6 months"

" Infants 0-5 months"

Calculations: In this indicator 0-5 months infant who were breastfed during previous day, who were not given any liquid yesterday and were not given any food yesterday. "ORS, Vitamins and mineral supplements are excluded from the list of liquids and are allowed under the definition of breast milk. In this study 12 infants (71%) from Vidisha Block and 5 infants (56%) from Basoda block 0-5 months were reported to be exclusively breastfed as shown in the table 5 and 6".

"Table 5:**Exclusively breastfeeding practices among mothers of the children less than 6 months at Vidisha Block"**

No. of 0-5 months old infant	Number of 0-5 months infant exclusively breastfed under 6 months	Percentage

17	12	71%

Graph 3:

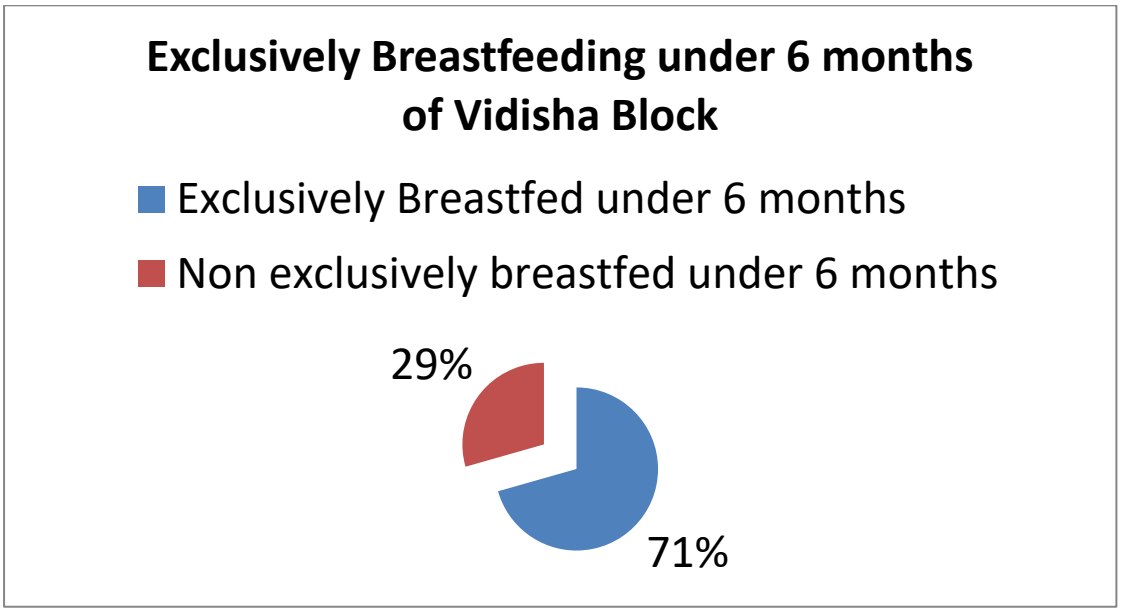
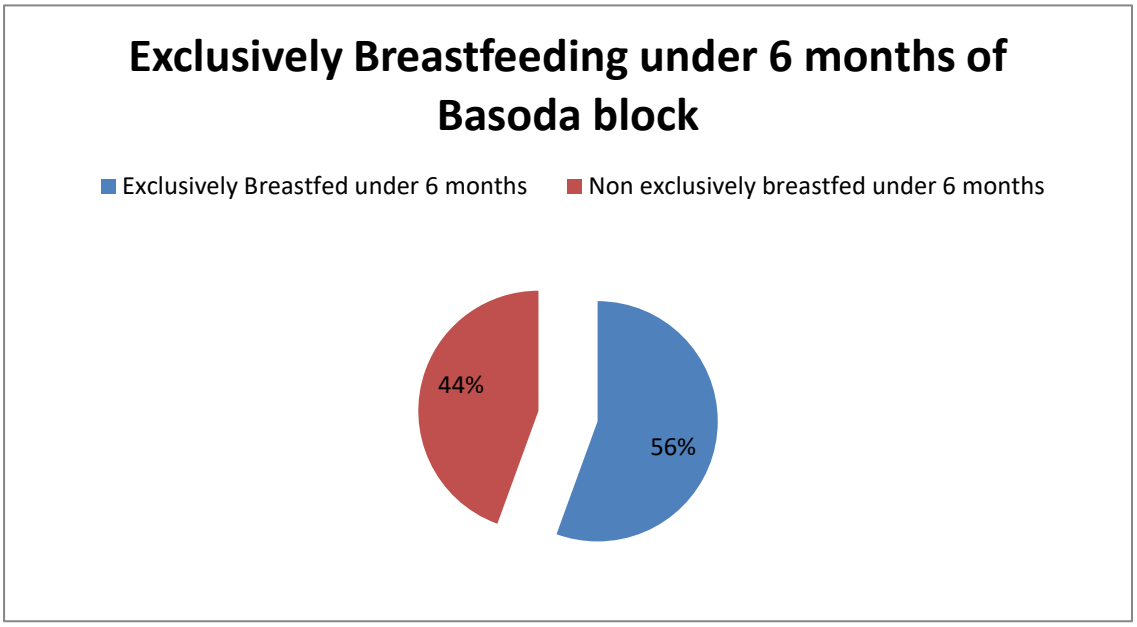


Table 6 ":**Exclusively breastfeeding practices among mothers of the children less than 6 months at Basoda Block"**

No. of 0-5 months old infant	"Number of 0-5 months infant exclusively breastfed under 6 months"	Percentage
9	5	56%

Graph 4:



Interpretation:- So average 63.5 %children Exclusively breastfed under 6 months

3.2.1.3 'Timely complementary feeding (6-9) months'

'Definition: Proportion of infants 6-9 months who received breastmilk and a solid or semi-solid food (based on 24 hour dietary recall).'

' No of infants 6-9 months who received breastmilk and a solid or semi solid food'

'Total number of infants 6-9 months'

Calculations: "This indicators includes infants who were breastfed yesterday and were given some solid or semi solid foods yesterday". "In this study 37% of 6-9 months infants from Vidisha block and 25% of 6-9 months were given timely complementary feeding as shown in the table 6 and 7".

Table 6 Timely complementary feeding of infants at Vidisha Block

Number of 6-9 month old infants	Number of 6-9 month old infant given timely complementary feeding	Percentage
9	4	44%

Graph 5

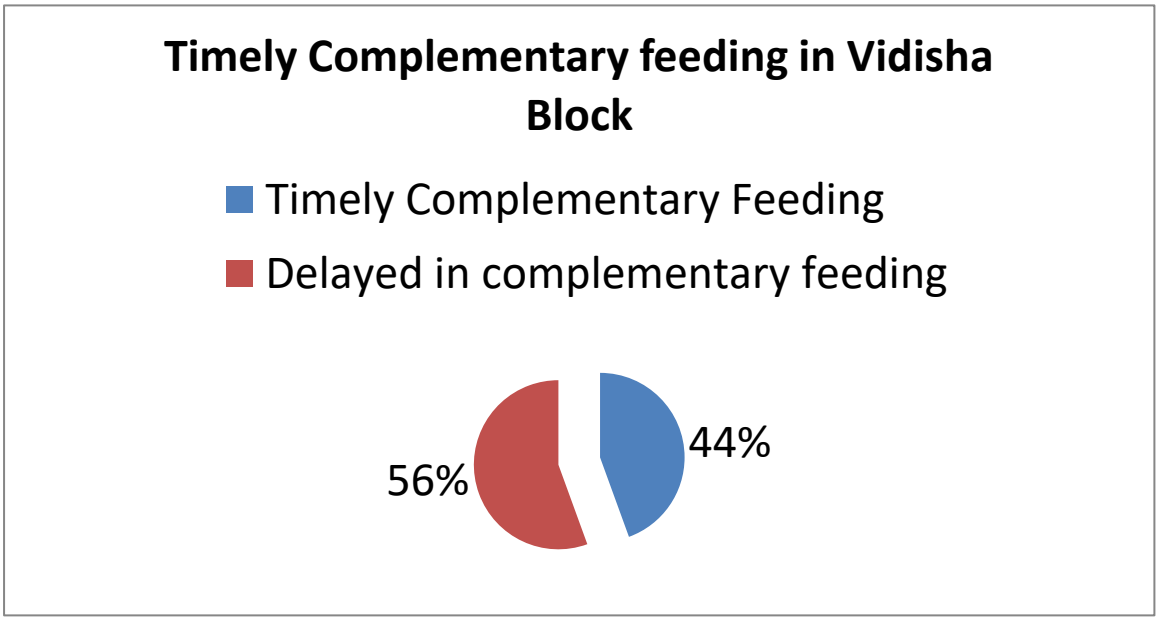
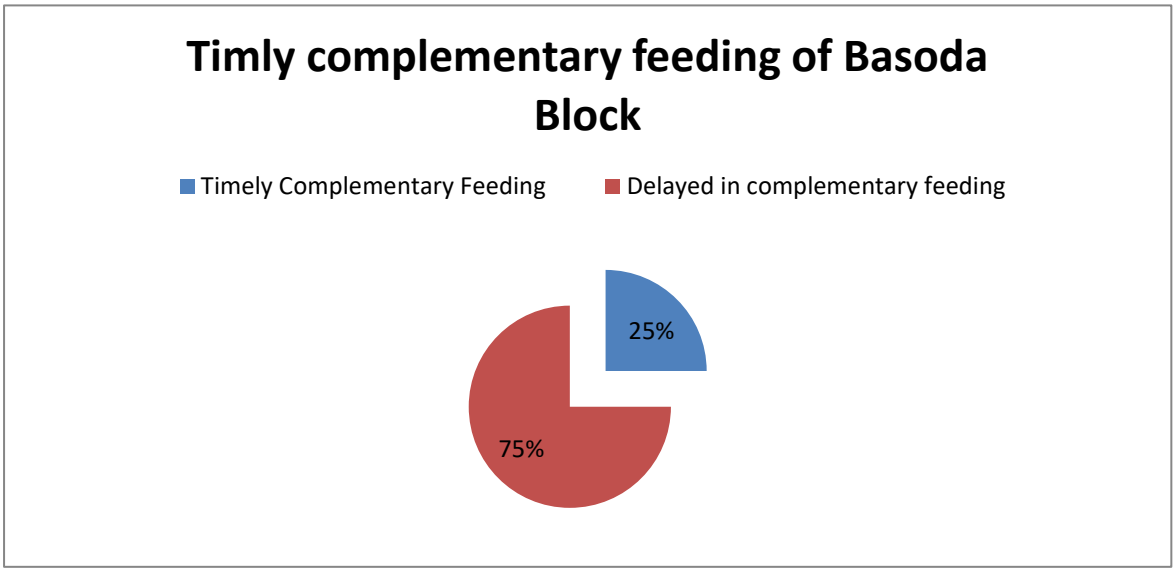


Table 7 Timely complementary feeding of infants at Basoda Block

Number of 6-9 month old infants	Number of 6-9 month old infant given timely complementary feeding	Percentage
8	2	25%

Graph 6:



Interpretation: Average 34.5% of the children under 6-9 months take timely complementary feeding

3.2.1.4 "Introduction of soft foods at 6-8 months"

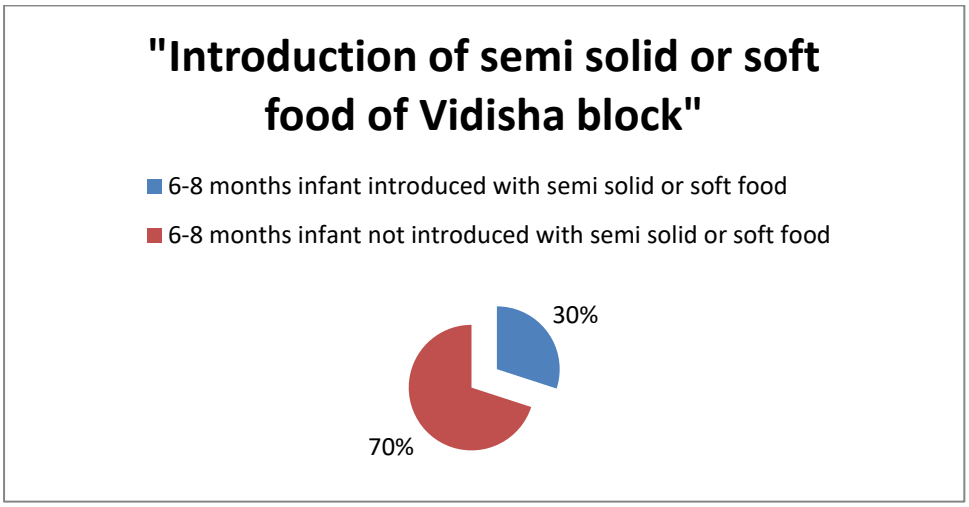
Definition: "Proportion of infants 6-8 months who received soft foods"

"Number of infants 6-8 months old, who received soft foods during the previous day"

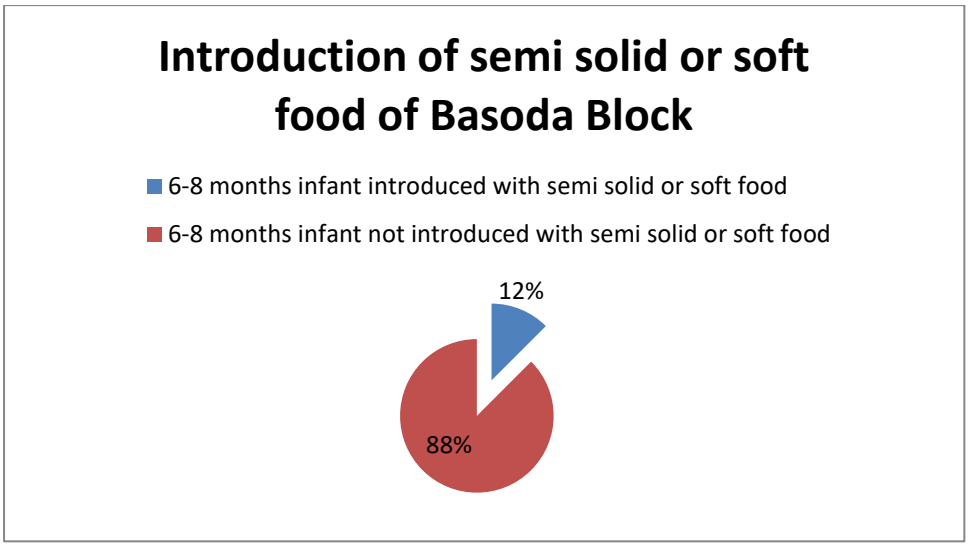
"Infants 6-8 months old"

Calculation: "In this indicator mothers were asked about the yesterday feeding of soft foods to their infants". "Liquids were not included in the indicator, however thick soup and stews were included in this indicator". "3 infants received semi-solid or soft food yesterday out of total 10 infants from Vidisha Block and out of total 8, 1 infant was introduced with solid, soft foods yesterday in the age group of 6-8 months as shown as shown as graph 7 and 8".

Graph 7 " Introduction of soft foods among Infants 6-8 months age at Vidisha Block" :



Graph 8 Introduction of soft foods among Infants 6-8 months age at Basoda Block :



"Interpretation: So average 30.5% children under 6-8 months introduce with soft foods".

3.2.1.5 "Continued breastfeeding at 1 year"

"Definition: Proportion of children 12-15 months old who were fed breast milk"

"Children 12-15 months old who received breast milk during the previous day"

"Children 12-15 months"

"Calculations: This indicators asked about the feeding of breast milk yesterday. In this study 15 out of 22 children from Vidisha Block and 16 out of 37 children 12-15 months of age received breast milk during the previous day as shown in the table 8 and table 9".

"Table 8:Continued breastfeeding at 1 year at Vidisha Block":

Number of 12-15 months old children	Number of 12-15 months old children with continued breastfeeding at 1 year	Percentage
22	15	68

Graph 9

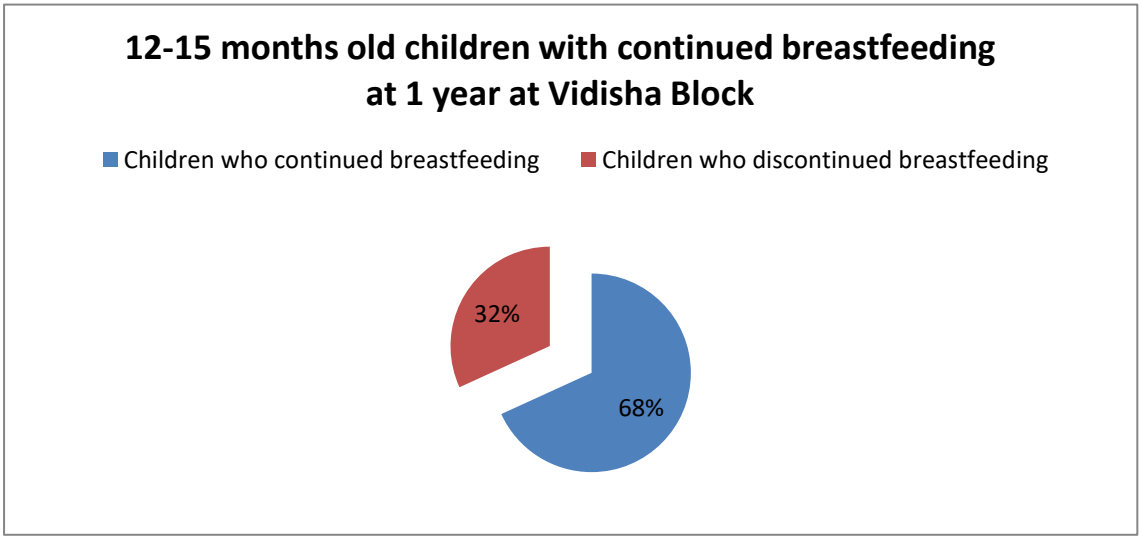
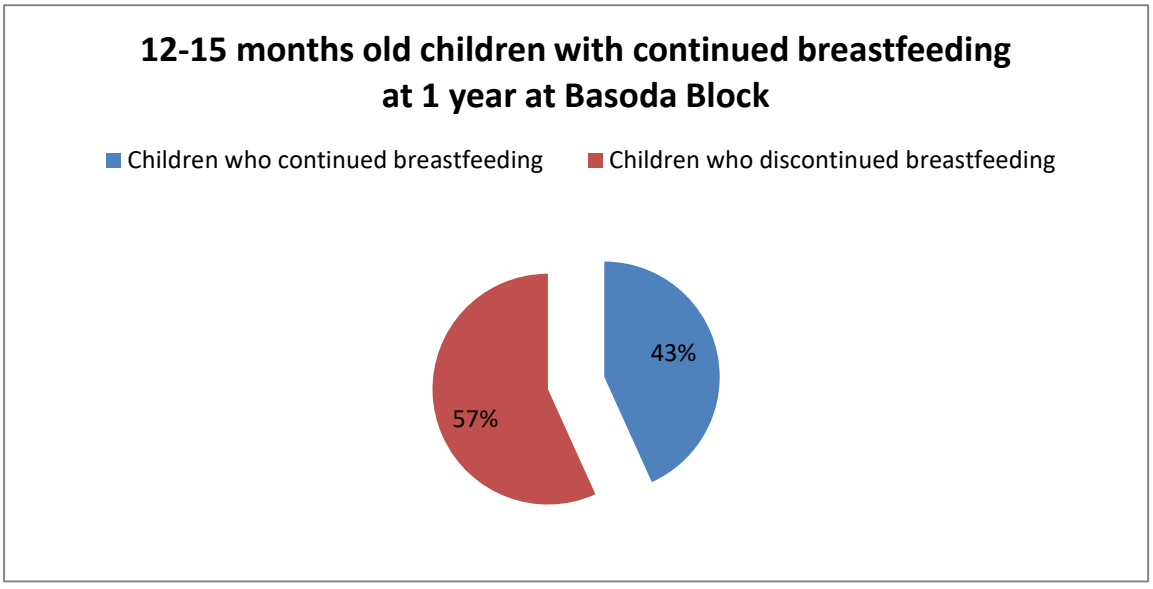


Table 9:Continued breastfeeding at 1 year at Basoda Block:

Number of 12-15 months old children	Number of 12-15 months old children with continued breastfeeding at 1 year	Percentage
37	16	43

Graph 10



"Interpretation:- Average 55.5% 12-15 months old children continued breastfed at 1 year"

"3.2.1.6 Minimum dietary diversity"

"Definition: Proportion of children 6-23 months who received foods from 4 or more food groups".

"Children 6-23 months old who received foods from 4 or more groups during the previous day"

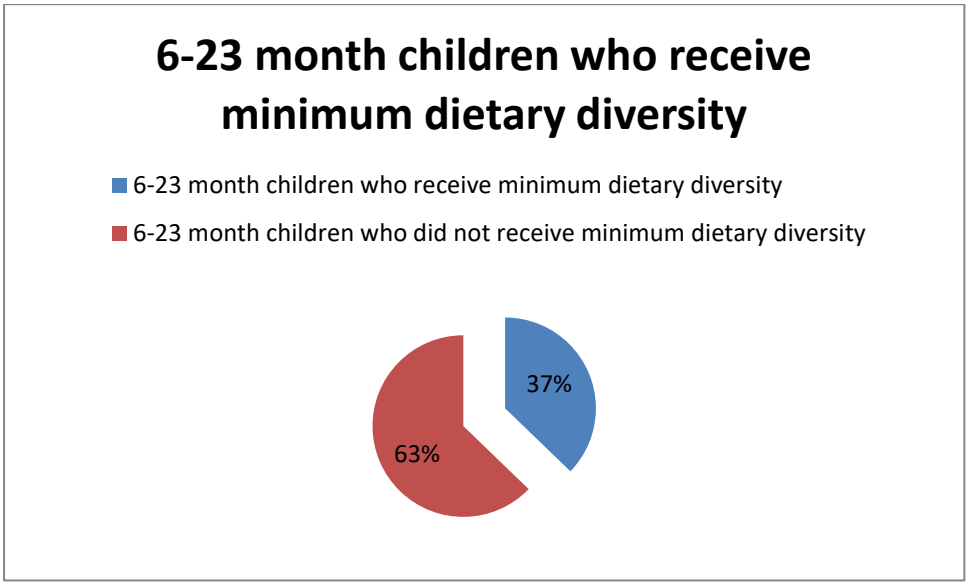
"Children 6-23 months"

"Calculation: This indicator involved 7 food groups and these are as under":

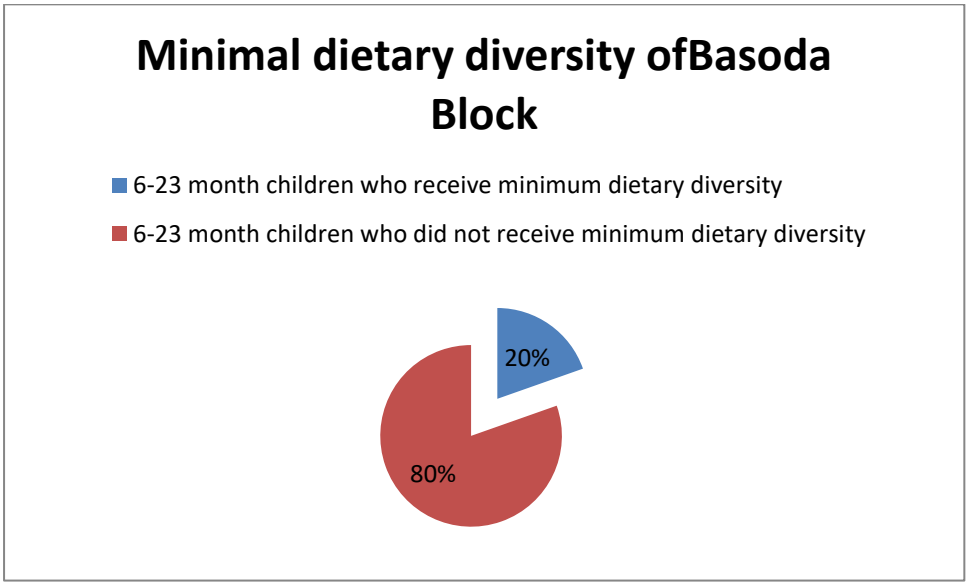
- "Grains, roots and tubers"
- "Legumes and nuts"
- "Dairy Products"
- "Flesh foods"
- "Eggs"
- "Vitamin- A rich fruits and vegetables"
- "Other Fruits and Vegetables"

"Those 6-23 month old children were included children who were given any of the 4 or more than 4 of the above 7 food group. In this study 16 out of 43 children from Vidisha block and 10 out of 51 children from Basoda block of 6-23 months age who achieved minimum dietary diversity".

Graph 11 Minimum dietary diversity achieved of Vidisha block:



Graph 12 Minimum dietary diversity achieved of Basoda block:



Interpretation: . So average 28.5 % children 6-23 month age children receive minimum dietary diversity in Vidisha District

3.2.1.7 Minimum Meal Frequency

"Definition: Proportion of Breastfed children and non breastfed children 6-23 months who receive solid, semi-solid or soft foods (but also including milk feeds for non breastfed children) the minimum number of times or more".

"Breastfed children 6-23 months who received solid, semi-solid or soft foods the minimum number times or more during the previous day"

"Breastfed children 6-23 months old"

And

"Breastfed children 6-23 months who received solid, semi-solid or soft foods the minimum number times or more during the previous day"

"Non-Breastfed children 6-23 months old"

"Calculation: This indicator was disaggregated to other different age group due to different pattern of feeding at different age groups. Here minimum is defined as" :

- "2 times for breastfed infant 6-8 months"
- "3 times for breastfed children 9-23 months"
- "4 times for non-breastfed children 6-23 months"

"For age group 6-8 and 9-23 months: Feeding of breast milk yesterday, frequency of feeding of solid, semi-solid or soft foods yesterday were included in these age groups".

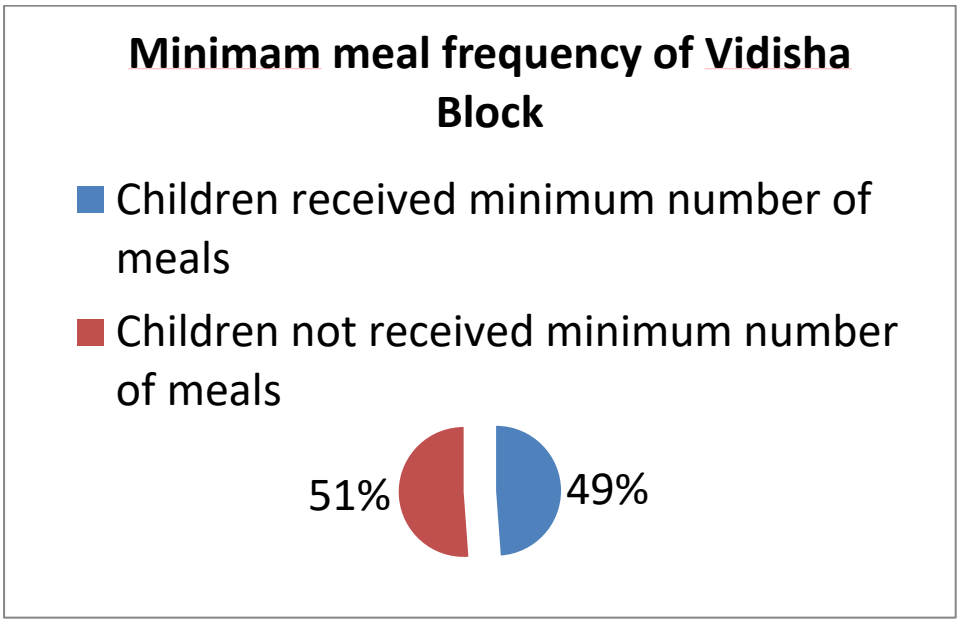
"For age group 6-23 months of non breastfed children: In this age group those children who were not breastfed but were given infant formula yesterday, who received animal milk or powder milk yesterday and who were given yogurt yesterday".

"In this study, 4 out of 10 and 10 out of 21, breastfed infants who were 6-8 and 9-23 months old respectively , met the requirements for minimum no of meals. In addition to this 4 of 12 non-breastfed infants 6-23 months old met the requirements for minimum no of meals"." Hence 21 children 6-23 months out of 43 received the minimum numbers of meals in Vidisha Block as shown in the table 10 and graph 13".

Table 10: Age group wise minimum meal frequency in Vidisha Block

Breastfd/Non-breastfed	Age group	"Number of infants in the age group"	"Number of infants who meet the requirementsof mimumno of meals"	Percentage
Breastfed	6-8 months	10(Breastfed)	4	40
	9-23months	21 (Breastfed)	10	47.62
Non-breastfed	6-23 months	12(Non-breastfed)	4	33.33
Total	6-23 months	43	21	48.84

Graph 14: Age group wise minimum meal frequency in Vidisha Block

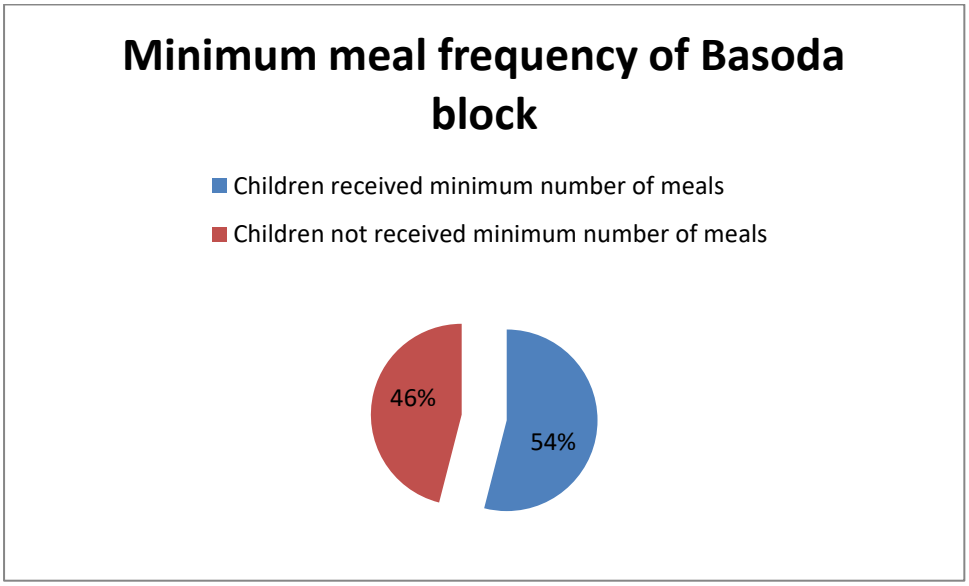


"In this study, 3 out of 7 and 13 out of 23, breastfed infants who were 6-8 and 9-23 months old respectively , met the requirements for minimum no of meals. In addition to this 11 of 20 non-breastfed infants 6-23 months old met the requirements for minimum no of meals". "Hence 21 children 6-23 months out of 43 received the minimum numbers of meals in Basoda Block as shown in the table 11 and graph 14".

Table 11: Age group wise minimum meal frequency in Basoda Block

Breastfd/Non-breastfed	Age group	Number of infants in the age group	Number of infants who meet the requirementsof mimumno of meals	Percentage
Breastfed	6-8 months	7(Breastfed)	3	42.86%
	9-23months	23 (Breastfed)	13	56.52
Non-breastfed	6-23 months	20 (Non-breastfed)	11	55
Total	6-23 months	50	27	54

Graph14: Age group wise minimum meal frequency in Basoda Block



Interpretation: :- **Average 51.5 % breastfed and non- breastfed children receive minimum number of meals**

3.2.1.8 " Bottle Feeding"

"Definition: Proportion of children 0-23 months old who were fed with a bottle during the previous day"

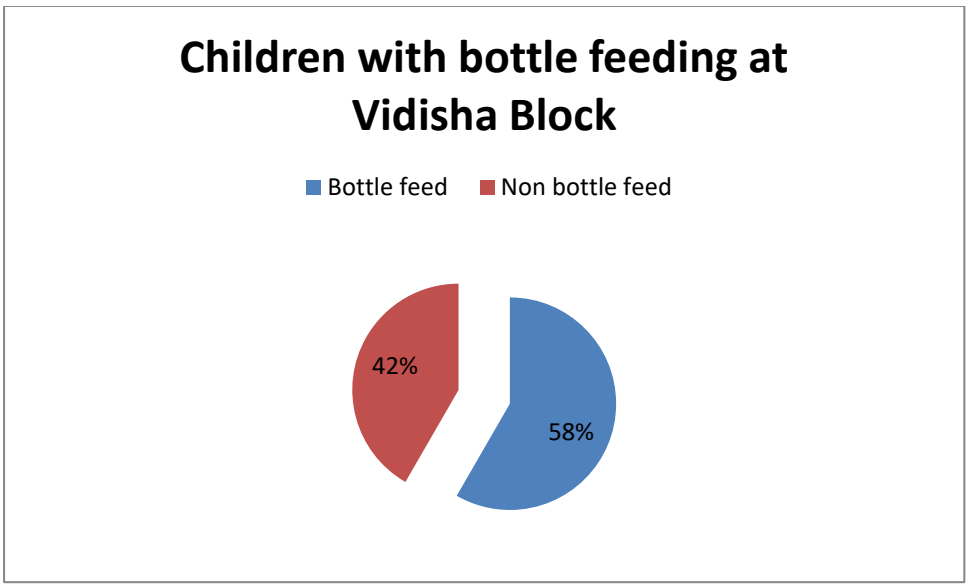
"Children 0-23 months old who were fed with a bottle during the previous day"

"Children 0-23 months"

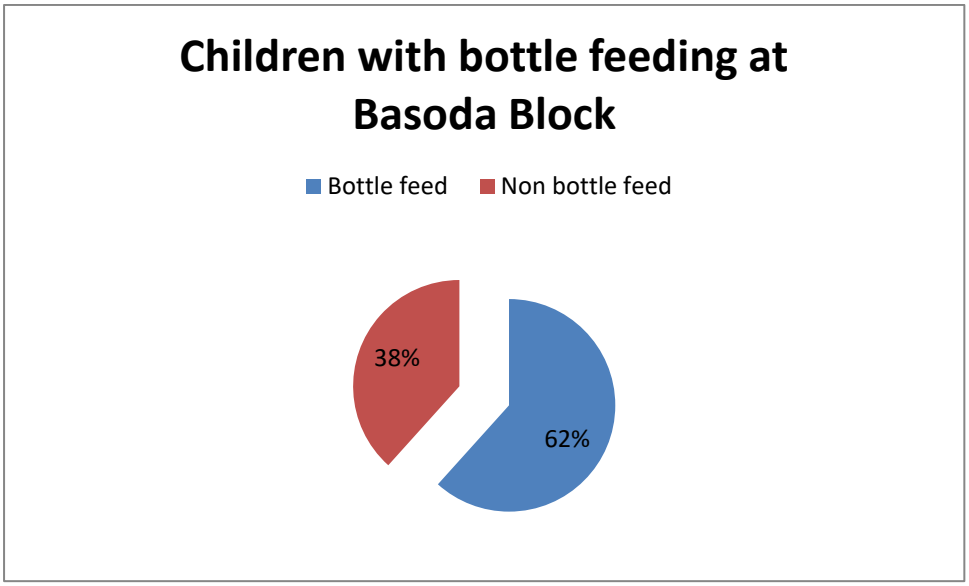
"Here the children less than 23 months who received any food or drink from bottle during the previous day (including breast milk) were included regardless of whether or not the infant was breastfed".

"Here in this study 35 out of 60 from Vidisha Block and 37 out of 60 from Basoda block of 0-23 months were bottle fed. This is shown in the graph 15 and 16".

Graph 15. "Bottle feeding 0-23 months children of Vidisha Block":



Graph 16. Bottle feeding 0-23 months children of Basoda Block:



Interpretation:- :- Average 60 % children feed with bottle in Vidisha District.

3.3 " Knowledge and Attitude regarding IYCF practices of the mothers"

3.3.1 "Indicators for assessing the knowledge and attitude regarding IYCF practices of mothers"

" In this study following indicators were used to assess the Knowledge and Attitude of mothers":

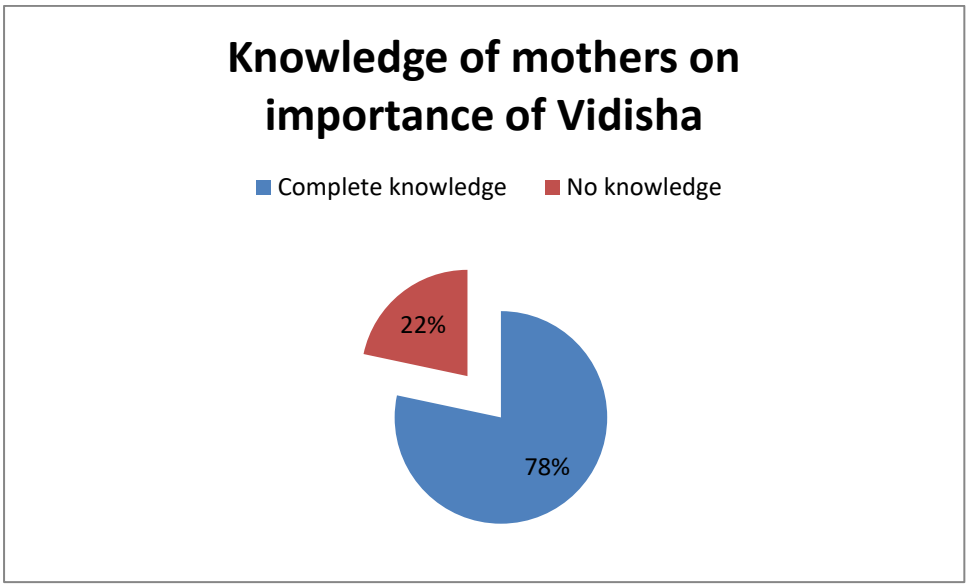
Indicators:-

- "Importance of Breastfeeding"
- "Different position of breastfeeding"
- "Breast Attachment during breastfeeding"
- "Exclusive breastfeeding"
- "Alternative methods of feeding a new born apart from breastfeeding".
- "Introducing of semi-solid or soft food at 6 months"
- " Exclusive breastfeeding reduce episodes of diarrhoea"
- "Importance of colostrums for new born baby".
- "Water consumption during exclusively breastfeeding".

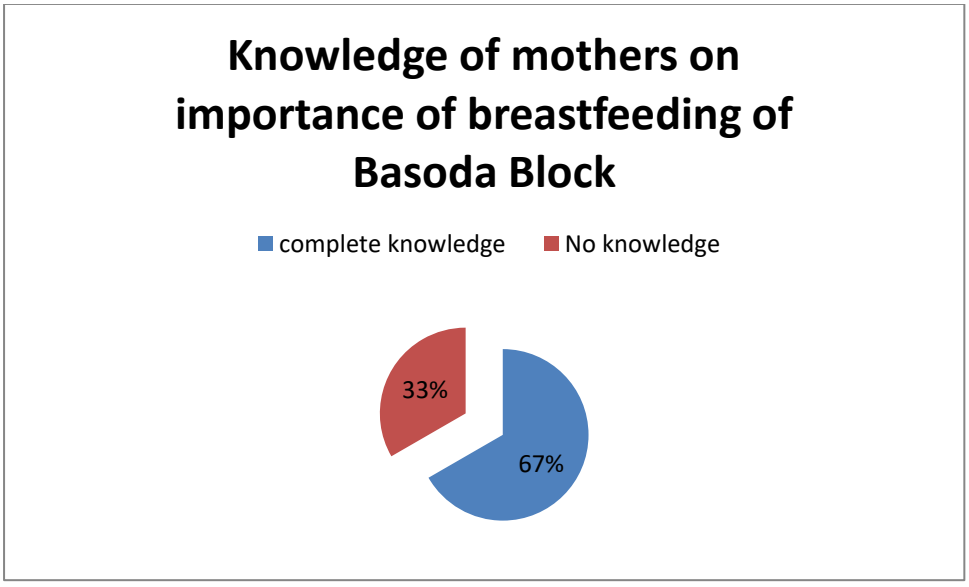
3.3.1.1 Importance of breastfeeding

In this study out of 60 mothers 47 have knowledge about importance of breastfeeding in Vidisha block and out of 60 mothers, 40 have knowledge in Basoda block . This is shown in the graph 17 and graph 18.

Graph 17 Knowledge about breastfeeding in Vidisha Block



Graph 18 Knowledge about breastfeeding in Basoda Block



Interpretation: Average 72.5 % mothers have knowledge about importance of breastfeeding in Vidisha Didtrict

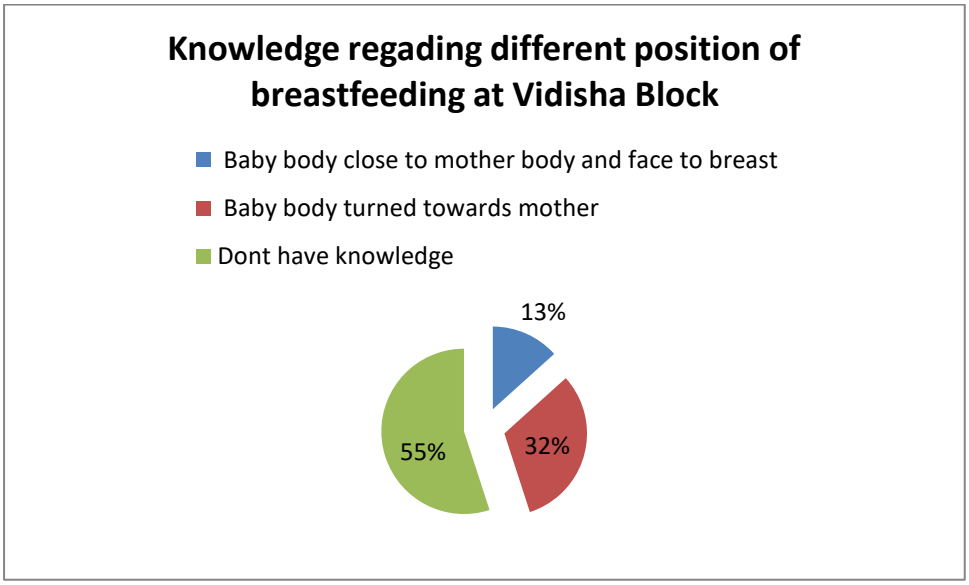
3.3.1.2" Different types of position of breastfeeding"

There are 4 types of breastfeeding positions

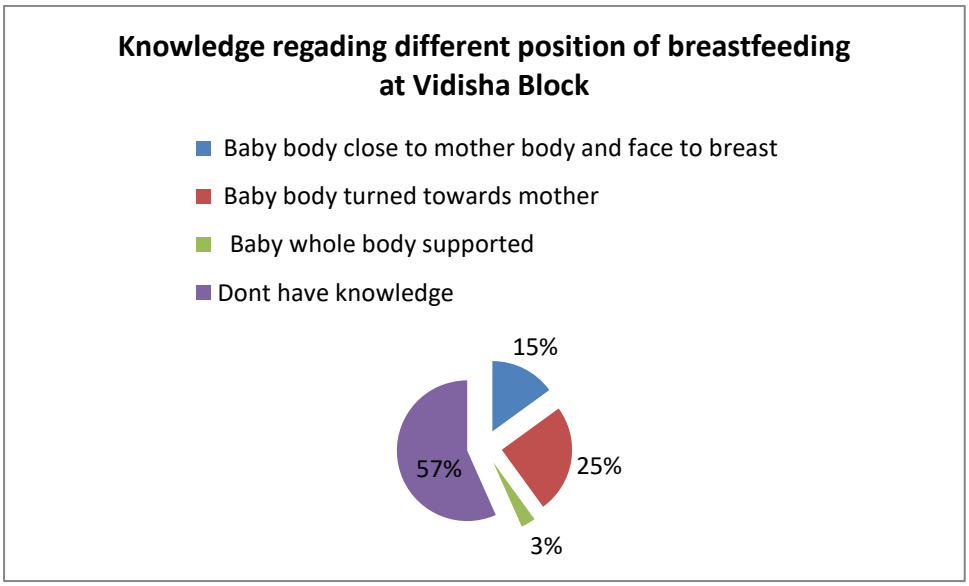
- "Baby neck straight or slightly bent slightly back and body straight"
- "Baby body turned towards mother"
- "Baby body close to mother body and face to breast"
- "Baby whole body supported"

In this study, Out of this 4 positions out of 60 mothers 19 mothers were aware about **(Baby body turned towards mother)and 8 mothers were aware about (Baby body close to mother body and face to breast)**in Vidisha block and out of 60 mothers 15 were aware about **(Baby body turned towards mother)**, 9 mothers were aware about **(Baby body close to mother body and face to breast)** and 2 were aware about**(Baby whole body supported)** in Basoda block . This is shown in the graph 19 and graph 20.

Graph 19 Knowledge about different types of positions at Vidisha Block



Graph 20 Knowledge about different types of positions at Basoda Block



Interpretation: Average 45% of mothers are aware about different position of breastfeeding in Vidisha district

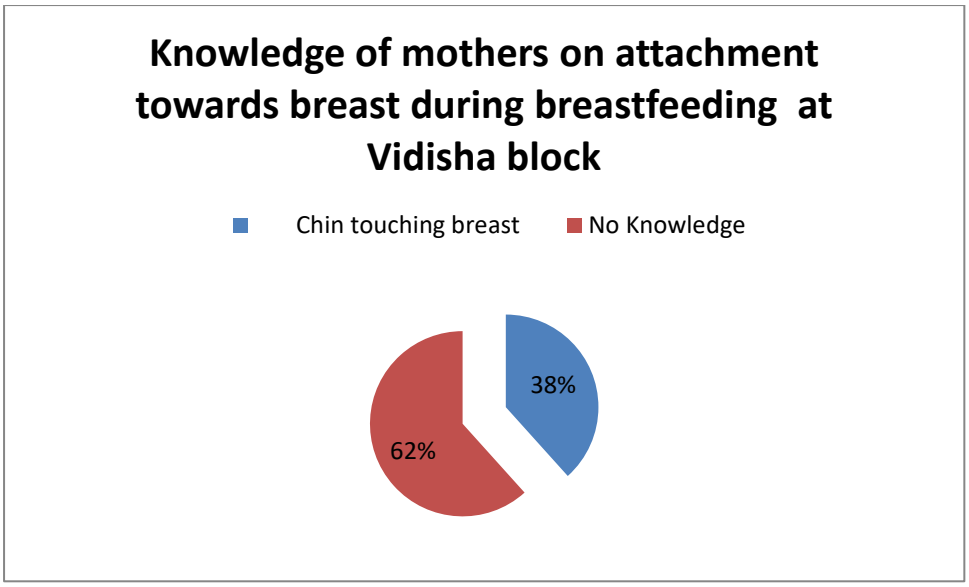
3.3.1.3"Breast attachment during breastfeeding"

"There are 5 types of correct breast attachment during breastfeeding"

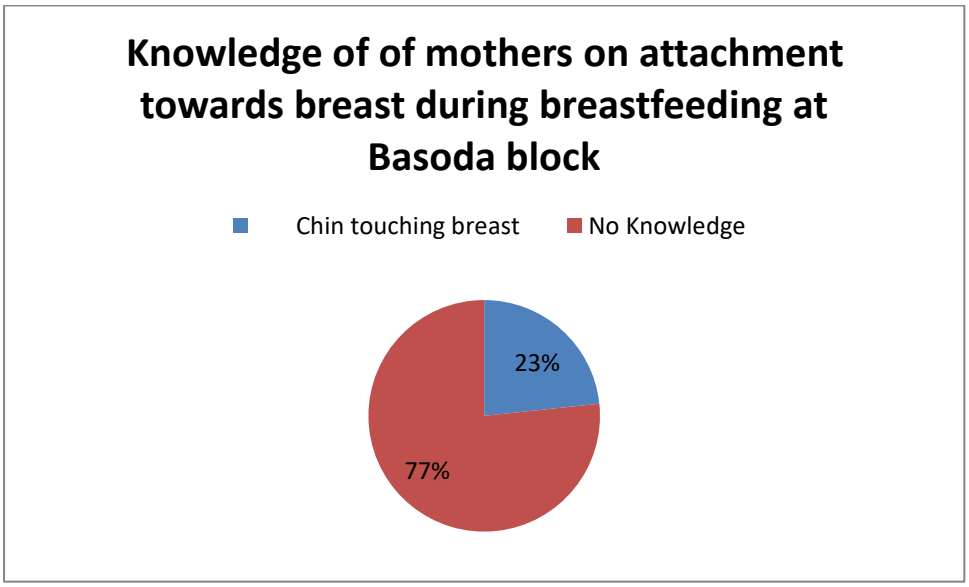
- "Chin touching breast"
- "Mouth wide and open"
- "Lowest lip turn outward"
- "More areola seen above baby mouth"

In this study out of 4 attachment out of 60 mothers 23 have knowledge about**(Chin touching breast)** attachment towards breast during breastfeeding in Vidisha block and out of 60 mothers 14 have knowledge in Basoda block . This is shown in the graph 21 and graph 22

Graph 21 Knowledge of attachment towards breast during breastfeeding at Vidisha Block



Graph 22 Knowledge of attachment towards breast during breastfeeding at Basoda Block

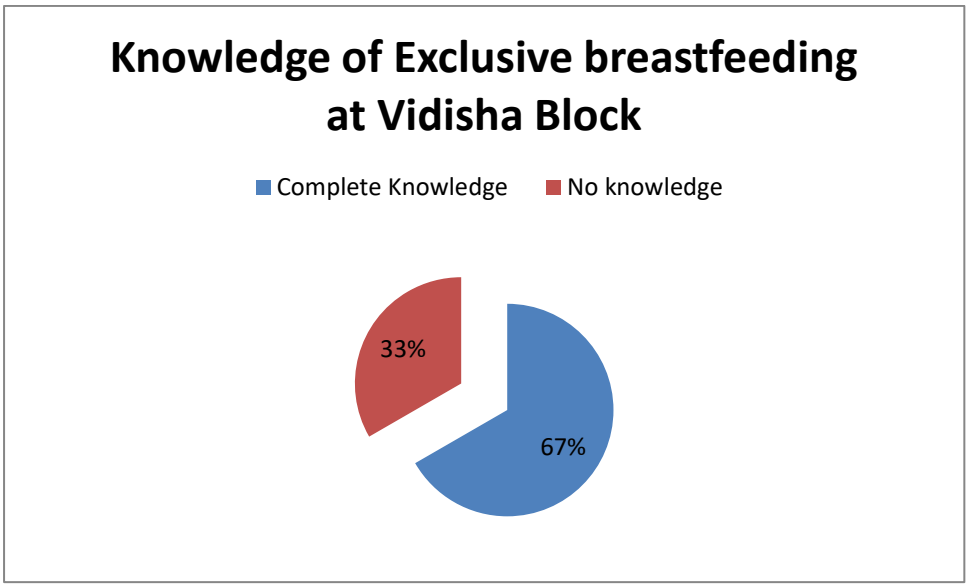


Interpretation: Average 45% of mothers are aware about attachment towards breast during breastfeeding in Vidisha district

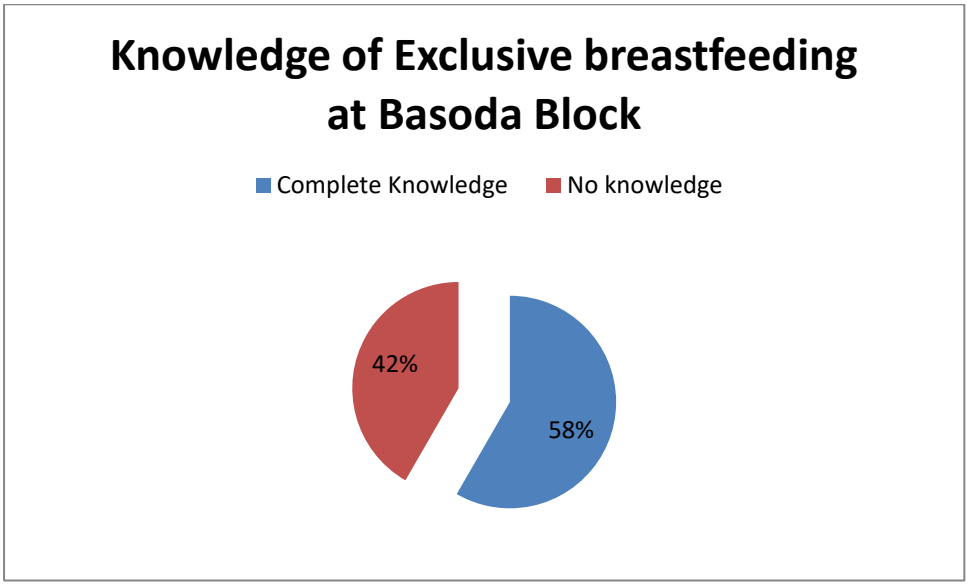
3.3.1.4 Exclusive breastfeeding

In this study out of 60 mothers, 40 have knowledge about importance of Exclusive breastfeeding in Vidisha block and out of 60 mothers, 35 have knowledge in Basoda block . This is shown in the graph 23 and graph 24

Graph23 Knowledge of Exclusive Breastfeeding at Vidisha Block



Graph24 Knowledge of Exclusive Breastfeeding at Basoda Block



Interpretation: Average 62.5 % of mother are aware about exclusive breastfeeding in Vidisha district

3.3.1.5Alternative methods of feeding a new born apart from breastfeeding.

There are 4 alternative methods of feeding

a) By spoon and katori

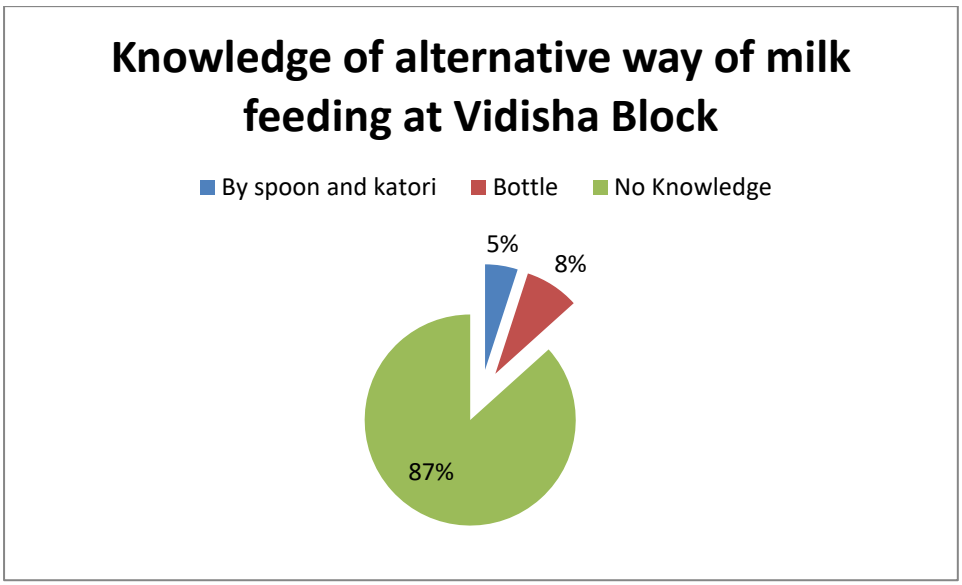
b) Cup

c) Bottle

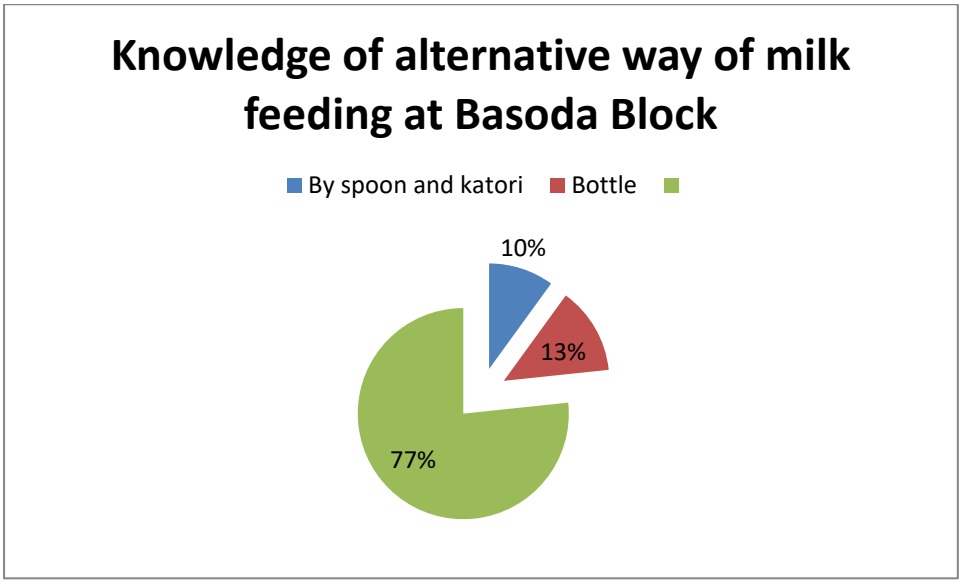
d) Paladai

In this study out of 60 mothers 3mothers have knowledge about alternative method of feeding by spoon and katori and 5 mothers have knowledge about alternative method of feeding by bottle in Vidisha block and out of 60 mothers 6 mothers have knowledge about alternative method of feeding by spoon and katori and 8 mothers have knowledge about alternative method of feeding by bottle in Basoda block . This is shown in the graph 25 and graph 26

Graph25:Knowledge of alternative way of milk feeding at Vidisha Block



Graph26:Knowledge of alternative way of milk feeding at Basoda Block

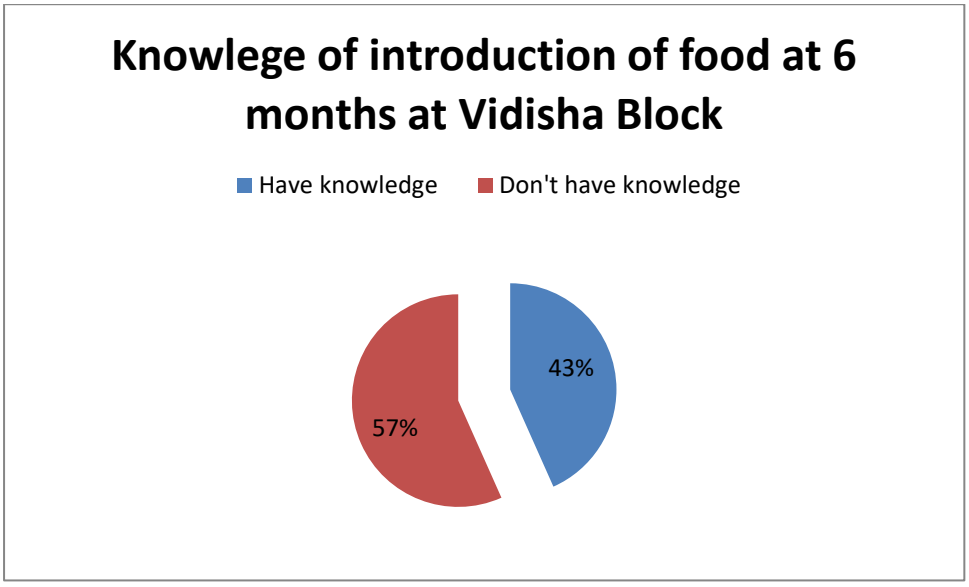


Interpretation: Average 18% of the mothers are aware about alternative way of milk feeding apart from breastfeeding in Vidisha district

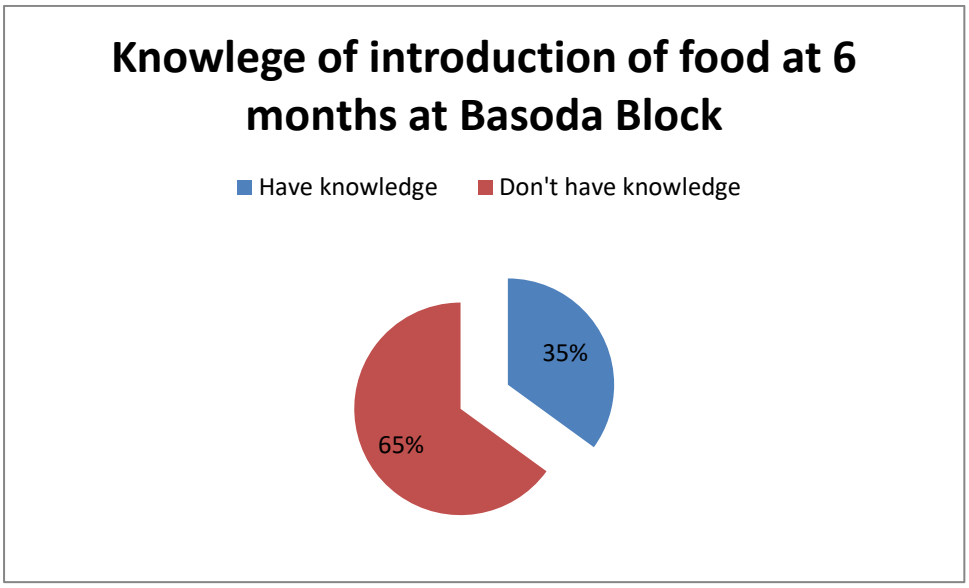
3.3.1.6Introduction of soft food at 6 month

In this study out of 60 mothers, 26 have knowledge about introduction of soid,semi-solid or soft food in Vidisha block and out of 60 mothers, 21 have knowledge in Basoda block . This is shown in the graph 27 and graph 28

Graph27 knowledge about introduction of soft food in Vidisha block



Graph28 knowledge about introduction of soft food in Basoda block



Interpretation: Average 39% of mothers are aware about introduction of soft food at 6 month in Vidisha District

Discussion

'This cross sectional study attempts to determine the current feeding practices and knowledge of mothers having children 0-23 months'.

"In this the majority of the respondents, about 12 % are illiterate, and 30 % were having education upto primary, 60 were having upto middle, 7% were having secondary respectively. Most of the mothers about 90% were house wife".

"Eight indicators were used to determine the current feeding practices among the mothers". "In this study only 59% were put to breast within 1 hour after birth. About 63.5% 0-5 months infant were exclusively breastfed for a period of 6 months". "Only 34.5% of 6-9 months of infant were timely given the complementary food along with breast milk". "However only 30.5% of 6-8 months infant were given solid, semi-solid or soft food without breast milk". "About 55.5% 0f 12-15 months children received continued breastfeeding for period of 1 year". "There were only 28.5 % of children with age of 6-23 months who were having minimum diversity in diet". "Here diversity means the usage diversification in the 7 food groups according to the WHO guidelines". "About 51.5 % 6-23 months children were having a frequency in their meals". "This included both breastfed and non-breastfed children and about 60% of 0-23 months children were fed with bottle".

"Six indicators were used to determine the knowledge of mothers regarding feeding practices among the mothers". "In this study about 73% of mothers were about importance of breastfeeding". "Only 45% of mothers were aware about different position of breastfeeding and attachment towards breast during breastfeeding". "However 62% of mother had knowledge about exclusive breastfeeding". "There were only 18% of mother who had knowledge about different way of milk feeding apart from breastfeeding". "And only 39% of mothers were aware about introduction of solid, semi-solid or soft food at 6 month age"

4.CONCLUSION

Practice of late feeding of infant just after the birth is high. Feeding practices like Exclusive breastfeeding and timely complementary feeding are poor. Diet provided to most of the infants is neither appropriate in frequency nor acceptable as per guideline. Constant breastfeeding has a positive relationship in reducing malnutrition.

5. RECOMMENDATION

- "Intervention need to be at the household level using positive deviance approach and behavioural change communication strategies".
- "Consistent message on child care and feeding practices by sensitizing Frontline health service workers and AHHA workers".
- "Area specific programme are to be planned to create an enabling environment for comprehensive nutrition".
- "Health education of mothers/caregivers, health and nutrition workers to protect , promote and sustain the optimal IYCF practices in Vidisha district of MP".

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