Internship Training

At

INDIA HEALTH ACTION TRUST

A Study To Assess Infant Young Child Feeding Practices Of Children Under Two Years In Bareilly And Shahjahanpur Districts Of Uttar Pradesh

By

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PG/14/046

Under the guidance of

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Post Graduate Diploma in Hospital and Health Management

2014-16

International Institute of Health Management Research

New Delhi

India Health Action Trust

INDIA HEALTH ACTION TRUST

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A Study To Assess Infant Young Child Feeding Practices Of Children Under Two Years In Bareilly And Shahjahanpur Districts Of Uttar Pradesh

From February to April, 2016

She comes across as a committed, sincere & diligent person who has a strong drive & zeal for learning
We wish her all the best for future endeavors

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This is to certify that Pragya Sharma student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone internship training at INDIA HEALTH ACTION TRUSTfrom February to April.
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I wish him all success in all his future endeavors.

Dr. A.K. Agarwal
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The following dissertation titled **"A Study To Assess Infant Young Child Feeding Practices Of Children Under Two Years In Bareilly And Shahjahanpur Districts Of Uttar Pradesh"** at **International Institute of Health Management Research, New Delhi** is here by approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn there in but approve the dissertation only for the purpose it is submitted.

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This is to certify that **Dr. Pragya Sharma,** a graduate student of the **Post- Graduate Diploma in Health and Hospital Management** has worked under our guidance and supervision. She is submitting this dissertation titled" **A Study To Assess Infant Young Child Feeding Practices Of Children Under Two Years In Bareilly And Shahjahanpur Districts Of Uttar Pradesh** at IHAT in partial fulfilment of the requirements for the award of the Post- Graduate Diploma in Health and Hospital Management.

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This is to certify that the dissertation titled "**A Study To Assess Infant Young Child Feeding Practices Of Children Under Two Years In Bareilly And Shahjahanpur Districts Of Uttar Pradesh"**and submitted by **(Pragya Sharma)** Enrollment No **PG/14/046** under the supervision of Dr.VinayTripathifor award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from **February 2016 to April 2016** 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.

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FEEDBACK FORM

Name of the Student: Dr. Pragya Sharma

Dissertation Organisation: India Health Action Trust

Area of Dissertation: Nutrition

Attendance: 100%

Objectives achieved:

- Training of CRP about nutrition
- Visits to Anganwadi centres for observation and assessment
- Participation in Districts, Block and Zonal Meetings held by an organization

Strength:

- Hard working and sincere
- Always complete tasks with full dedication
- Good analytical and communication skills
- Good Team player

Suggestions for Improvement: Coordination skills can be an area for improvement.

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Date: 14 may 2016
Place: Bareilly

PREFACE

The PGDHM (hospital and health management) course is well structured and integrated course of business studies. The main objectives of practical training at MBA level is to develop skill in students by supplement to the theoretical study of business management in general. Professors give us theoretical knowledge of various subjects in the institute. But we are practically exposed of such subjects when we get the training in the organization. It is the training through which we come to know that what an organization is and how it works. During this whole training I got a lot of experience and came to know about management practices in real that how it differs from those of theoretical knowledge and the practically in the real life.

It's very beneficial to learn health care delivery system at various levels. I observed the implementation of various National Health Programmes at National/State/District levels, I understood various functions of health systems by interactions with key stakeholders, policy makers, programme managers, academicians and researchers.

During my training period I had an overview of various programmes undertaken By Uttar Pradesh Technical Support Unit including the current status of the programmes. I also carried out a small study on-

"A Study to Assess Infant Young Child Feeding Practices of Children Under Two Years in Bareilly and Shahjahanpur Districts of Uttar Pradesh"

I have tried to put my best effort to complete this task on the basis of skill that I have achieved during my studies in the institute.

ACKNOWLEDGEMENT

At the onset of the report I would like to express my special gratitude and appreciation for my college authorities for allowing me to pursue my Dissertation from India Health Action Trust, also own as Uttar Pradesh (Technical Support Unit).

I would like to extend my special gratitude for my mentor, Dr Vinay Tripathi, for helping me in my dissertation and guiding me throughout the process.

I would also like to acknowledge with much appreciation the crucial role of Mrs Mansi Shekhar, State Team Leader (Nutrition Project), UP (TSU) and Mr Umesh Singh, Zonal Community Specialist, UP (TSU) who despite of other pre occupations and busy schedule were there to guide me and whose stimulating suggestions and encouragement helped me complete my training.

So I would like to thank all the consultants in various departments and other staff members at IHAT for being so helpful all the time and making this Dissertation project an unforgettable experience.

A special thanks to Mr Vikas Gothalwal, Exexutive Director, UP (TSU) and Mr Sanjeev, Team leader (Nutrition Project) UP TSU.

Finally, and most importantly, I would like to thank God for allowing me to complete my project, my beloved parents for their blessings and my friends for their help and wishes for the successful completion of this training.

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ABBREVIATIONS

ABBREVIATION	FULL FORM OF ABBREVIATION
AWC	ANGANWADI CENTRE
AWH	ANGANWADI HELPER
AWW	ANGANWADI WORKER
BFHI	BABY FRIENDLY HOSPITAL INITIATIVE
CMAM	COMMUNITY MANAGEMENT OF ACUTE MALNUTRITION
CSR	CORPORATE SOCIAL RESPONSIBILITY
EBF	EXCLUSIVE BREAST FEEDING
FLW	FRONT LINE WORKERS
FP	FAMILY PLANNING
FRU	FIRST REFERRAL UNIT
G2P	GOVERNMENT TO PERSON
GoUP	GOVERNMENT OF UTTAR PRADESH
GSIYCF	GLOBAL STRATEGY FOR INFANT YOUNG CHILD FEEDING PRACTICES
HAZ	HEIGHT FOR AGE Z SCORE
HMIS	HEALTH MANAGEMENT INFORMATION SYSTEM

ICDS	INTEGRATED CHILD DEVELOPMENT SCHEME
ICT	INFORMATION COMMUNICATION TECHNOLOGY
IHAT	INDIA HEALTH ACTION TRUST
IMNCI	INTEGARTED MANAGEMENT OF NEONATAL AND CHILDHOOD ILLNESS
IUGR	INTRAUTERINE GROWTH RETARDATION
IYCF	INFANT YOUNG CHILD FEEDING PRACTICES
JSI	JOHN SNOW INTERNATIONAL RESEARCH AND TRAINING INSTITUTE INC
MCTS	MOTHER AND CHILD TRACKING SYSTEM
MOC	MEMORANDUM OF CO-OPERATION
MWCD	MINISTRY OF WOMEN AND CHILDHOOD DEVELOPMENT
NCPCR	NATIONAL COMMISSION FOR PROTECTION OF CHILD RIGHTS
NHM	NATIONAL HEALTH MISSION
NRC	NUTRITIONAL REHABILITATION CENTRE
PHCs	PRIMARY HEALTH CENTRE
PPP	PUBLIC PRIVATE PARTNERSHIP
RKS	ROGI KALYAN SAMITI

RMNCH+A	REPRODUCTIVE MATERNAL NEONATAL CHILD HEALTH AND ADOLESCENT
UM	UNIVERSITY OF MANITOBA
UP TSU	UTTAR PRADESH TECHNICAL SUPPORT UNIT
VHND	VILLAGE HEALTH AND NUTRITION DAY
VHSNC	VILLAGE HEALTH SANITATION AND NUTRITION COMMITTEE
WAZ	WEIGHT FOR AGE Z SCORE

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ABSTRACT

Background: Optimal infant and young child feeding practices are crucial for nutritional status, growth, development, health and ultimately survival of infant and young children

Timely introduction of complementary feeding can prevent almost 6%of under-five mortality.

The poor complementary feeding practices mean that many children continue to be vulnerable to irreversible outcomes of stunting, poor cognitive development and significant increased risk of infectious disease such as diarrhoea and pneumonia.

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. WHO and UNICEF have articulated a global strategy for infant, young, child feeding. Based on these guiding principles, government of India has collaborated with international agencies to adopt the culturally acceptable IYCF guidelines which are in incorporated in Reproductive maternal neonatal and child health + adolescent program (RMNCH+A).

Objective: To identify the existing IYCF practices among mothers of infant and young children below two years in Bareilly and Shahjahnpur districts of Uttar Pradesh,with a view to analyse these practices for improving the health of infants.

Materials & methods: Community Based Cross sectional study was conducted in 8 blocks of two Districts of Uttar Pradesh i.e. Bareilly and Shahjahanpur 384 mothers having children between 0-2years age group were included in the study .Self-administered questionnaire was used to collect information on IYCF practices in the initial 0 to 2 years of the child.

Results: The study findings revealed that majority of children did not received minimal dietary diversity (90%). Initiation of breastfeeding within an hour was practiced by only (50%) of mothers. Only 40% babies were
exclusively breastfed till six months. The most common reason for withdrawal of breast feeding was dearth of milk for breast feeding.

Conclusion: The study reveals that there is an urgent need to improve IYCF practices in Uttar Pradesh and focus should be more on exclusive breast feeding and complementary feeding. The study find out that although majority of infants and children (both breast fed and non-breast fed) achieve standards for minimum food frequency but they fail to achieve standards for minimum food diversity because of age inappropriate complementary food practices. Less than half of mothers of infants aged 6-9 months (42%) introduced timely complementary foods which shows lack of awareness about the right age of introduction of complementary feeding. 57% of mother of infants aged 0-6 months gave their child plain water before six months, which may be due to lack of awareness about exclusive breast feeding practices and intends to prioritize on interventions based on these areas through effective communication and counselling.

Organization profile

ORGANIZATION BACKGROUND

UTTAR PRADESH TECHNICAL SUPPORT UNIT

INDIA HEALTH ACTION TRUST, UTTAR RADESH

BACKGROUND

A Technical Support Unit (TSU) is established for the Government of Uttar Pradesh (GoUP), with the **goal** of providing techno-managerial support to the GoUP to improve the efficiency, effectiveness and equity of delivery of key RMNCHA interventions. This will be accomplished by supporting the state in the implementation of the nationally launched NRHM RMNCH+A strategy, and in the scale-up of agriculture and financial inclusion services.

The TSU's activities will be focused on the twenty-five most underserved districts in the state, where the aim is to improve RMNCHN service delivery and outcomes within 100 priority blocks. These districts have been selected and agreed upon jointly by GOI, GoUP and the foundation.

The India Health Action Trust (IHAT) will have overall responsibility for executing the TSU project in Uttar Pradesh. The University of Manitoba (UM) will provide key technical and managerial support to all RMNCHN areas, and financial inclusion/agriculture. John Snow International Research & Training Institute Inc. (JSI) will provide technical inputs in the areas of strategic planning and donor/stakeholder coordination, supply/cold chain management, new born care, and immunization. The JSI will also facilitate linkages and alignment of project activities to the Government of India (GoI) policies by providing support at national level.

ORIGIN AND HISTORY

Uttar Pradesh is India's most populous state, with approximately 200 million people, and with weak health infrastructure and poor health outcomes. There is a tremendous opportunity to improve the state execution capacity to enhance the efficiency, effectiveness and equity in health and development. This is the basis upon which the Bill & Melinda Gates Foundation (the foundation) has collaborated to provide techno-managerial assistance to the Government of Uttar Pradesh (GoUP) and this proposed to set up a Technical Support Unit (TSU) to execute against the Memorandum of Cooperation (MoC) signed by the foundation and GoUP in December 2012. The Government of India (GoI) has launched a renewed campaign to improve RMNCH+A performance across India, and the GoUP has followed up the national launch with its own show of commitment through the state RMNCH+A effort.

VISION

To reduce the adverse health and development outcomes to families, mothers, new-borns and children by achieving high reach, coverage and quality of effective interventions and services for health (reproductive, maternal, neonatal and child health and nutrition in communities and at health facilities), agriculture and financial inclusion

MISSION

The mission of the TSU is to support the government, not to implement on its own. Building the capacity of the health system to execute according to its own mandate, with strong political, bureaucratic and administrative ownership

OBJECTIVES:

The key **objectives** of the project are to:

- Support the GoUP to improve the quality and quantity of FLW interactions at the community level and within households to drive the eight priority RMNCHN behaviors
- Support GoUP in improving its RMNCHN related primary care services at facilities.
- Support GoUP to improve strategies and systems required to deliver improved FLW capabilities and service delivery at primary care facilities
- Support the GoUP in improving its capacity to fund, contract, and regulate/ mandate private providers
- Support the GoUP in improving the scale and quality of community accountability mechanisms

CORE VALUES:

The four core values to address the major barriers like poor accountability, poor focus on outcomes, lack of skilful planning and poor policies are as follows:

1. Efforts to improve leadership and outcome-focus by ensuring bureaucratic ownership of innovations, strong political will under the foundation-GoUP MOU.
2. Strengthening of internal and external accountability mechanisms through developing strong coaching, mentoring and supervisory systems within NRHM and the Directorate of Health/Family Welfare in the GoUP and by creating concurrent monitoring systems using data, dashboards and feedback loops to effect mid-course corrections.

3. Improving the skills and capabilities for FLW and primary care performance by ensuring trainings are conducted with high quality by GoUP and the skills and practices are enhanced through appropriate supportive supervision mechanisms and use of Information Communication Technology (ICT) based solutions to improve FLW and facility performance.
4. Improving policy, planning and coordination by improving private sector stewardship, funding and contracting processes (such as providers for family planning services, developing new incentive schemes and contracting more management capacity out to the private sector for issues like accreditation), supply chain and G2P (Government to person) payment improvements, select human resource and infrastructure improvements at the field level, better annual planning and fund flow mechanisms.

STRATEGIES

Six structural components which define the *modus operandi* of the TSU have been identified as follows:

1. Strengthen FLW skills/capabilities: Strengthen FLW skills/capabilities through supportive supervision and job-aids to improve quality and quantity of interactions in households, at VHNDs and facilities, to increase service access and improve the eight key behaviors around MNCH, nutrition, and FP.
2. Build skills/capabilities of providers at facilities: Improve availability of services and quality of care at first level facilities (e.g., block PHCs) and referral facilities by offering improved training and on-site skills building (e.g., nurse mentors and skills labs) combined with improved case sheets, checklists and workflow management tools.

3. Improve health system management capabilities to support efficient and effective execution to support the above two areas.
    - Ensure robust project planning and funds flow (e.g., PIP processes)
    - Establish appropriate roles and responsibilities for supportive supervision at the block, district and state levels
    - Leverage ICT to improve data, dis-intermediation, demand and to drive performance efficiencies, especially among FLWs and facilities
    - Create robust systems for data collection, analysis, and planning to improve management of the program (e.g., MCTS, HMIS)
    - Create robust concurrent monitoring systems to validate data collection by the system and feedback information for immediate and mid-course correction
    - Assist the government to execute existing incentive schemes at scale by improving data management, planning and streamlining payment systems
4. Support critical infrastructure improvements at the health system level in collaboration with other DPs: support select cross-cutting areas of the health system that act as critical bottlenecks to the first two areas listed above

- Improve supply chain and cold chain management to minimize stock out of essential drugs
- In our role as the state lead partner, ensure alignment with donor/partner efforts in the state; coordinate with other 'units' to catalyze the overall response especially around creating critical infrastructure (e.g. PHCs, FRUs) and HR (staff nurses, supervisors, etc.)

5. Improve the government's ability to be better stewards of the private sector, through better management and contracting approaches:

- Assist the government with devising and executing schemes and contracts to outsource select provision to the private sector (e.g., ORS/Zinc scheme to improve

distribution, institutional deliveries, clinical services for FP, 'outsourced' management of FRU staff through 'mother NGOs')

- Assist with improving accreditation and payment systems to enable private providers to be paid by the government to increase coverage – e.g., contracting of agencies (such as Public Private Interface Agencies) to oversee accreditation processes and to streamline their function.
- Explore potential options for a primary care pilot involving government and private providers under a capitation-based model
- Work with the World Bank, UNICEF and other partners to ensure harmonization of efforts with other public private partnership (PPP) efforts in the state

6. Enable accountability measures to provide feedback on quality of services, improve external accountability and hence drive program change.

- The NRHM construct includes an external accountability framework that includes social audits and involvement of democratic grass root institutions (Panchayati Raj Institutions) and grievance redressal mechanisms. While progress has been slow, senior politicians and bureaucrats are committed to this vision.
- We would support government to strengthen the functioning of existing government-mandated accountability structures such as Village Health and Sanitation Committees (VHSCs), RKS (Rogi Kalyan Samiti) and grievance redressal mechanisms, where beneficiaries can directly register/log their complaints. Our grants would provide state level technical assistance for the state government to contract NGOs to build VHSC capabilities as has been done in other states.

UTTAR PRADESH'S TECHNICAL SUPPORT UNIT –NUTRITION PROJECT

The overarching goal of this grant is to provide high quality, well-coordinated nutrition techno-managerial support to the government's ICDS and NHM programs in UP in order to reduce < 5 morbidity and mortality due to childhood malnutrition in Uttar Pradesh.

GOALS OF THE PROJECT

GOAL 1: Increased ICDS capacity to delivery quality miycn interventions – implementation related activities

- Support AWWs in tracking and listing their target population in their catchment areas.
- Develop and roll out job-aids and tools on MIYCN counseling for the FLWs (ASHAs, AWWs and ANMs).
- Strengthen the delivery of MIYCN related services in Village Health and Nutrition Days.
- Support strengthening of convergence among ASHAs, ANMs and AWWs by leveraging existing common Health and ICDS platforms such as VHNDs, AAA meetings and Cluster meetings.
- Support activation of existing ICDS schemes such as Sneha Shivir, Godh Bharai and Annaprashan in 25 HPD in UP according to GoI's operational guidelines and build their capacity to deliver MIYCN related counseling.
- Support the district and Block ICDS teams to provide supportive supervision to the FLWs.

- Support the implementation of Community based management of children with acute malnutrition (CMAM) in selected 5 districts (one in each TSU zone).

GOAL 2: Increased health system capacity to deliver quality MICYN interventions– planning related activities

- Gap analyses at two levels:
    - Health Facility Assessment on MIYCN services in 25 HPDs. This will include all delivery points and NRCs.
    - KAP study for the community frontline health workers on MIYCN will help in prioritizing the capacity building of the FLWs and the follow up actions.
- Support NHM in including in the PIP the strategies to bridge the gaps in facilities and community health workers

GOAL 3: Increased health system capacity to deliver quality MICYN interventions– implementation related activities (1/3)

- Support the GoUP in training all FLWs (ASHAs and ANMs) in MIYCN practices and counseling.
- Provide on-the-job training and supportive supervision to all FLWs on MIYCN counseling topics.
- Support the GoUP/NHM in establishing strong supervisory and monitoring mechanisms for MIYCN service delivery
- Support GoUP in training all facility staff (Nurse Mentors, Staff Nurses, ANMs and NRC personnel) at all delivery points in MIYCN practices and counseling

- Provide on-the-job training and supportive supervision to all facility staff at all delivery points on MIYCN counseling
- Support GoUP in establishing MIYCN counseling centres at Block level health facilities at all delivery points

Support the management of children with severe acute malnutrition (SAM)

GOAL 4: Increased use of MICYN data for strategic decision-making

- Consultation workshops with the ICDS FLWs and their immediate supervisors on the requirement of information in relation to their goals and objectives, the current challenges in the availability and use of such information and designing of tools and methods to make it easier for them in the collection and use of data for problem solving.
- Support the ISSNIP in the roll out of ICT-RTM in the 11 TSU districts which overlap with the ISSNIP districts.
- Designing and implementing denominator-based, relevant indicators within an information management system for the ICDS that would provide internal data on MIYCN service coverage, quality and utilization.
- Consultation workshops on improving the review mechanisms at the Block, district and state levels and designing and implementing guidelines on the same.
- Development and implementation of dashboards for ICDS, similar to the ones developed by the TSU for health department, to facilitate better performance management.
- Support the use of CBTS data, at the district level, to understand the current levels of coverage and utilization of MICYN services to effect any midcourse program corrections

INTRODUCTION

(SECTION -1)

INTRODUCTION TO PROJECT ON INFANT AND YOUNG CHILD FEEDING PRACTICES

1.1 BACKGROUND

Optimal infant and young child feeding practices are crucial for nutritional status, growth, development, health and ultimately survival of infant and young children. Worldwide, sub optimal breastfeeding still accounts for deaths of 1.4 million children aged less than five years (under five mortality). Timely introduction of complementary feeding can prevent almost 6%of under-five mortality. It was estimated that if 90% of infants are covered with a package of intervention to protect, promote and support the optimal 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 significant increased risk of infectious disease such as diarrhoea and pneumonia. This has a tremendous impact in developing country like India with high burden of disease and low access to safe water and sanitation. [(1)]

The mother infant relationship is the most vital 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 belief and attitude regarding child rearing are important milestones on the road of child's health from in utero period. Also faulty breast feeding and weaning practices have their roots in socio economic and educational status of the parents, their cultural beliefs, number and spacing of siblings and the employment status of the 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. WHO and UNICEF have articulated a global strategy for infant, young, child feeding. Based on these guiding principles, government of India has collaborated with international agencies to adopt the culturally acceptable IYCF guidelines which are in incorporated in Reproductive maternal neonatal and child health + adolescent program (RMNCH+A)[2]

A comprehensive approach to IYCF involves large-scale action at national level, health system and community levels, including various cross-cutting strategies such as communication and context-specific actions on infant feeding in the context of emergencies and HIV. National-level actions include advocacy to generate increased commitment to IYCF and the development of policies, legislation, strategies and plans to implement the main operational targets of the WHO-UNICEF Global Strategy for Infant and Young Child Feeding (GSIYCF). Building capacities and conducting supportive supervision for health workers and community workers to implement integrated infant and young child feeding counselling and support (addressing both breastfeeding and complementary feeding) at key maternal and child health contacts is a must in all settings. Further, actions include ensuring adequate IYCF content in the national pre- and in-service curricula for various cadres of health providers, as well as improving breastfeeding practices in maternity facilities through institutionalization of the 10 Steps to Successful Breastfeeding or the Baby Friendly Hospital Initiative (BFHI). Mother to mother support groups in the community are another possible component, and finally, actions involve effective and targeted communication strategies to promote recommended infant/child feeding practices, using multiple channels and messages tailored to the local context and the specific barriers. Crucial to all these actions is focused monitoring and evaluation, with effective use of the data generated. For complementary feeding, education and counselling on improved use of locally available foods is the cornerstone of interventions in all contexts. Where the main nutritional problems are

micronutrient deficiencies and locally available foods cannot provide sufficient micronutrients (which is most often the case for iron), supplementation with multiple micronutrients may be recommended in addition to optimizing use of locally available foods. In food-insecure populations with significant nutrient deficiencies and where locally available foods are inadequate in macro- and micronutrients, additional components such as fortified complementary foods and/or lipid-based nutrient supplements may be needed to fill nutrient gaps. [3]

1.2 PROBLEM STATEMENT

Recent estimates of global burden of malnutrition in under five children are that 159 million of all children are stunted, 95 million are underweight and 50 million are wasted.[4]

An important underlying determinant for under nutrition is care provided to the child. The care practices provided that could impact on child nutrition include care of pregnant and lactating mothers, breast feeding and infant young child feeding practices, food preparation and storage and hygiene

Exclusive breast feeding rates in India at 6 months is about 46 percent.

At 6-8 months, only 54 percent of breast fed and 75 percent of non-breast fed are initiated into complementary feeding.

At the start of second year of life, only about 42 percent of infants receive the recommended appropriate foods at appropriate frequency. [4]

1.3 RATIONALE:

In India, nearly 17 lakh children below five years5 (level and trends in child mortality 2012; Estimates developed by Interagency Group-Report 2012), the highest number of child deaths in any single country in the world. Uttar Pradesh, the most populous state

with an estimated population of 199.5 million, alone accounts for over an estimated 5.5 lakh child deaths, of which nearly 45% can be attributed to poor nutritional status of the mother and children.

In Uttar Pradesh, 42% of children below three years are underweight, 52% are stunted and 19.5% are wasted (NFHS-3; 2005-2006.

The under nutrition figures in Uttar Pradesh assumes more significance because of the sheer size of the State' population. In addition, approximately 12.6 lakh children suffer from severe acute malnutrition (weight-for-height<3SD) at any point in time. Children with severe acute malnutrition are nine times more likely to die than children who are malnourished.

The coverage with breastfeeding and complimentary feeding; two of the very important nutrition intervention which can reduce 11.6%of mortality (Lancet 2013) occurring in children less than five years continues to be low.

Only 33% of children (NFHS-3) are fed mothers milk with in the first hour of birth and only 46% children 6-9 months receive solid/semisolid foods along with breast milk. [(4)]

There is a need to identify a recurring factor that influences a woman's decision regarding early cessation of Breastfeeding.

There is not much block level data available to understand the dietary diversity of food given to children (6 to 23) month in Uttar Pradesh.

There is a need to obtain general overview of IYCF practices in high priority districts of Uttar Pradesh so that necessary nutrition specific and nutrition sensitive interventions for under two children can be designed and implemented.

With this background, present study is undertaken to assess the IYCF practices among children less than 2 years in district of Uttar Pradesh.

REVIEW OF LITERATURE

(SECTION-2)

REVIEW OF LITERATURE:

- A study titled “The Optimal Duration Of Exclusive Breastfeeding -A Systematic Review By Michael S. Kramer, Md ,Ritsuko Kakuma, Msc” by Department Of Nutrition For Health And Development and Department Of Child And Adolescent Health And Development ,World Health Organization was undertaken with the objective to assess the effects on child health, growth, and development, and on maternal health, of exclusive breastfeeding for 6 months vs exclusive breastfeeding for 3–4 months with mixed breastfeeding (introduction of complementary liquid or solid foods with continued breastfeeding) thereafter through 6 months. Sixteen independent studies meeting the selection criteria were identified by the literature search: 7 from developing countries (2 of which were controlled trials in Honduras) and 9 from developed countries (all observational studies). Infants who are exclusively breastfed for 6 months experience less morbidity from gastrointestinal infection than those who are mixed breastfed as of 3 or 4 months, and no deficits have been demonstrated in growth among infants from either developing or developed countries who are exclusively breastfed for 6 months. The available evidence demonstrates no apparent risks in recommending, as public health policy, exclusive breastfeeding for the first 6 months of life in both developing and developed country settings. (6)
- The 2003 landmark Lancet Child Survival Series ranked the top 15 preventative child survival interventions for their effectiveness in preventing under-five mortality. Exclusive breastfeeding up to six months of age and breastfeeding up to 12 months was ranked number one, with complementary feeding starting at six months number three. These two

interventions alone were estimated to prevent almost one-fifth of under-five mortality in developing countries. The 2008 Lancet Nutrition Series [4] also reinforced the significance of optimal IYCF on child survival. Optimal IYCF, especially exclusive breastfeeding, was estimated to prevent potentially 1.4 million deaths every year among children under five (out of the approximately 10 million annual deaths). According to the Nutrition Series, over one third of under-five mortality is caused by under nutrition, in which poor breastfeeding practices and inadequate complementary feeding play a major role. Breastfeeding, especially six months of exclusive breastfeeding, has a significant effect in the reduction of mortality from the two biggest contributors to infant deaths: diarrhoea and pneumonia, as well as on all-cause mortality. Low birth weight and low height (length) at birth are some of the factors determining growth of the child later on. Intra-uterine growth of a child is determined by the mother‘s health and nutritional status before and during pregnancy. A woman‘s poor nutrition status during pregnancy (especially low BMI and anaemia) are among the contributing factors to intrauterine growth restriction (IUGR), along with pre-term delivery, as well as other maternal health complications. Hence tackling the causes of IUGR will go certain way to reducing young child under nutrition.(7)

- In a study on “Impact of education and provision of complementary feeding on growth and morbidity in children less than 2 years of age in developing countries: a systematic review by Zohra S Lassi, Jai K Das , Guleshehwar Zahid Aamer Imdad and Zulfiqar A Bhutta” included 16 studies in review. Amongst these, 9 studies provided education on complementary feeding, 6 provided complementary feeding (with our

without education) and 1 provided both as separate arms. Overall, education on CF alone significantly improved HAZ (SMD: 0.23; 95% CI: 0.09, 0.36), WAZ (SMD 0.16, 95% CI: 0.05, 0.27), and significantly reduced the rates of stunting (RR 0.71; 95% CI: 0.56, 0.91). While no significant impact were observed for height and weight gain. Based on the subgroup analysis; ten studies from food secure populations indicated education on CF had a significant impact on height gain, HAZ scores, and weight gain, however, stunting reduced non-significantly. In food insecure population, CF education alone significantly improved HAZ scores, WAZ scores and significantly reduced the rates of stunting, while CF provision with or without education improved HAZ and WAZ scores significantly. It was concluded that Complementary feeding interventions have a potential to improve the nutritional status of children in developing countries.[7]

- A study titled “Delayed breastfeeding initiation increases risk of neonatal mortality by Edmond KM1, Zandoh C, Quigley MA, Amenga-Etego S, Owusu-Agyei S, Kirkwood BR.” Was designed to evaluate whether timing of initiation of breastfeeding are associated with risk of neonatal mortality. The analysis was based on 10,947 breastfed singleton infants born between July 2003 and June 2004 who survived to day 2 and whose mothers were visited in the neonatal period in Ghana. Breastfeeding was initiated within the first day of birth in 71% of infants and by the end of day 3 in all but 1.3% of them; 70% were exclusively breastfed during the neonatal period. The risk of neonatal death was fourfold higher in children given milk-based fluids or solids in addition to breast milk. There was a marked dose response of increasing risk of neonatal mortality with

increasing delay in initiation of breastfeeding from 1 hour to day 7; overall late initiation (after day 1) was associated with a 2.4-fold increase in risk. Promotion of early initiation of breastfeeding has the potential to make a major contribution to the achievement of the child survival millennium development goal; 16% of neonatal deaths could be saved if all infants were breastfed from day 1 and 22% if breastfeeding started within the first hour. Breastfeeding-promotion programs should emphasize early initiation as well as exclusive breastfeeding. [8]

RESEARCH QUESTION AND OBJECTIVES

(SECTION-3)

RESEARCH QUESTION:

- What are the existing feeding practices among mothers of infant and young children below two years of age in Bareilly and Shahjahanpur districts of Uttar Pradesh?
- What are the reasons for withdrawal of breast feeding of infant and young children below two years of age in Bareilly and Shahjahanpur districts of Uttar Pradesh?

RESEARCH OBJECTIVES:

- To identify the existing feeding practices among mothers of infant and young children below two years in Bareilly and Shahjahnpur districts of Uttar Pradesh.

SPECIFIC OBJECTIVES:

- To obtain quantitative data on infant and young child feeding practices using the IYCF indicators.
- To assess the consumption of the different types of food for children aged from 6-

  23 months with in the 24 hours prior to the survey, and hence estimate the food diversity within the last 24hours.
- To identify the reasons for withdrawal of breast feeding of infant and young children below two years of age in Bareilly and Shahjahnpur districts of Uttar Pradesh.

METHODOLOGY

(SECTION-4)

METHODOLOGY

4.1 STUDY TYPE: Descriptive cross sectional study

4.2 STUDY DURATION: February 2016 to April 2016

4.3 STUDY AREA: This study was carried in Bareilly and Shahjahanpur districts of Uttar Pradesh. It is proposed to conduct the study in the assigned districts to the researcher.

4.4 SAMPLING PROCEDURE:

Both the districts were selected from the 25 high priority districts of Uttar Pradesh.

Bareilly and Shahjahanpur were selected through convenience sampling as these two districts were near to our job area and due to lack of resources both financial and human resources the study was conducted in these two districts.

From both the districts 8 TSU Blocks were selected which were in our job area. 4 blocks were selected out of 15 Blocks from Bareilly and 4 Blocks were selected from 15 Blocks of Shahjahanpur. From each block, eight Anganwadis were selected randomly.

AWC was selected through Simple random sampling through excel generated number for which the formula for simple random sampling was used –

RAND()*(b-a)+a.

Where **a** is the smallest number and **b** is the largest number. Each AWC was assigned a number and the numbers were entered in the excel formula.

A list of children who have been delivered in the past two years were obtained from the selected Anganwadi. From each anganwadi, six infants and young children below two years were selected randomly. 6 children below two years of age were considered as one

cluster. Total of 64 clusters were selected. A sample of 384 children was selected randomly to conduct the survey.

4.5 STUDY RESPONDENTS: Mothers of infant and young children under two years of age. To estimate the infant and young child feeding practices, relevant information was gathered from mothers of children who are under two years of age in all selected anganwadis.

4.6 SAMPLE SIZE: Sample size is estimated to be 380 children using sampsize calculator at 95% confidence interval and 0.5% degree of error.

Steps of Sample size calculation

Step 1: Estimate the percent of mothers practicing each of the IYCF behaviours which was taken from RSOC survey. Before you can calculate your sample size, you need to estimate the current prevalence for each.

These indicators selected are:

- Timely initiation of breastfeeding (children 0-23 months)
- Exclusive breastfeeding under 6 months
- Timely complementary feeding
- Introduction of solid, semi-solid or soft foods
- Continued breastfeeding (at 1 year)
- Minimum dietary diversity
- Minimum meal frequency
- Minimum acceptable diet
- Consumption of iron-rich or iron-fortified foods
- Bottle feeding

Step 2: sample size for each of the indicator is calculated using sample size calculator at 95% confidence interval and 0.5% degree of error.

Step 3: sample size which is highest among all the indicators (EBF= 380) is taken as our final sample size as it will include sample size of all the indicators. [10]

4.7 TOOLS AND TECHNIQUES: A structured questionnaire for face to face interview was used to collect the data. The data collection formats was adapted from UNICEF guidelines for assessment of infant and young child feeding.

INDICATORS FOR ASSESSING THE FEEDING PRACTICES

(SECTION-5)

INDICATORS FOR ASSESSING THE FEEDING PRACTICES:

Timely initiation of breastfeeding: Proportion of children 0-23 months who were put to breast feeding within one hour of birth.

Exclusive breastfeeding under six months: Proportion of infants 0-5 months who were fed exclusively with Breast milk.

Timely complementary feeding: Proportion of infants 6-9 months old who received breast milk and a solid or semi-solid food (based on 24 hour dietary meal)

Introduction of solid, semisolid or soft foods: Proportion of infants 6-8 months who received solid, semi-solid or soft foods.

Continued breastfeeding at one year: Proportion of children 12-15 months old who were fed breast milk.

Minimum dietary diversity: Proportion of children 6-23 months who received foods from 4 or more food groups. (7 food groups under consideration are grains, roots and tubers, legumes and nuts, dairy products, flesh foods, eggs, vitamin A rich fruits and vegetables and other fruits and vegetables)`

Minimum meal frequency: Proportion of breastfed children and non-breastfed children 6-23 months who receive solid, semi-solid or soft foods (also including milk feeds for non-breastfed children) minimum no. of times or more. (Minimum is defined as 2 times for breastfed infants 6-8 months, 3 times for breastfed children 9-23 months and 4 times for non-breastfed children 6-23 months)

DATA ANALYSIS

(SECTION-6)

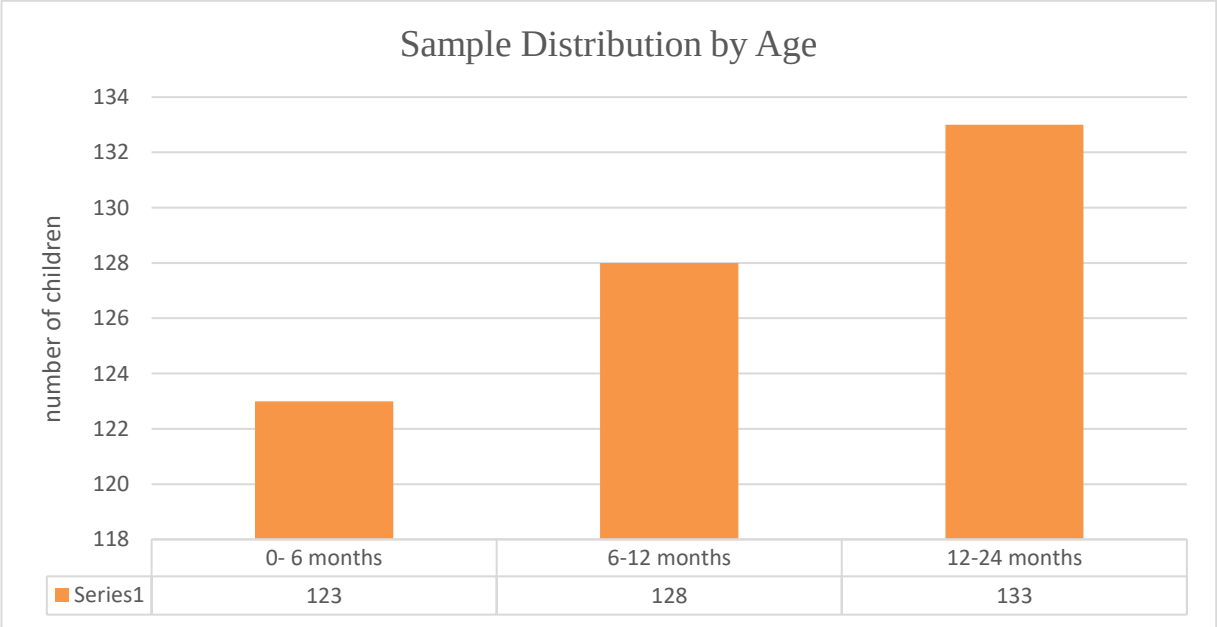
DATA ANALYSIS:

In total, sample size of 384 children was taken from two districts Bareilly and Shahjahanpur which were divided into 48 clusters, 24 clusters in each districts.

Total of 384 samples were taken which were divided in to 3 categories:-

AGE GROUP	SAMPLE SIZE
0 TO 6 MONTHS	123
6 TO 12 MONTHS	128
12 TO 24 MONTHS	133

TABLE NO.6.1 : DISTRIBUTION OF SAMPLE BY AGE



GRAPH.6.1: DISTRIBUTION OF SAMPLE BY AGE

The study population comprise of 327 Hindus and 57 Muslims. Out of total sample of 384 children, 75 children belonged to scheduled caste, 5 children belonged to scheduled

tribe, 194 children belonged to other backward classes and 110 children belonged to the general category of caste. For consistency and inter-observer agreement, standardized questionnaire was used, and collected data were cross-checked and supervised. Analysis was done using MS EXCEL Simple proportions and percentages were calculated for each IYCF indicator.

A total of 3 months' time period is spend in collection and analysis of data. The analysis of data is done on basis of 7 indicators given by unicef.

The analysed data is represented through tables and graphs.

ANALYSIS OF IYCF INDICATORS:

TIMELY INITIATION OF BREASTFEEDING: Proportion of children 0-23 months who were put to breast feeding within one hour of birth.

FORMULA= Children 0-23 months who were put to the breast within one hour of birth

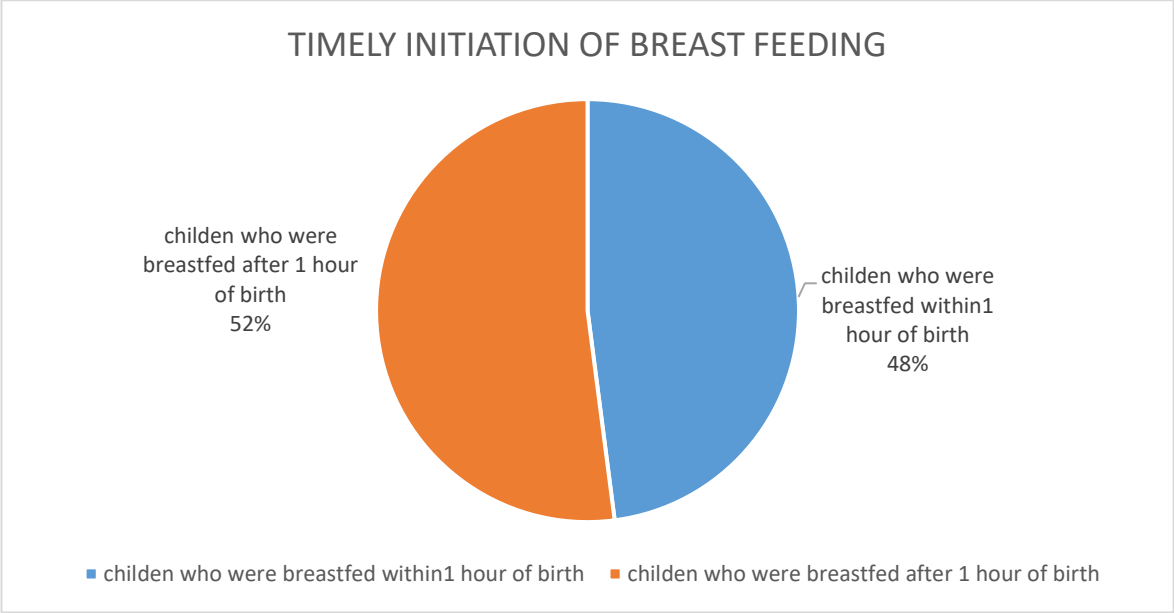
Children 0-23 months

CALCULATION: In this indicator all children 0-23 months were included and were asked the question "Have you ever breastfed [NAME]?" and the responses were recorded accordingly. If the mother put the baby to breast immediately after birth (within first hour) '0' was recorded as their response and if the mother put the baby to breast after 1 hour, the response in number of hours and days was recorded respectively.[10]

In this study, only 184 children 0-23 years of age were breastfed within one hour of birth out of total 384 children as shown in table no.2

No. of children breastfed within one hour of birth	Percentage	Number of children breastfed after one hour of birth	Percentage
184	47.9%	200	52%

TABLE NO.6.2: TIMELY INITIATION OF BREAST FEEDING



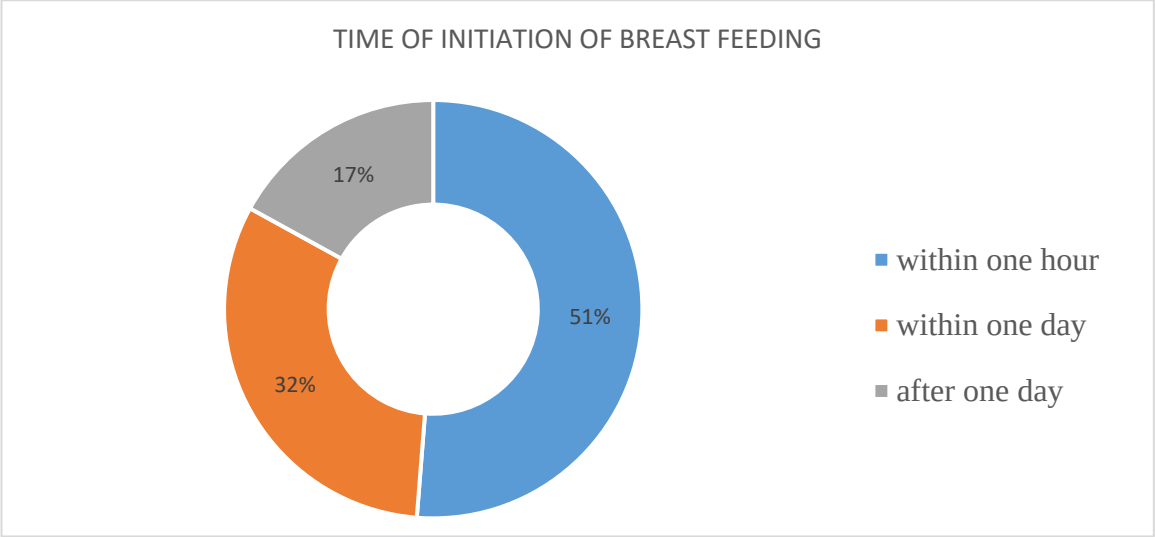
GRAPH NO.6.2 TIMELY INITIATION OF BREASTFEEDING

CONCLUSION: Only 48 percent of mothers of infants less than 2 years of age began breastfeeding in the first hour of life.

It was observed that 184 mothers initiated breastfeeding within one hour , 114 mothers initiated breast feeding within one day and 61 mothers initiated breastfeeding after one day

Time of initiation	Percentage
Within one hour	51%
Within one day	32%
After one day	17%

TABLE NO.6.3: RANGE OF TIME FOR INITIATION OF BREAST FEEDING



GRAPH NO.6.3: RANGE OF TIME FOR INITIATION OF BREAST FEEDING

CONCLUSION: It was found that out of total sample of 384 children, 51 percent of mothers initiated breast feeding in one hour, 32 percent of mothers initiated breast feeding within one day and 17 percent of mothers initiated breast feeding after one day.

EXCLUSIVE BREASTFEEDING UNDER SIX MONTHS: Proportion of infants 0-5 months who were fed exclusively with Breast milk.

FORMULA: Infants 0-5 months who received only breastmilk during the previous day

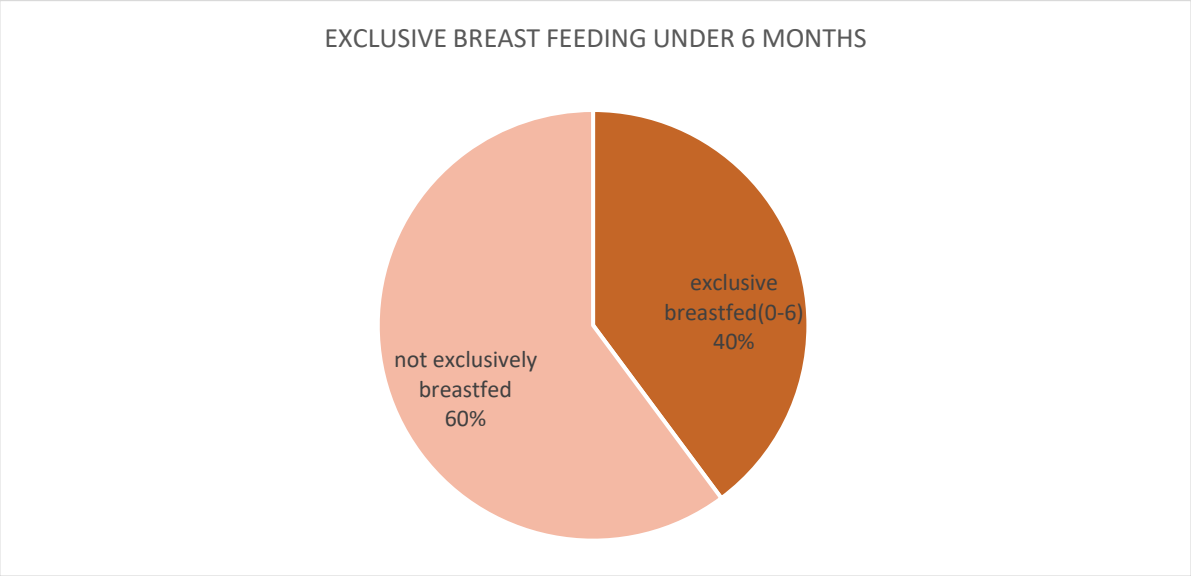
Infants 0-5 months

CALCULATION: In this indicator 0-5 months infants who were breastfed during the period of study and not given any liquid, solid or semi-solid food during the first six months were recorded.[10]

In this study 49 infants of 0-5 months were reported to be exclusively breastfed as shown in table no. 6.4

No. of infants less than six months	Number of infants less than six months who are exclusively breast fed	Percentage
123	49	39.8

TABLE NO.6.4: EXCLUSIVE BREASTFEEDING PRACTICES AMONG MOTHERS OF INFANTS LESS THAN 6 MONTHS



GRAPH NO.6.4: EXCLUSIVE BREASTFEEDING PRACTICES AMONG MOTHERS OF INFANTS LESS THAN 6 MONTHS

CONCLUSION: Only 48 percent of mothers of infants less than 6 months of age breastfed exclusively.

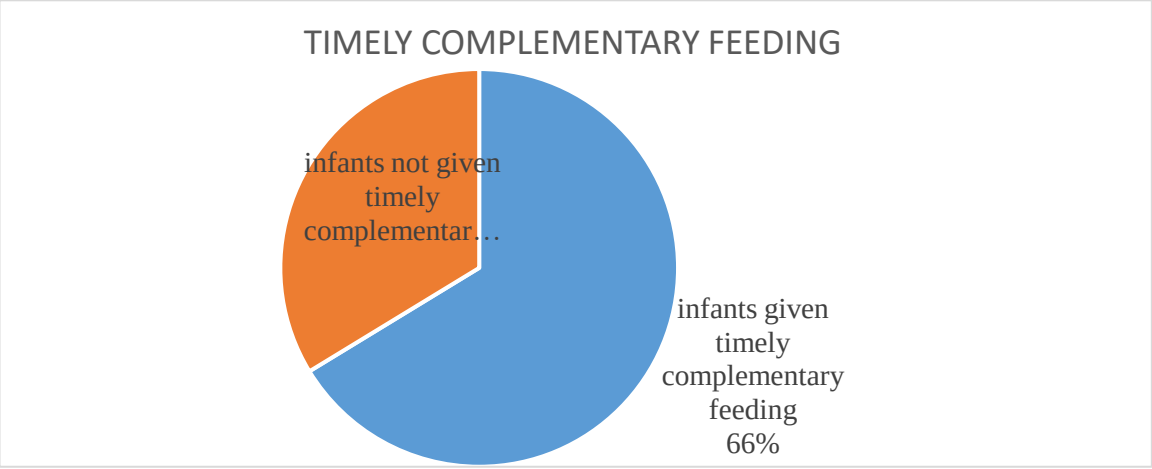
TIMELY COMPLEMENTARY FEEDING: Proportion of infants 6-9 months old who received breast milk and a solid or semi-solid food (based on 24 hour dietary meal)

FORMULA: $\frac{\text{Number of infants 6–9 months who received breastmilk } \textit{and} \text{ a solid or semi-solid food}}{\text{Total number of infants 6–9 months}}$

CALCULATION: In this indicator all infants who were breastfed in the last 24 hour and were given some solid or semi solid food based on 24 hour dietary recall were recorded. In this study only 59 percent of 6-9 month infants were given timely complementary feeding as recorded in table no 6.5. .[10]

Number of 6-9 month old infant	Number of infants given timely complementary feeding	Percentage
89	59	66.3%

TABLE NO.6.5: TIMELY COMPLEMENTARY FEEDING OF 6-9 MONTH OLD INFANT



GRAPH NO.6.5: TIMELY COMPLEMENTARY FEEDING OF 6-9 MONTH OLD INFANT

CONCLUSION: Only 66 percent of mothers of infants 6-9 months of age introduced timely complementary foods.

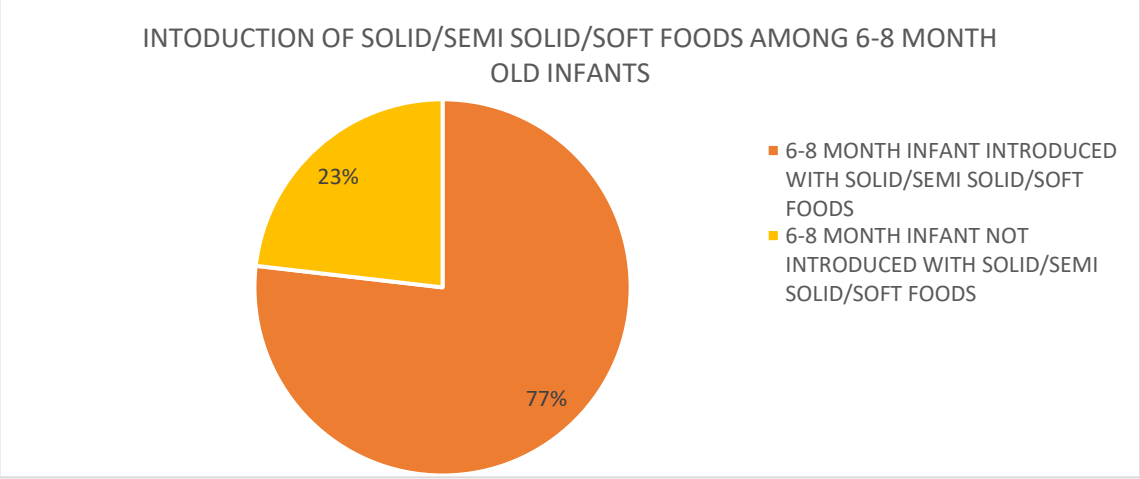
INTRODUCTION OF SOLID, SEMISOLID OR SOFT FOODS: Proportion of infants 6-8 months who received solid, semi-solid or soft foods.

FORMULA: Number of infants 6-8 months old who received solid, Semi-solid or soft foods during the previous day / Infants 6-8 months old

CALCULATION: In this indicator mothers were asked to recall the previous 24 hour dietary intake of their infant 6-8 months old. Liquids were not included in this indicator whereas solids and semi solids foods were included in this indicator. 63 Infants had recieved solid, semi solid or soft foods in the 24 hour dietary recall out of total 82 infants in the age group of 6-8 months old as shown in the graph no6.6.[10]

Number of 6-8 month old infant	Number of infants of age 6-8 months introduced with solid , semi solid or soft foods	Percentage
82	63	76.8%

TABLE NO.6.6: INTRODUCTION OF SOLID SEMI SOLID OR SOFT FOODS AMONG INFANTS OF AGE 6-8 MONTHS OF AGE



GRAPH NO.6.6: INTRODUCTION OF SOLID SEMI SOLID OR SOFT FOODS AMONG INFANTS OF AGE 6-8 MONTHS OF AGE

CONCLUSION: 77 % of mothers of infants 6-8 months of age introduced solid, semi-solid or soft foods in a timely fashion.

CONTINUED BREASTFEEDING AT ONE YEAR: Proportion of children 12-15 months old who were fed breast milk.

FORMULA: Children 12-15 months old

who received breast milk during the previous day

Children 12-15 months

CALCULATION: In this indicator all children of age 12-15 months who were fed with breast milk in the previous 24 hours based on 24 hour dietary recall were recorded, in this study 46 out of 57 children 12-15 months of age received breast milk during the previous 24 hours as shown in the table no.6.7.[10]

Number of children 12-15 month old	Number of 12-15 month children with continued breastfeeding at one year	Percentage
57	46	80.7%

TABLE NO.6.7: CONTINUED BREASTFEEDING AT ONE YEAR

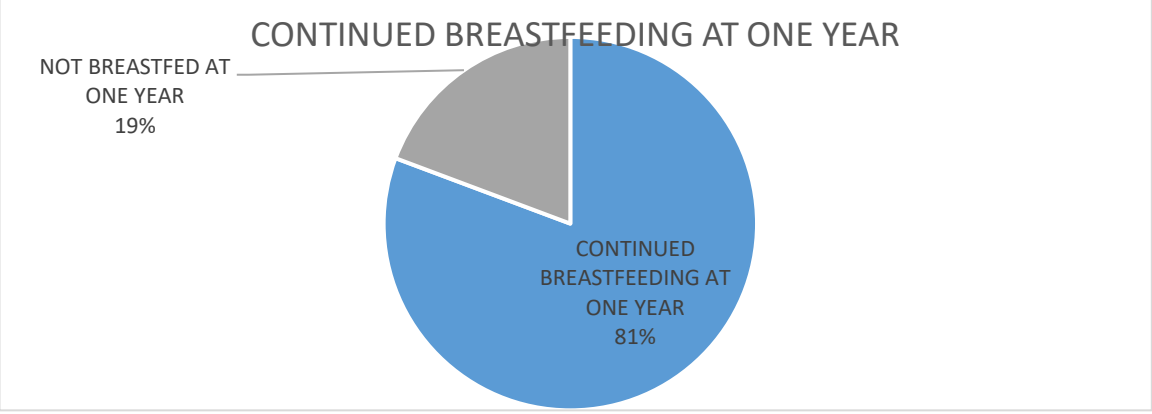


TABLE NO.6.7: CONTINUED BREASTFEEDING AT ONE YEAR

CONCLUSION: 81 % of mothers of infants 12 to 15 months of age continued to breastfeed their children.

MINIMUM DIETARY DIVERSITY: Proportion of children 6-23 months who received foods from 4 or more food groups. (7 food groups under consideration are grains, roots and tubers, legumes and nuts, dairy products, flesh foods, eggs, vitamin A rich fruits and vegetables and other fruits and vegetables)`

FORMULA: **Children 6-23 months old who received foods from 4 or more food groups during the previous day**

Children 6-23 months

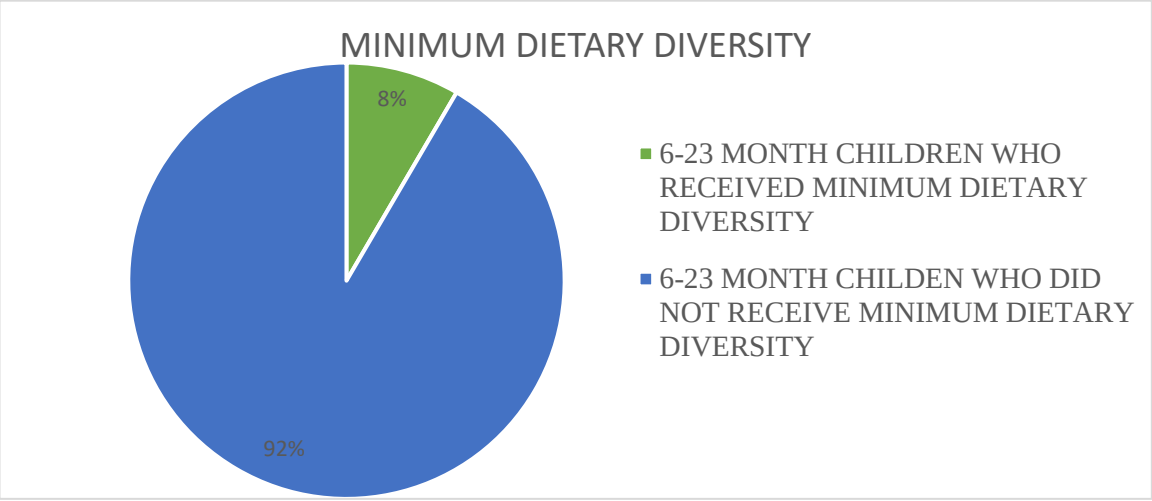
CALCULATION: This indicator included seven food groups and these are as under

1. Grains , roots and tubers
2. Legumes and nuts
3. Dairy products
4. Flesh foods
5. Eggs
6. Vitamin A rich fruits and vegetables
7. Other fruits and vegetables

All children of age 6-23 months who received any of the four or more than four of the seven food groups defined above based on 24 hour dietary recall. In this study only 22 out of 261 children of 6-23 months age achieved minimum dietary diversity.

Number of children 6-23 month old	Number of 6-23 month children who received any of the four or more than four of the seven food groups	Percentage
261	22	8.4%

GRAPH NO.6.8: MINIMUM DIETARY DIVERSITY ACHIEVED



GRAPH NO.6.8: MINIMUM DIETARY DIVERSITY ACHIEVED

CONCLUSION: Only 8 % of mothers of infants 6 to 23 months of age met the standards for minimum dietary diversity.

MINIMUM MEAL FREQUENCY: Proportion of breastfed children and non-breastfed children 6-23 months who receive solid, semi-solid or soft foods (also including milk feeds for non-breastfed children) minimum no. of times or more. (Minimum is defined as 2 times for breastfed infants 6-8 months, 3 times for breastfed children 9-23 months and 4 times for non-breastfed children 6-23 months)

FORMULA: Breastfed children 6-23 months who received solid, semi-solid or soft

Foods the minimum number of times or more during the previous day

Breastfed children 6-23 months old

AND

Non-breastfed children 6-23 months who received solid, semi-solid or soft foods or milk feeds the minimum number of times or more during the previous day

Non-breastfed children 6-23 months old

CALCULATION: In this indicator 143 children (breastfed and non-breastfed) 6-23 months of age received solid, semi-solid or soft foods or milk feeds the minimum number of times or more during the previous 24 hours based on 24 hour dietary recall were recorded. .[10]

Minimum is defined as:

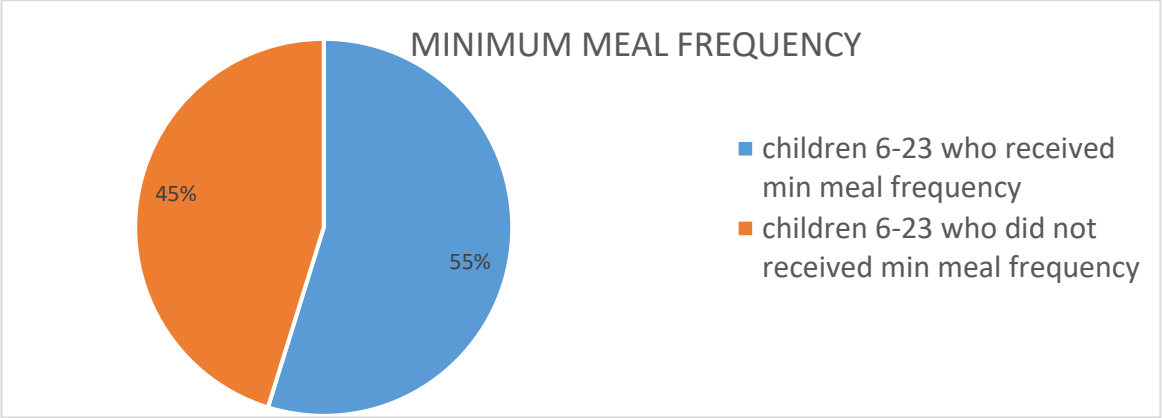
- 2 times for breastfed infants 6-8 months
- 3 times for breastfed children 9-23 months
- 4 times for non-breastfed children 6-23 months

'Meals' include both meals and snacks (other than trivial amounts), and frequency is based on caregivers 24 hour dietary recall report

In this study only 143 out of 261 children 6-23 months of age met the standards for minimum meal frequency.

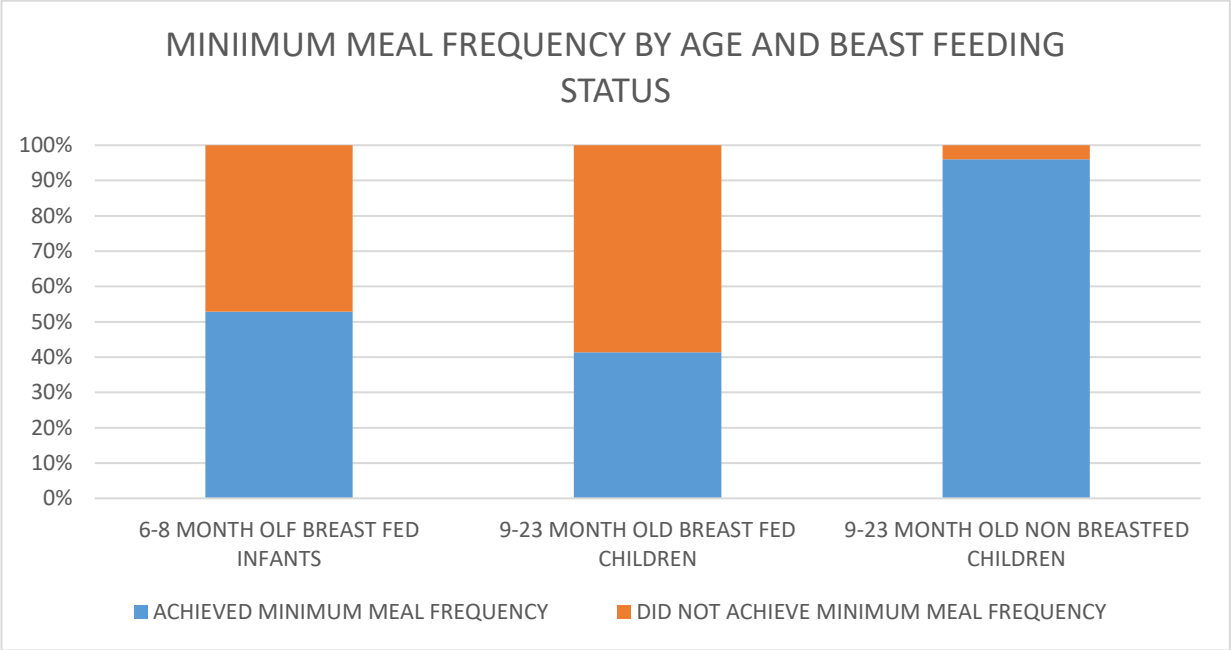
Number of children 6-23 month old	Number of 6-23 month children who received received solid, semi-solid or soft foods or milk feeds the minimum number of times	Percentage
261	143	54.7%

TABLE NO.6.9: MINIMUM MEAL FREQUENCY OF CHILDREN 6-23 MONTHS OF AGE



GRAPH NO.6.9: MINIMUM MEAL FREQUENCY OF CHILDREN 6-23 MONTHS OF AGE

CONCLUSION- Only 45 Percent of children 6-23 months of age met the standards for minimum meal frequency



GRAPH NO.6.10: MINIMUM MEAL FREQUENCY BY AGE AND BREAST FEEDING STATUS

CONCLUION: It Is Observed That More Than 50 Percent Of Breastfed Children Aged 6-8 Months Did Not Meet The Standard For Minimum Meal Frequency, 40 percent Of Breastfed Children Aged 9-23 Months Did Not Meet The Standard For Minimum Meal

Frequency And More Than 95 Percent Of Non-Breastfed Children Aged 9-23 Months Met The Standards For Minimum Meal Frequency.

MINIMUM ACCEPTABLE DIET: Proportion of children 6-23 months of age who receive a minimum acceptable diet (apart from breastmilk)

FORMULA:

Breastfed children 6-23 months of age who had at least the minimum dietary diversity and the minimum meal frequency during the previous day

Breastfed children 6-23 months old

And

Non-breastfed children 6-23 months of age who had at least the 2 milk feedings and had at least the minimum dietary diversity and the minimum meal frequency during the previous day

Non-breastfed children 6-23 months old

CALCULATION: In this indicator all children Breastfed and Non-breastfed (6-23 months of age) who had at least the minimum dietary diversity or 2 milk feedings and the minimum meal frequency during the previous 24 hours based on 24 hour dietary recall were recorded. .[10]

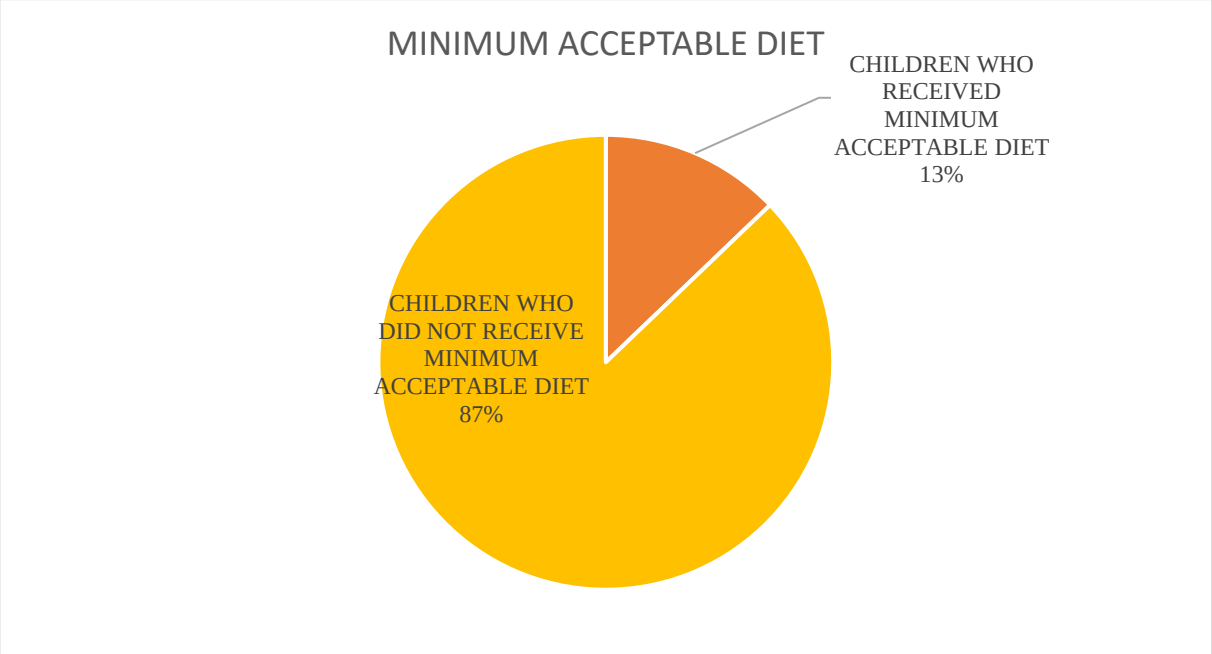
The 6 food groups used for calculation of this indicator are:

- Grains, roots and tubers
- Legumes and nuts
- Flesh foods (meat, fish, poultry and liver/organ meats)
- Eggs
- Vitamin-A rich fruits and vegetables
- Other fruits and vegetables

In this study only 22 out of 261 children 6-23 months of age met the standards for Minimum acceptable diet.

Number of children 6-23 month old		Number of 6-23 month children who are currently breast fed or not breastfed.	Number of children who received minimum acceptable diet	Percentage
Breastfed	Non breastfed			
215	46	261	22	13.5%

TABLE NO.6.10: MINIMUM ACCEPTABLE DIET



GRAPH NO.6.11: MINIMUM ACCEPTABLE DIET

CONLUSION: 13.5 percent of children 6 to 23 months of age met the standards for Minimum acceptable diet.

BOTTLE FEEDING: Proportion of children 0-23 months old who were fed with a bottle during the previous day.

FORMULA:

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

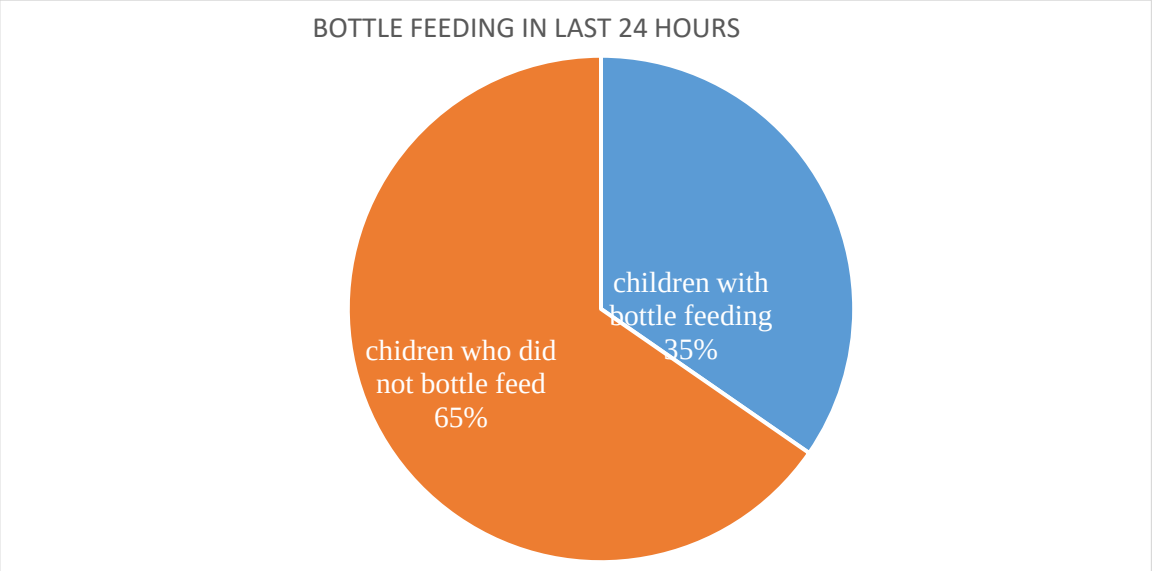
Children 0-23 months

CALCULATION: In this indicator 0-23 months children who were fed any liquid with a bottle with nipple during the last 24 hours during the period of study were recorded.

In this study 133 children out of 384 children of 0-23 months were reported to be fed with a bottle during last 24 hours.

Total no of children of age 0-23 months	No. of children who were fed with a bottle during the last 24 hours	Percentage
384	133	34.6%

TABLE NO.6.11: BOTTLE FEEDING IN LAST 24 HOURS



GRAPH NO.6.12: BOTTLE FEEDING IN LAST 24 HOURS

CONCLUSION: It is observed that 35 percent of children aged 0-23 months have been fed with a bottle with nipple in the last 24 hours during the period of our study.

BREAST FEEDING PRACTICES

The study also tried to elicit certain behaviours related to breastfeeding practices like reasons behind not breastfeeding and early withdrawal of breastfeeding and range of age where mothers tend to initiate complementary feeding

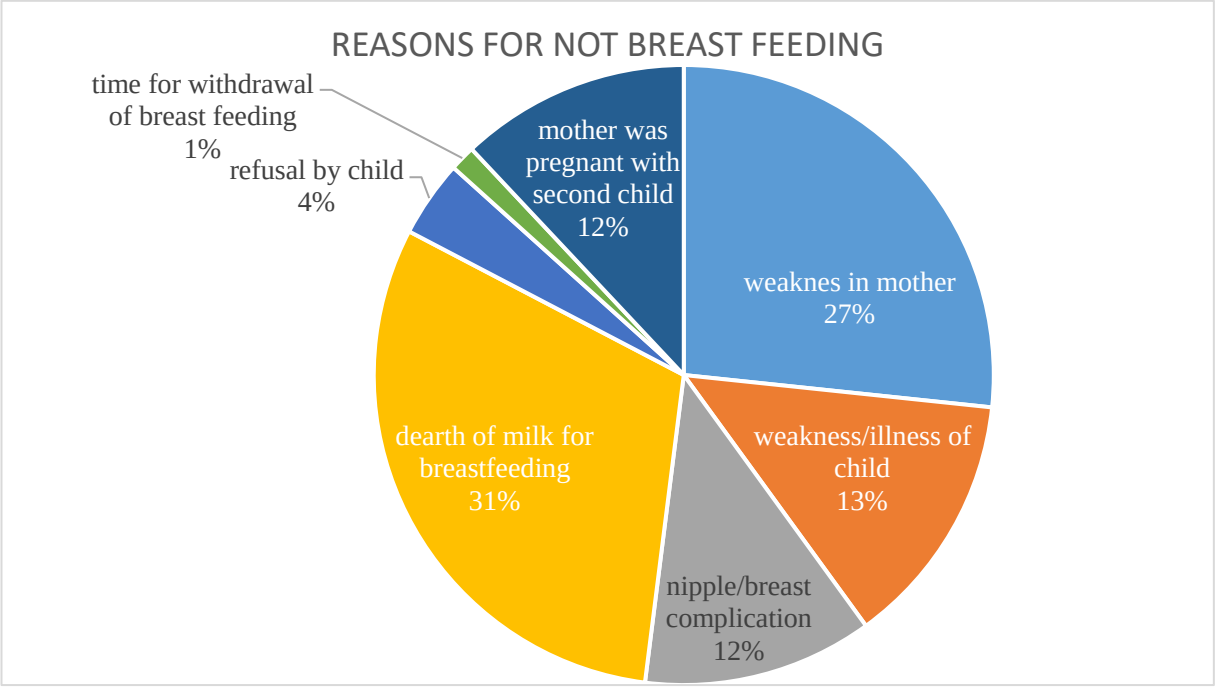
REASONS FOR NOT BREAST FEEDING

In this study, out of 384 children, a total of 75 mothers had either not ever initiated breastfeeding or had withdrawn breastfeeding early.

The following reasons were found to be prevalent for withdrawal of breastfeeding:

- Weakness/illness in mother
- Weakness/illness of child
- Nipple/ breast complication
- Dearth of milk for breast feeding
- Lack of time due to working mothers
- Refusal by child
- Age for withdrawal of breast feeding
- Not possible because mother was pregnant with second child
- Not possible because mother was consuming OCP

The following graph shows the reasons behind early withdrawal of breastfeeding in our study.



GRAPH NO.6.13: REASONS FOR NOT BREAST FEEDING

CONCLUSION: Out of 75 mothers who did not breast feed their children, 27 percent did not do so because of weakness /illness of mother, 31 percent did not do so because of deart in milk for breast feeding ,13 prcent did not do so because of weakness /illness of child, 12 percent did not do so because of nipple/breast complications and 12 percent did not do so because of mother being pregnant with second child.

AGE FOR INTRODUCTION OF COMPLEMENTARY FEEDING

The study tried to elicit the range of age when mothers tend to initiate complementary feeding. The following table shows the age at which mothers tend to initiate complementary feeding.

Age for introduction of complementary foods	Percentage
Less than three months	13
Three to six months	32
Six to nine months	47
Nine to twelve months	5
Twelve to fifteen months	3

TABLE NO.6.12: AGE FOR INTRODUCTION OF COMPLEMENTARY FOODS

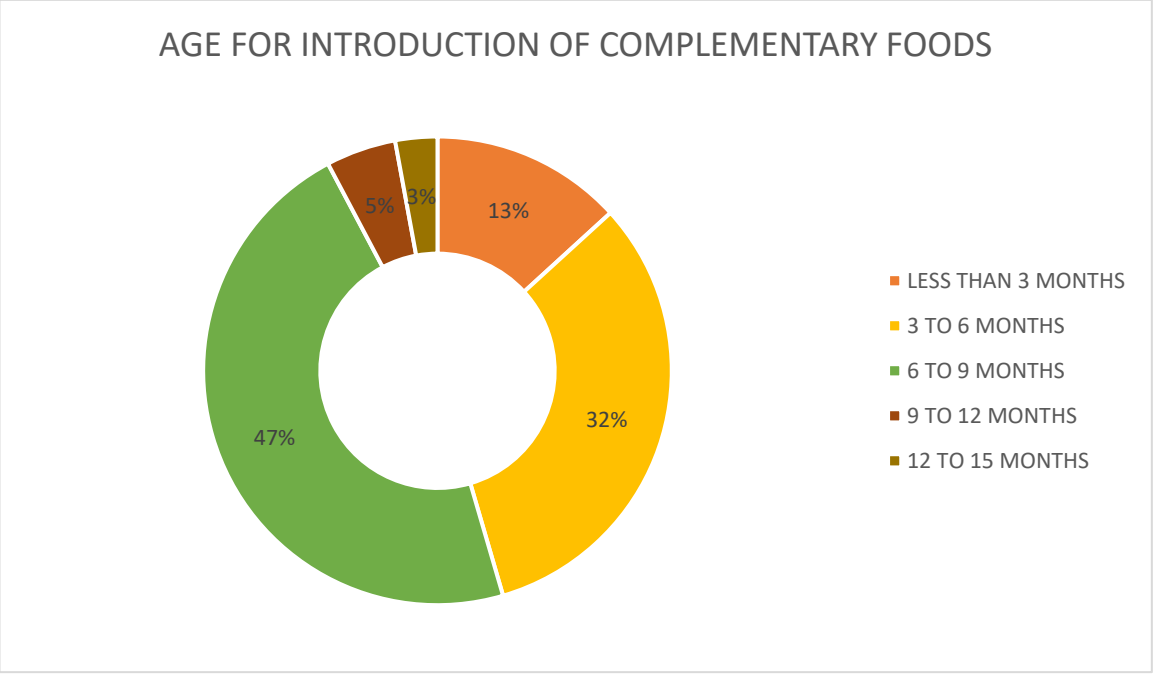
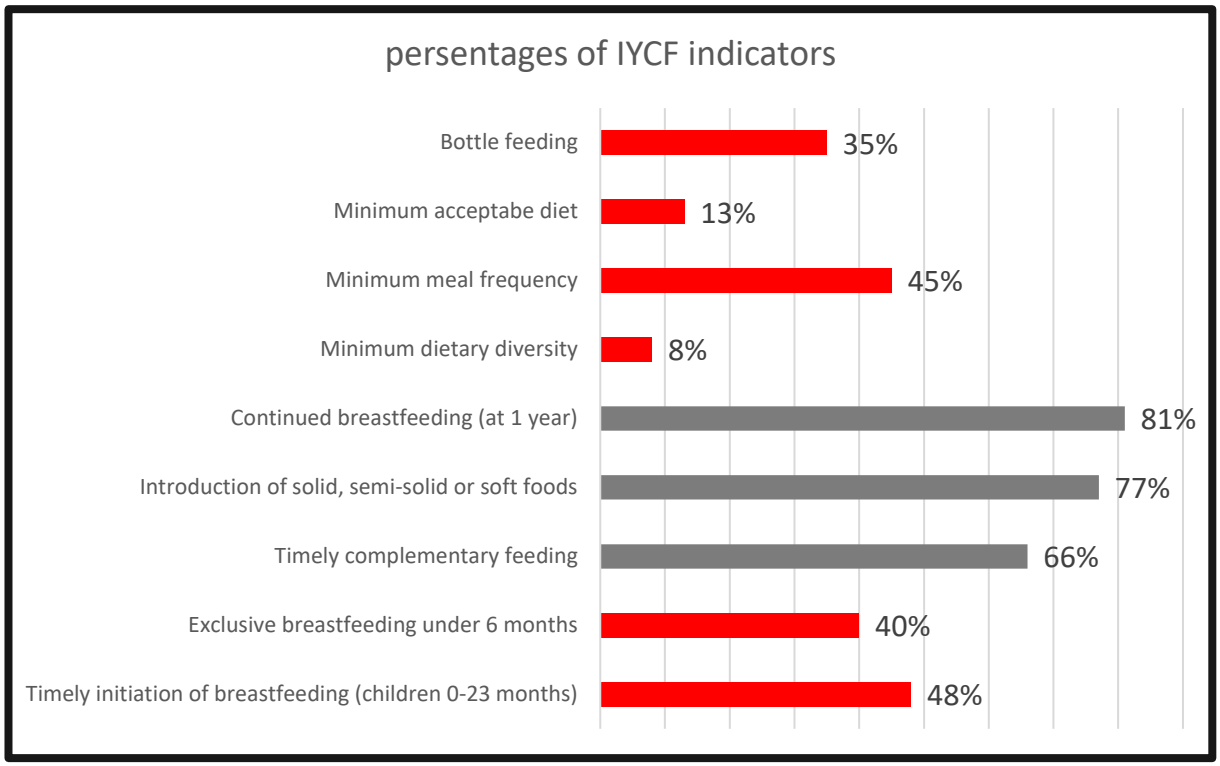


TABLE NO.6.14: AGE FOR INTRODUCTION OF COMPLEMENTARY FOODS

CONCLUSION: Out of 210 mothers who had begun with complementary feeding of their children, 13 percent of mothers began it in less than three months, 32 percent of mother began it in the range of three to six months, 47 percent of mothers began complementary feeding in range of six to nine months and 5 percent of mothers began it in range of nine to twelve months.

That is total of 45 % (13+32) of mother's introduced complementary foods before 6 months, which may due to lack of information on the EBF up to 6 months and the right age of introduction of complementary food.

KEY FINDINGS



1. Out of all indicators maximum number of indicators (6) are less than 50% which shows there is a need to improve IYCF practices in Uttar Pradesh.
2. Less than half of the children (48%) were timely breast which could be the reason for early neonatal mortality in U.P.
3. Even after launch of so many schemes focusing on exclusive breast feeding have launched in U.P. still almost 40% of children aged upto 6 months are not exclusively breastfed. Which could be the reason for high MMR of U.P (68%)
4. Most of the mothers of children aged (6 to 8) give their children Dal ka pani (6%) as diet supplement instead of semisolid dal which may due to lack of awareness.
5. 71 mothers out of 123 mothers (57%) of children aged 0-6 months give their newborns plain water which may due to lack of awareness or may due to their cultural norms.
6. 90% of children did not receive minimal dietary deficiencies which could be the reason for various dietary deficiencies in children in the later age.

7. Less than half 42 % of mothers of infants 6-9 months of age introduced timely complementary foods which shows lack of awareness about the right age of introduction of complementary feeding.
8. The most recurrent reason for withdrawal of breast feeding was – dearth of milk for breast feeding which could be due to wrong.
9. 58% of mother give their baby water before 6 months.

Suggestions

- Training of healthcare providers adequately on breastfeeding support skills, and providing structured breastfeeding support after maternity discharge is needed to promote EBF
- 58% of mother give their baby water before 6 months.BCC on EBF and there is need to bring behavioural change in cultural misbeliefs that "*an infant needs to drink water*". Public health education campaigns through advertisement, role plays aimed at empowering family members especially those at the top of family echelon viz. grandmother, father, traditional birth attendants who can function as birth companions to promote exclusive breast feeding and age appropriate complementary feeding.
- Increase access to information on breastfeeding through **mobile kunji** and other m-health apps would especially be vital in modifying families' conception of 'appropriate' infant feeding.
- Religious leaders if properly educated about exclusive breast feeding could be used to modify and /or discourage such practices that involve feeding new-born wit inappropriate substitutes.
- Strengthening mediums such as village health and nutrition day, anganwadis to deliver hands on training to mothers in camps to demonstrate age appropriate complementary feeding practices and to reinforce importance of minimal dietary diversity.

Conclusion

The study reveals that there is an urgent need to improve IYCF practices in Uttar Pradesh and focus should be more on exclusive breast feeding and complementary feeding.

The study find out that although majority of infants and children (both breast fed and non-breast fed) achieve standards for minimum food frequency but they fail to achieve standards for minimum food diversity because of age inappropriate complementary food practices.

Less than half of mothers of infants aged 6-9 months (42%) introduced timely complementary foods which shows lack of awareness about the right age of introduction of complementary feeding. 57% of mother of infants aged 0-6 months gave their child plain water before six months, which may be due to lack of awareness about exclusive breast feeding practices and intends to prioritize on interventions based on these areas through effective communication and counselling.

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ANNEXURES

For research purposes only

LIST OF BLOCKS

SHAHJAHANPUR DISTRICT	BAREILLY DISTRICT
1. KALAN	1. BAHERI
2. MIRZAPUR	2. MIRGANJ
3. JALALABAD	3. KYARA
4. BANDA	4. NAWABGANJ
5. KHUTAR	5. MAJHGAWAN
6. POWAYAN	6. BHOJIPURA
7. SINDHAULI	7. RAM NAGAR
8. KATRA	8. BITHIRI CHAINPUR
9. JAITIPUR	9. BHADPURA
10. TILHAR	10. BHAMORA
11. NIGOHI	11. BHUTA
12. KANTH	12. SHERGARH
13. DADROL	13. FATEHGANJ
14. BHAWALKHERA	14. DAMKHODA
15. KHUTAR	15. FARIDPUR

For research purposes

Survey ID:

Study on INFANT YOUNG CHLD FEEDING PRACTICES

Informed Consent Form

Good _____. मेरा नाम _____ हैं और मैं भारतीय संस्थान(IIHMR), से स्वास्थ्य प्रबंधन रिसर्च कर रहीं हूँ. मैं दो वर्ष से कम उम्र के बच्चों की फीडिंग की स्थिति पर अध्ययन कर रही हूँ और यह इंडिया हैल्थ एक्शन ट्रस्ट की इंटर्नशिप कार्यक्रम के द्वारा समर्थित है। हम उत्तर प्रदेश के दो जिलों में यह अध्ययन कर रहे हैं।

इस अनुसंधान के भाग के रूप में, हम आप के और आप के बच्चे के स्वास्थ्य और फीडिंग की स्थिति के बारे में 10 मिनट के लिए साक्षात्कार करेंगे। इस साक्षात्कार में आपकी व्यक्तिगत जानकारी को पूरी तरह से गुप्त रखा जाएगा और इस अध्ययन में भाग लेने पर आप को किसी प्रकार की हानि नहीं होगी .आप किसी भी समय साक्षात्कार रोक सकते हैं या किसी भी सवाल का जवाब देने के लिए मना कर सकते हैं। इस अध्ययन में भाग लेने से आप को कोई सीधा लाभ नहीं होगा लेकिन इस जानकारी को स्थानीय अधिकारियों को दिया जाएगा ,जो बच्चों को स्वास्थ्य और पोषण संबंधी सेवाएं उपलब्ध कराने के लिए जिम्मेदार हैं।

यदि इस अनुसंधान में आप को कोई समस्या हो या आप का कोई प्रश्न हो, तो आप मुझे इस नंबर ..... पर संपर्क कर सकते हैं। हमें उम्मीद है कि आप इस अध्ययन में भाग लेंगे।

क्या आप अध्ययन में भाग लेने के लिए तैयार है?

1. नहीं ☐ ⟶ प्रतिवादी को उनके समय के लिए धन्यवाद दो और छोड़ दो.

2. हाँ ☐ ⟶ हस्ताक्षरित सहमति लें और सर्वेक्षण को आगे बढ़ाएँ

मैं, प्रतिवादी सहमति फार्म को सही ढंग से समझ गया हूँ और अध्ययन में भाग लेने के लिए स्वेच्छा से सहमत हूँ।

प्रतिवादी के हस्ताक्षर:

प्रतिवादी के नाम: दिनांक:

(अनपढ़ / अलग ढंग से विकलांग प्रतिवादी के मामले में, हस्ताक्षर एक गैर मामूली गवाह से प्राप्त किया जाना चाहिए)

साक्षी के हस्ताक्षर:

गवाह का नाम:

दिनांक

A1	बच्चे का नाम	_____ -777 नहीं जानते है -999 जवाब देने के लिए मना कर दिया							
A2	बच्चे के जन्म की तारीख	M	M	D	D	Y	Y	Y	Y
		-777 नहीं जानते है -999 जवाब देने के लिए मना कर दिया							
A3	(पूर्ण किए गए महीनों में) आयु	_____ -777 नहीं जानते है, -999 जवाब देने के लिए मना कर दिया							
A3	लिंग (To be Observed)	1 - लड़का		2. लड़की		-888 (Other) Specify _____			
A4	पता								
A5	आंगनवाड़ी केंद्र का नाम								
A6	स्वास्थय उपकेंद्र का नाम								
A7	माता-पिता का नाम	A5 .1) पिता का नाम	_____ -777 नहीं जानते है, -999 जवाब देने के लिए मना कर दिया						
		A5 .2) माता- का नाम	_____ -777 नहीं जानते है, -999 जवाब देने के लिए मना कर दिया						
A8	धर्म (उपयुक्त वृत्त)	1.Hindu	2.Muslim	3.Christian	4.Sikh	-888 (Other) Specify _____			
		-777 Does Not Know -999 Refused to Answer							
A9	सामाजिक जाती (उपयुक्त वृत्त)	1.SC	2.ST	3.OBC Specify (_____)	4.General	-888 (Other) Specify _____			
		-777 नहीं जानते है, -999 जवाब देने के लिए मना कर दिया							

INTERVIEW INFORMATION:

1	साक्षात्कारकर्ता का नामः								
2	साक्षात्कार की तिथि:	M	M	D	D	Y	Y	Y	Y
3a	साक्षात्कार की तिथि:								
3b	साक्षात्कार के अंत समय								
4	साक्षात्कार की जगह								
5	साक्षात्कारकर्ता का हस्ताक्षर								

6	Scrutinizer 1 हस्ताक्षर Date:		Scrutiny Notes	

Section A: Personal Information (To be separated from survey)

Section B: assessment of IYCF practices			
B1	क्या आपने कभी (नाम) को स्तनपान कराया है?	1. हाँ 2. नहीं -777 नहीं जानते है, -999 जवाब देने के लिए मना कर दिया	If no then skip to B4.
B2	जन्म के कितने समय बाद आपने (नाम) को स्तनपान कराया? यदि 1 घंटे के अंदर हो तो "तुरंत" रिकॉर्ड " करें। अगर 24 घंटे, के अंदर हो तो “घंटे” रिकॉर्ड घंटे करें। अन्यथा, दिन रिकॉर्ड करें।	1. तुरंत ..... 2. घंटे..... 3. दिन..... -777 नहीं जानते है, -999 जवाब देने के लिए मना कर दिया	
B3	क्या आपका बच्चा अभी स्तनपान कर रहा है ?	1.हाँ 2 नहीं -777 नहीं जानते है, -999 जवाब देने के लिए मना कर दिया	If yes then skip to B5
B4	आपने किस कारण की वजह से (नाम) को स्तनपान कराना छोड़ा?	माँ की बीमारी / कमजोर .....01 बच्चे की बीमारी / कमजोर .....02 निपल/स्तन समस्या .....03 दूध पर्याप्त नहीं .....04 माँ काम करती है .....05 बच्चे ने इनकार कर दिया .....06 दूध छुड़ाने की आयु .....07 दोबारा गर्भ धारण करने की वजह से .....08 गर्भनिरोधक का उपयोग शुरू करने की वजह से .....09 अन्य वजह (निर्दिष्ट करें).....10 -777 नहीं जानते है, -999 जवाब देने के लिए मना कर दिया	Skip to B8
B5	कितनी बार आपने कल सूर्योदय और आज सूर्योदय के बीच [नाम], को स्तनपान कराया है ?	संख्या _____ -777 नहीं जानते है, -999 जवाब देने के लिए मना कर दिया	

B6	क्या आपने बच्चे को मां के दूध के अलावा अन्य किसी तरल पदार्थ या खाद्य पदार्थ (अर्द्ध ठोस या ठोस) का परिचय किया है?	1.हाँ 2.नहीं -777 नहीं जानते है, -999 जवाब देने के लिए मना कर दिया	*** यदि जवाब "नहीं"है तो साक्षात्कार को अंत करें
B7	किस उम्र में आपने पहली बार मां के दूध के अलावा अन्य तरल पदार्थ या खाद्य पदार्थ का परिचय किया था?	माह _____ -777 नहीं जानते है, -999 जवाब देने के लिए मना कर दिया	

B8	बीते कल बच्चे को दिन या रात के दौरान कोई भी तरल पदार्थ दिया गया है ? (बाहर लिए गए पदार्थ को भी इस लिस्ट में शामिल करें और अगर आइटम किसी अन्य पदार्थ के साथ मिलाकर दिया है तो भी रिकॉर्ड करें***)		
	तरल भोजन के प्रकार	क्या बच्चे ने इनमे से कुछ पिया है 1 हाँ 2. नहीं 777 नहीं जानते है 999 जवाब देने के लिए मना कर दिया	
		आइटम	कितनी बार पिछले 24 घंटों में पिया गया था
	सादा जल		
	फलों का रस		
	सूप / दलिया		
	दूध (ताजा / पाउडर)		
	शिशु फार्मूला		
	कोई भी अन्य तरल पदार्थ, निर्दिष्ट करें _____		
B9	बीते कल के २४ घटे में , बच्चे को दिन या रात के दौरान कोई भी / ठोस /अर्ध ठोस पदार्थ दिया गया है ? (बाहर खाय गए पदार्थ को भी इस लिस्ट में शामिल करें और अगर आइटम किसी अन्य पदार्थ के साथ मिलाकर दिया है तो भी रिकॉर्ड करें***)		
	ठोस / अर्द्ध ठोस भोजन का प्रकार	क्या बच्चे ने इनमे से कुछ खाया है 1 हाँ 2 नहीं 777 नहीं जानते है 999 जवाब देने के लिए मना कर दिया	
		आइटम	कितनी बार पिछले 24 घंटों में खाया गया था
	दही// चीज़/ मिल्क प्रोडक्ट्स		
	शिशु फार्मूला (Cerelac/ Farex)		
	दलिया / ब्रेड /रोटी /चावल /नूडल्स		
	बटर /घी /ऑइल /फैट्स		
	कद्दू / गाजर (अंदर से नारंगी रंग का खाना)		
	आलू, सफेद आलू, कसावा या किसी भी अन्य खाद्य जड़ों से बना दिया		
	पत्तेदार साग (पालक आदि)		

	पका हुआ आम / पका पपीता		
	किसी भी लाल मांस - चिकन / मटन		
	अंडा		
	मछली (सूखे / ताजा)		
	बीन्स / मटर /दाल / नट्स /सीड्स		
	चॉकलेट्स/ कैंडी /बिस्कुट्स /केक		
	कोई भी अन्य ठोस, अर्ध ठोस या नरम भोजन, निर्दिष्ट करें		
B10	क्या (नाम) ने पिछले २४ घंटे में बोतल से निप्पल द्वारा कोई भी तरल पदार्थ पिया है ?	1 हाँ 2 नहीं 777 नहीं जानते है	