

INTERNSHIP TRAINING

At

National Health Mission, Chhattisgarh

Title of the study

**“A Study of the perception on exclusive breastfeeding among
postnatal mothers at District Hospital”**

Preeti Manik

Under the Guidance of

Dr. Pradeep Panda

Post Graduate Diploma in Hospital and Health Management

2015-17



International Institute of Health Management Research

New Delhi

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A Report

By

Preeti Manik

Post Graduate Diploma in Hospital and Health Management

2015-17



International Institute of Health Management Research

New Delhi

Completion of Dissertation from NHM, Chhattisgarh

The certificate is awarded to


Preeti Manik

**In recognition of having successfully completed her
Internship and has successfully completed her Project on**

**A Study of The Perception On Exclusive Breast Feeding Among Postnatal Mothers At
District Hospital**

Date 11th May 2017

**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 endeavours.**


**State Program Manager, NHM Chhattisgarh
Raigarh**

Date: 11.05.2017,

Certificate from Dissertation Advisory Committee

This is to certify that Dr. Preeti Manik, 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 **"Study of the Perception on Exclusive Breast Feeding among Postnatal Mothers at District Hospital"** in partial fulfilment of the requirements for the award of the Post- Graduate Diploma in Health and Hospital Management.

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.



Dr. Pradeep Panda

**Research Dean, IIHMR Delhi
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State Program Manager

NHM, Raigarh,

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Preeti Manik is a student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi and she has undergone internship training at ***NHM Chhattisgarh from 15th February 2017 to 10th May 2017.***

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

The Internship is in fulfilment of the course requirements. We wish him all success in all his future endeavours.



Dr. A.K. Agarwal
Dean, Academics and Student Affairs
IIHMR, New Delhi



Dr. Pradeep Panda
IIHMR, New Delhi

Certificate of Approval

The following dissertation titled ***"The Study Of The Perception On Exclusive Breast Feeding Among Postnatal Mothers At District Hospital at "NHM CHHATTISGARH, RAIGARH"*** is hereby 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 therein but approve the dissertation only for the purpose it is submitted. Dissertation Examination Committee for evaluation of dissertation.

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FEEDBACK FORM

Name of the Student : Preeti Manik

Dissertation Organization : NHM, Chhattisgarh

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Attendance : ok (100%)

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Strengths : Dedicated to work
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Suggestions for Improvement: Can be more organised

Date:.

Signature of the Officer-in-Charge/

Place : Organization Mentor (Dissertation)

**INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH,
NEW DELHI**

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled "*A Study Of The Perception On Exclusive Breast Feeding Among Postnatal Mothers At District Hospital*" submitted by **Preeti Manik** Enrollment No. **PG/15/56** under the supervision of **Dr. Pradeep Panda** for award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from 15th February 2017 to 10th May 2017 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.

Preeti Manik

PG/15/56

PGDHM (2015-2017) - Health

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Abbreviations

ICDS	Integrated Child Development Services
AWC	Anganwadi Centre
AWW	Anganwadi Worker
AWH	Anganwadi Helper
SC and ST	Schedule Caste and Schedule Tribe
ASHA	Accredited Social Health Activist
MIS	Management Information System
WHO	World Health Organization
PRIs	Panchayati Raj Institutions
SNP	Supplementary Nutrition Programme
THR	Take Home Ration
SHGs	Self Help Groups
PHC	Primary Health Centre
CHC	Community Health Centre
FRU	First Referral Unit
MMR	Maternal Mortality Ratio
M & E	Monitoring and Evaluation
LS	Lady Supervisor
LQAS	Lots Quality Assurance Sample
CDPO	Child Development Programme Officer
DPO	District Programme Officer
MoHFW	Ministry of Health and Family Welfare
MoWCD	Ministry of Women and Child Development
IEC	Information Education Communication
BCC	Behaviour Change Communication
IFA	Iron Folic Acid
MDGs	Millennium Development Goals
ANMs	Auxiliary Nurse midwives
Mos	Medical Officers
DRG	District Resource Group
BRG	Block Resource Group
PNC	Post Natal Care
ECD	Early childhood Development

ORGANIZATION PROFILE

NATIONAL HEALTH MISSION, CHHATTISGARH

The Union Cabinet vide its decision dated 1st May 2013 has approved the launch of National Urban Health Mission (NUHM) as a Sub-mission of an over-arching National Health Mission (NHM), with National Rural Health Mission (NRHM) being the other Sub-mission of National Health Mission.

NHM has six financing components:

1. NRHM-RCH Flexipool
2. NUHM Flexipool
3. Flexible pool for Communicable disease,
4. Flexible pool for Non communicable disease including Injury and Trauma,
5. Infrastructure Maintenance and
6. Family Welfare Central Sector component.

Within the broad national parameters and priorities, states would have the flexibility to plan and implement state specific action plans. The state PIP would spell out the key strategies, activities undertaken, budgetary requirements and key health outputs and outcomes.

The State PIPs would be an aggregate of the district/city health action plans, and include activities to be carried out at the state level. The state PIP will also include all the individual district/city plans. This has several advantages: one, it will strengthen local planning at the district/city level, two, it would ensure approval of adequate resources for high priority district action plans, and three, enable communication of approvals to the districts at the same time as to the state.

The fund flow from the Central Government to the states/UTs would be as per the procedure prescribed by the Government of India. The State PIP is approved by the Union Secretary of Health & Family Welfare as Chairman of the EPC, based on appraisal by the National Programme Coordination Committee (NPCC), which is chaired by the Mission Director and includes representatives of the state, technical and programme divisions of the MoHFW, national technical assistance agencies providing support to the respective states, other departments of the MoHFW and other Ministries as appropriate.

All existing vertical programmes, shall be horizontally integrated at state, district and block levels. This will mean incorporation into an integrated state, district/city programme implementation plan, sharing data

and information across these structures. It shall also mean rationalization of use of infrastructure and human resources across these vertical disease programmes.

Vision of the NHM

“Attainment of Universal Access to Equitable, Affordable and Quality health care services, accountable and responsive to people’s needs, with effective inter-sectoral convergent action to address the wider social determinants of health”

Core Values

- Safeguard the health of the poor, vulnerable and disadvantaged, and move towards a right based approach to health through entitlements and service guarantees
- Strengthen public health systems as a basis for universal access and social protection against the rising costs of health care.
- Build environment of trust between people and providers of health services.
- Empower community to become active participants in the process of attainment of highest possible levels of health.
- Institutionalize transparency and accountability in all processes and mechanisms.
- Improve efficiency to optimize use of available resources.

Guiding Principles

- Build an integrated network of all primary, secondary and a substantial part of tertiary care, providing a continuum from community level to the district hospital, with robust referral linkages to tertiary care and a particular focus on strengthening the Primary Health Care System including outreach services in both rural areas and urban slums.
- Ensure coordinated inter-sectoral action to address issues of food security and nutrition, access to safe drinking water and sanitation, education particularly girls education, occupational and environmental health determinants, women’s rights and empowerment and different forms of marginalization and vulnerability.
- Incentivize states and UTs to undertake health sector reforms that lead to greater efficiency and equity in health care delivery.
- Ensure prioritization of services that address the health of women and children and the prevention and control of communicable and non-communicable diseases, including locally endemic diseases.
- Reduce out of pocket expenditure on health care, eliminate catastrophic health expenditures and provide social protection to the poor against the rising costs of health care, through cashless

services delivered by public health care facilities, supplemented by contracted-in private sector facilities wherever necessary.

- Ensure that all public health care facilities or publicly financed private care facilities provide assured quality of health care services.
- Ensure increased access and utilization of quality health services to minimize disparity on account of gender, poverty, caste, other forms of social exclusion and geographical barriers.
- Plan for differential financial investments and technical support to cities, districts and states with higher proportions of vulnerable population groups, urban poor and destitute, and with difficult geographical terrain that face special challenges to meeting health goals.
- Strengthen state level implementation capacity to progress towards achievement of universal health care through flexible and responsive resource allocation, the creation of efficient institutional mechanisms, rules, regulations and processes to enable effective decentralized health planning and management.
- Incentivize good performance of both facilities and providers.
- Address shortages of skilled workers in remote, rural areas, and other under-served pockets through appropriate monetary and non-monetary incentives.
- Promote partnerships with private, for profit, and not for profit agencies including civil society organizations to achieve health outcomes.
- Facilitate knowledge networks and create effective public health institutions.
- Encourage and enable the involvement of Panchayati Raj Institutions (PRIs) /Urban Local Bodies (ULBs) representatives in the governance and oversight of health services, and undertake proactive efforts for convergence and concerted action on social determinants of health such as food and nutrition, safe drinking water, sanitation and hygiene, housing, environment and waste management, education, child marriage, gender and social inequity.
- Establish an accountability and governance Framework that would include social audits through people's bodies, community based monitoring and an effective mechanism of concurrent evaluation.
- Mainstream AYUSH, so as to enhance choice of services for users and to learn from and revitalize local health care traditions.
- Expand focus beyond maternal and child survival to ensuring quality of life for women, children and adolescents.

Goals, Outcomes and Strategies

The key goals of this phase of NHM will be towards enabling and achieving the stated vision, making the system responsive to the needs of citizens, building a broad based inclusive partnership for realizing National health goals, focusing on the survival and wellbeing of women and children, reducing existing disease burden and ensuring financial protection for households.

To achieve these goals, NHM will implement the following strategies:

1. Support and supplement state efforts to undertake sector wide health system strengthening through the provision of financial and technical assistance.
2. Build state, district and city capacity for decentralized outcome based planning and implementation, based on varying diseases burden scenarios, and using a differential financing approach. There will be a focus on results and performance based funding including linkage to caseloads.
3. Enable integrated facility development planning which would include infrastructure, human resources, drugs and supplies, quality assurance, and effective Rogi Kalyan Samitis (RKS).
4. Create a District Level Knowledge Centre within each District Hospital to serve as the hub for a range of tasks including inter alia, provision of secondary care and selected elements of tertiary care, and the site for skill based training for all cadres of health workers, collating and analysing data and coordinating district planning.
5. Improve delivery of outreach services through a mix of static facilities and mobile medical units with a team of health service providers with the skill mix and capacity to address primary health care needs.
6. Strengthen the sub-centre/Urban Primary Health Centre (UPHC) with additional human resources and supplies to deliver a much larger range of preventive, promotive and curative care services- so that it becomes the first port of call for each family to access a full range of primary care services.
7. Prioritize achievement of universal coverage for Reproductive Maternal, Newborn, Child Health + Adolescent (RMNCH+A), National Communicable Disease Control and Non Communicable Diseases programmes.
8. Expand focus from child survival to child development of all children 0-18 years through a mix of Community, Anganwadi, and School based health services. The focus of such services will be on prevention and early identification of diseases through periodic screening, health education and promotion of good health practices and values during these formative years and timely management including assured referral for secondary and tertiary level care as appropriate.
9. Achieve the goals of safe motherhood and transition to addressing the broader reproductive health needs of women.
10. Focus on adolescents and their health needs.
11. Ensure the control of communicable disease which includes prompt response to epidemics and effective surveillance.
12. Use primary health care delivery platforms to address the rising burden of Non Communicable Diseases
13. Converge with Ministry of Women & Child Development and other related Ministries for effective prevention and reduction of under-nutrition in children aged 0-3 years and anaemia among children, adolescents and women.

14. Empower the ASHA to serve as a facilitator, mobilizer and provider of community level care.
15. Strengthen people's organizations such as the Village Health Sanitation and Nutrition Committees (VHSNC) and Mahila Arogya Samitis (MAS) for convergent inter-sectoral planning to address social determinants of health and increasing utilization of health and related public services at the community level.
16. Create mechanisms to strengthen Behaviour Change Communication efforts for preventive and promotive health functions, action on social determinants and to reach the most marginalized.
17. Enable Social Protection Function of Public Hospitals through the universal provision of free consultations, free drugs and diagnostics, free emergency response and patient transport systems.
18. Develop elective partnerships with the not-for-profit, nongovernmental organizations and with the for-profit, private sector to bring in additional capacity where needed to close gaps or improve quality of services.
19. Improve Public Health Management by encouraging states to create public health cadre, and strengthening/ creating elective institutions for programme management, providing incentives for improved performance and building high quality research and knowledge management structures.
20. Support states to develop a comprehensive strategy for human resources in health, through policies to support improved recruitment, retention and motivation of health workers in rural, remote and underserved areas, improved workforce management, required staff to help achieve IPHS norms of human resource deployment, development of midlevel care providers and creation of new cadres with appropriate skill sets, and in-service training.
21. Enhance use of Information & Communication Technology to improve health care and health systems performance.
22. Strengthen Health Management Information Systems as an effective instrument for programme planning and monitoring, supplemented by regular district level surveys and a strong disease surveillance system.
23. Ensure universal registration of births and deaths with adequate information on cause of death, to assist in health outcome measurements and health planning.
24. Establish Accountability Frameworks at all levels for improved oversight of programme implementation and achievement of goals. Mechanisms for accountability shall range from participatory community processes like Jan Sunwais/Samwads, Social Audit through Gram Sabhas to professional independent concurrent evaluation.
25. Implement pilots for Universal Health Coverage (UHC) in selected districts in both EAG and non EAG States to test approaches and innovations before scaling up.

To ensure equitable health care and to bring about sharper improvements in health outcomes, a systematic effort to effectively address the intrastate disparities in health outcomes would be undertaken. 25% of all districts in each state that are in the lowest quintile of composite health index have been identified as high priority districts. All tribal and LWE affected districts which are below the state's average

of composite health index have also been included as high priority districts. Further, all the LWE districts have been identified as special focus districts. These districts would receive higher per capita funding, relaxed norms, enhanced monitoring and focussed supportive supervision, and encouraged to adopt innovative approaches to address their peculiar health challenges. Technical support from all sources is being harmonised and aligned with NHM to support implementation of key intervention packages.

There is a shared conviction among policy makers and public health experts that it would be at least two to three plan periods before India can provide UHC to all its citizens. NHM represents the prime vehicle for achieving UHC. The government has already taken steps towards provision of free maternal, and child health services, including new-born care, immunization, adolescent health, and family planning. Free diagnostic and treatment services are provided for major communicable and a selected range of non-communicable diseases. These need to be further expanded and strengthened.

The NHM will essentially focus on strengthening primary health care across the country. The emphasis would be on strengthening health facilities and services up to the district level in urban and rural areas. The Twelfth Plan document states that expenditures on primary health care should account for at least 70% of the health care expenditure. Tertiary care and regulatory functions should be a part of the other Central Sector and/or Centrally Sponsored scheme, namely, Human Resources & Medical Education.

Outcomes for NHM in the 12th Plan are synonymous with those of the 12th Plan, and are part of the overall vision. Specific goals for the states will be based on existing levels, capacity and context. State specific innovations would be encouraged. Process and outcome indicators will be developed to reflect equity, quality, efficiency and responsiveness. Targets for communicable and non-communicable disease will be set at state level based on local epidemiological patterns and taking into account the financing available for each of these conditions.

1. Reduce MMR to 1/1000 live births
2. Reduce IMR to 25/1000 live births
3. Reduce TFR to 2.1
4. Prevention and reduction of anaemia in women aged 15–49 years
5. Prevent and reduce mortality & morbidity from communicable, non- communicable; injuries and emerging diseases
6. Reduce household out-of-pocket expenditure on total health care expenditure
7. Reduce annual incidence and mortality from Tuberculosis by half
8. Reduce prevalence of Leprosy to <1/10000 population and incidence to zero in all districts
9. Annual Malaria Incidence to be <1/1000
10. Less than 1 per cent microfilaria prevalence in all districts
11. Kala-azar Elimination by,<1 case per 10000 population in blocks

PROJECT REPORT

Title of the study

**“A Study of the perception on exclusive breastfeeding
among postnatal mothers at District Hospital”**

CHAPTER ONE

INTRODUCTION

WHO recommends the practice of exclusive breastfeeding as an essential component of infant nourishment, which is defined as giving no food or liquid other than mother's breast milk during the first 6 months after birth¹. However, after many years of continuous efforts by various government and non-government agencies across the world, approximately 1.3 million lives are lost annually because of inadequate exclusive breastfeeding². In India, only 46.4% of children are exclusively breastfed and the country still struggles to achieve a reasonable level of optimal infant and child-feeding practices.³

Chhattisgarh state of India has recorded a high infant mortality rate (41 per 1000 live births)⁴. This figure is especially higher in rural Chhattisgarh (43) than in urban areas (32). Rural children in Chhattisgarh are also

¹ WHO. Exclusive breastfeeding for six months best for babies everywhere. (Online) 2011. Available: http://www.who.int/mediacentre/news/statements/2011/breastfeeding_20110115/en/ .

² 2. UNICEF. Nutrition – what are the challenges? 2003. Available: http://www.unicef.org/nutrition/index_challenges.html

³ National Family Health Survey (NFHS-3), 2005-06: Mumbai: IIPS, 2007.

⁴ SRS 2016 Report

more likely to be undernourished than urban children with a total of around 41% of 0–5 year children being underweight. The breastfeeding practices are further influenced by various cultural and community beliefs in rural regions.⁵ Thus, it is essential to understand the factors underlying rural women's breastfeeding behaviour.

Previous researchers have identified maternal intention as an important determinant of breastfeeding behaviour.^{6,7,8} Further, prenatal intention has been emphasised by many authors as one of the strongest factors for breastfeeding intensity and duration.^{9,10,11,12} In addition, a woman's clear vision about breastfeeding before pregnancy or during the early stage of pregnancy increases her likelihood of optimal breastfeeding.^{13,14}

The framework of theory of planned behaviour has given insights into the effect of breastfeeding intention on the actual behaviour and related determinants.^{15,16,17} The key factor in this theory is the intention of the individual to execute a behaviour that is determined by its three constructs – the individual's attitude towards that behaviour, subjective norms (perception of social pressure from significant others to perform a particular behaviour) in the society about that behaviour and the perceived control (perception of the ease or difficulty of performing a particular behaviour) to be able to practice that behaviour. This theory has been used by numerous researchers on breastfeeding intention, who have found that the three constructs, attitude, subjective norm and perceived behavioural control, have significant effect on breastfeeding intention¹⁸⁻²⁴.^{18,19,20,21,22,23}

⁵ Bandyopadhyay M. Impact of ritual pollution on lactation and breastfeeding practices in rural West Bengal, India. *International Breastfeeding Journal* 2009; 4(2): 1-8.

⁶ Bai Y, Middlestadt SE, Peng CY, Fly AD. Predictors of continuation of exclusive breastfeeding for the first six months of life. *Journal of Human Lactation* 2010; 26(1): 26-34.

⁷ Forster DA, McLachlan HL, Lumley J. Factors associated with breastfeeding at six months postpartum in a group of Australian women. *International Breastfeeding Journal* 2006; 1(18): 1-12.

⁸ Shi L, Zhang J, Wang Y, Guyer B. Breastfeeding in rural China: association between knowledge, attitudes, and practices. *Journal of Human Lactation* 2008; 24(4): 377-385

⁹ Dodgson JE, Henly SJ, Duckett L, Tarrant M. Theory of planned behaviour-based models for breastfeeding duration among Hong Kong mothers. *Nursing Research* 2003; 52(3): 148-158.

¹⁰ DiGirolamo A, Thompson N, Martorell R, Fein S, Grummer-Strawn L. Intention or experience? Predictors of continued breastfeeding. *Health Education and Behaviour* 2005; 32: 208-226.

¹¹ Scott JA, Binns CW, Oddy WH, Graham KI. Predictors of breastfeeding duration: evidence from a cohort study. *Paediatrics* 2006; 117(4): e646-655

¹² Swanson V, Power KG. Initiation and continuation of breastfeeding: theory of planned behaviour. *Journal of Advanced Nursing* 2005; 50(3): 272-282

¹³ Buxton KE, Gielen AC, Faden RR, Brown CH, Paige DM, Chwalow AJ. Women intending to breastfeed: predictors of early infant feeding experiences. *American Journal of Preventive Medicine* 1991; 7(2): 101-106.

¹⁴ Hood LJ, Faed JA, Silva PA, Buckfield PM. Breast feeding and some reasons for electing to wean the infant: a report from the Dunedin multidisciplinary child development study. *New Zealand Medical Journal* 1978; 88(621): 273-276.

¹⁵ Ajzen I. The theory of planned behavior. *Organizational Behavior and Human Decision Processes* 1991; 50: 179-211.

¹⁶ Ajzen I and Fishbein M. *Understanding attitudes and predicting social behaviour*. Englewood Cliffs NJ: Prentice-Hall, 1980.

¹⁷ Wambach KA. Breastfeeding intention and outcome: A test of the theory of planned behaviour. *Research in Nursing & Health* 1997; 20(1): 51-59.

¹⁸ Al-Akour NA, Khassawneh MY, Khader YS, Ababneh AA, Haddad AM. Factors affecting intention to breastfeed among Syrian and Jordanian mothers: a comparative cross-sectional study. *International Breastfeeding Journal* 2010; 5(6): doi: 10.1186/1746-4358-5-6

Breast milk is an ideal way of providing food for the health, growth and development of infants, and it is also an integral part of the reproductive process with important implications for the health of mothers. A recent review has shown that on a population basis exclusive breastfeeding for six months is the optimal way of feeding infants. Thereafter infants should receive complementary foods with continued breastfeeding up to two years of age or beyond. (WHO; 2000-2004; A Report card on exclusive breastfeeding). Breast milk is the natural first food for babies, it provides all the energy and nutrients that the infant needs for the first months of life, and it continues to provide up to half or more of a child's nutritional needs during the second half of the year and up to one-third during the second year of life (WHO, 2000-2004).

Breastfeeding promotes sensory and cognitive development and protects the infants against infection and chronic disease. Exclusive breastfeeding reduces infants mortality due to common childhood illnesses such as diarrhea and pneumonia and helps for a quicker recovery during illness (Kramer M et al, 2001} Breastfeeding contributes to the health and wellbeing of mothers, it helps to space children, reduces the risk of ovarian cancer and breast cancer, increases family and national resources, is a secure way of feeding and is safe for the environment (WHO, 2000-2004: A report on Nutrition). While breastfeeding is a natural act, it is also a learned behavior.

An extensive study has demonstrated that mothers and other caregivers require active support for establishing and sustaining appropriate breastfeeding practices. WHO and UNICEF launched the Baby – friendly Hospital Initiative (BFHI) in 1992, to strengthen maternity practices to support breastfeeding based on the foundation of the ten steps to successful Breastfeeding to protect, promote and support Breastfeeding {WHO,2000-2004}. Exclusive breastfeeding in the first six months of life stimulates baby's immune systems and protects them from diarrhea and acute respiratory infection; two of the major causes of infant mortality in the developing world and improves their responses to Vaccination. Particularly in unhygienic conditions however breast milk substitutes carry a high risk of infection and can be fatal in infants. Yet only slightly more than one-third of all infants in developing countries are exclusively breastfed for the first six months (UNICEF; May 2006, A report card on Nutrition; Number 4).

¹⁹ Kools EJ, Thijs C, de Vries H. The behavioral determinants of breast-feeding in the Netherlands: predictors for the initiation of breast-feeding. *Health Education and Behaviour* 2005; 32(6): 809-824.

²⁰ Meedya S, Fahy K, Kable A. Factors that positively influence breastfeeding duration to 6 months: a literature review. *Women and Birth* 2010; 23(4): 135-145.

²¹ Persad MD, Mensinger JL. Maternal breastfeeding attitudes: association with breastfeeding intent and socio-demographics among urban primiparas. *Journal of Community Health* 2008; 33(2): 53-60.

²² Rempel LA. Factors influencing the breastfeeding decisions of long-term breastfeeders. *Journal of Human Lactation* 2004; 20(3): 306-318.

²³ Swanson V, Power KG. Initiation and continuation of breastfeeding: theory of planned behaviour. *Journal of Advanced Nursing* 2005; 50(3): 272-282.

The promotion protection and support of breastfeeding is an exceptionally cost-effective strategy for improving child survival and reducing the burden of childhood disease particularly in developing countries (Horton et al, 1996; Morrow et al 1999, Sikorsk et al, 2002; Arifeen et al, 2001, Blacket et al, 2003 Jones, et al, 2003). Scientific evidence has guided the development of international recommendations for optimal infant feeding practices which include exclusive breastfeeding for six months, that is, milk only with no other liquids or foods given, and continued breastfeeding up to two years of age or beyond with timely addition of appropriate complementary foods (Butte et al, 2002; Kramer and Kakuma, 2002; WHO, 2002). Compliance with the above recommendation has significant child health and nutritional benefits. The Bellagio child survival study Group has identified optimal breastfeeding in the first year of life as one of the most important strategies for improving child survival (Black et al, 2002, Jones et al, 2003).

Increasing optimal breastfeeding practices could save as many as 1.5 million infant lives every year given the significant protection that breastfeeding provides infants against diarrhea disease, pneumonia and neonatal sepsis (UNICEF 2002, Black et al, 2003, Jones et al, 2003). Improved breastfeeding practice can also have a positive effect on birth spacing, which attributes to child survival (Labbok et al, 1997, Jones et al, 2003).

Most researches on maternal breastfeeding intention have been conducted in developed countries with limited existing data from India and none from Chhattisgarh state. Moreover, only a few studies have specifically focused on prenatal intention for exclusive breastfeeding and rural women's breastfeeding intention has been much less examined. Thus, the aim of this study was to assess the exclusive breastfeeding intention of rural pregnant mothers in Chhattisgarh state of India and its relationship with their knowledge, attitude, subjective norm and perceived control for exclusive breastfeeding.

There is dearth of information for exclusive breastfeeding and mothers support group at District Hospital Raigarh due somehow to the fact that the hospital does not keep records. It is not a baby –friendly hospital and as such no such thing like mother support group. However, education and support services on exclusive breastfeeding have been rendered to mothers on MCH visits or routine postnatal clinics every week.

In conclusion exclusive breastfeeding and the idea of the mothers support groups for it, especially in Chhattisgarh, are still not quite encouraging, considering on the whole, the dropping nature of figures on exclusive Breastfeeding statistics of various surveys and studies.

Statement of the Problem

There has not been a mechanism put in place to keep proper or concrete records on the activities as well as indicators of Exclusive Breastfeeding and mothers support groups in hospitals, polyclinics and health centers in Chhattisgarh. The question therefore is

What are the contemporary views of mothers and helpers about exclusive Breastfeeding at District Hospital Raigarh, though without previous concrete reports or record in place?

- ❖ Do the breastfeeding mothers know how important the exclusive breastfeeding is and how to do it?
- ❖ Do they have confidence and where do they turn to when they face difficulty?
- ❖ Are people around them such as fathers and grandmothers supportive especially when mothers have to resume employment soon after delivery?

The Purpose of the Study

The purpose of the study is to ascertain the current feelings and views of a cross-section of the Breastfeeding mothers on a MCH clinic day at District Hospital Raigarh, about exclusive Breastfeeding in order to develop appropriate strategies.

Significance

It is hoped that the findings of the study will provide a current perceptual database that will inform all of us and more importantly the policy makers on the feelings and views of the mothers about exclusive breastfeeding so that appropriate alternatives to motivate the indulgence of exclusive breastfeeding and its support, would be developed by Breastfeeding mothers, helpers and the populace of Chhattisgarh.

Objectives of the Study

Main objective: The main objective of the study is to find out the perception on exclusive breastfeeding among postnatal mothers.

Specific Objectives

1. Assess the level of Breastfeeding mothers' views about the benefits of exclusive breastfeeding;
2. Determine the level of breastfeeding mother's views about barriers to exclusive breastfeeding;
3. Find the feelings towards exclusive breastfeeding;
4. Identify the behavior of participants;
5. Investigate any kind of support for breastfeeding mothers on exclusive breastfeeding.

Operational Definitions: - These are precise descriptions of how to derive a value for characteristics the researcher is measuring. It also entails how specific these characteristics are measured (Will, March, 2004).

- ❖ Perception – Knowledge, Practice, Attitudes and beliefs about exclusive breastfeeding.
- ❖ Exclusive Breastfeeding – Only breast milk to feed the baby, without any additional food or drink, not even water, for six months.
- ❖ Post-natal mothers – Breastfeeding mothers right from day one of postnatal period.

Organization of study

This study is organized into five chapters.

- ❖ Chapter one entails the introduction, which explains the background information, statement of the problem, the purpose of the study, its significance, objectives and definition of terms.
- ❖ Chapter two composes of the literature reviews on various studies carried out.
- ❖ The third chapter, which is on the methodology, talks about the research setting, population size, sampling techniques, method of data collection and analysis as well as the limitations of the study.
- ❖ Chapter four covers the analysis of the data from the study.
- ❖ Chapter five concerns the discussions, summary, recommendations, avenues for further studies and sample of the questionnaire used for the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Opoku (2005), in his book *A Short Guide to Research Writing in the Social Sciences and Education*, maintains that literature review involves extensive reading in areas which are directly or indirectly related to the topic of study. Such extensive reading does not only provide supportive information that is necessary to the study, but it is also the theoretical framework for the present as well as future research work. Thus, this study must be systematically presented and evaluated to give a clear idea of the topic studied. The literature search had been from various sources such as journals, and data bases (PubMed, CINAHL etc). This chapter would deal with studies carried out by scholars about perception on exclusive breast feeding among postnatal mothers. From our operational definition, perception implies Knowledge, Practice, Attitudes and Beliefs about exclusive breastfeeding.

2.1 Knowledge of Exclusive Breastfeeding

B.B.C English Dictionary (1992) defines knowledge as the information and understanding about a subject, which someone has in mind. In 1999 the U S American Academy of Pediatrics mailed questionnaires to randomly selected 1602 Pediatricians to study the latter's educational needs about exclusive breastfeeding (EBF) to design suitable programmes of information. The study disclosed that most of the Pediatricians had not participated in presentation on management of breastfeeding for three (3) years and a greater number wanted more information on breastfeeding management. Accordingly, the study concluded that Pediatricians had educational needs in breastfeeding management.

In 2002, at the Oslo Institute for Nutrition Research, Norway, De Paoli and Manongi researched into practices and knowledge of breastfeeding among gravidae or gravid women. The research unearthed three hundred and nine (309) mothers, who had earlier on practiced breastfeeding. Out of the number, 85% of the mothers initiated breastfeeding (BF) within the first hour after delivery; 18% of the neonates were given pre- lacteal foods. The implication is that some of the mothers had no knowledge as to initiate breast Feeding within one hour after birth as recommended by UNICEF/WHO that the baby be put to the breast 30 minutes after birth; it also implies that some of the mothers lacked knowledge on the need to avoid formula foods for the first six months of a baby's life. The conclusion to this research was that mothers who were knowledgeable on exclusive breastfeeding were less inclined to discontinue EBF earlier.

Also in 2002, Chen and Chen of Chun Shan Medical, Pediatric Department studied knowledge of breastfeeding among health professionals in Taiwan. By using questionnaires, the study revealed that around 29.8% of the respondents had no knowledge on counseling. It was thus proposed that counseling

skills be included in breastfeeding promotion programmes to empower nursing mothers. Similarly, in 2001-2002, The World Alliance for Breast Feeding Action assessed the understanding of semi-literate and well-lettered pregnant women on breastfeeding. The study unveiled that the semi-literate working mothers had no knowledge of exclusive breastfeeding. It further uncovered that out of 351 participants, none could demonstrate manual breast milk expression and the highly educated women among them knew about EBF but lacked knowledge on its management.

And in June 2002, under the auspices of UNICEF/ WHO Baby Friendly Hospital Initiative (BFHI) programme, Owuaje et al (2002) of the Department of Medicine, College Hospital Ibadan, Oyo state, Nigeria, conducted a study among health professionals. This study portrayed that nurses who had taken part in BFHI workshop were knowledgeable about exclusive breastfeeding and therefore were very positive in attitude, practices and promotion of exclusive breastfeeding.

The same assessment showed that the greatest percentage of health professionals who were able to demonstrate breastfeeding options. It was concluded that inadequate knowledge, information and skills in demonstration of health workers resulted from inadequate support coming from their health facility management. In the same vein, the study gave credence to the fact that knowledge of majority of mothers as to why baby may not obtain breast milk as well as the factors that facilitate increased flow of breast milk were inadequate. It was undeniable therefore, that these mothers were likely to give mixed feeds reasoning that enough breast milk could not be produced for their babies. It was also evident that greater numbers of the mothers were ignorant about the mode of prevention of HIV transmission from mother to child (MTCT) during exclusive breastfeeding.

2.2. Attitudes towards Exclusive Breastfeeding

BBC English Dictionary defines attitude to something as the way a person thinks and feels about it. Breastfeeding mothers think and feel differently about exclusive breastfeeding and this has profound influence on their desire to engage in the practice of EBF. The following studies reveal a variety of attitudes of nursing mothers towards EBF.

F. Savage King, a Pediatrician, in her book “Helping mothers to breastfeed” States that whether mothers breastfeed successfully or not depends partly on the attitude of other people in the community – fathers, grandmothers, relatives, friends, employers, community leaders and others. After studying the influence of paternal attitudes on the decision to breastfeed, Scott et al (1977) reported that paternal preference for breastfeeding was a crucial factor that influenced mothers to breastfeed. (Journal of pediatrics in Child health, 1997) Ineichen et al (1997) studied the behaviour and attitudes of teenage mothers as breast feeders and said that teenage mothers who were not expecting or did not want pregnancy were less inclined to breastfeed than those who had planned for their pregnancies, (American Journal of Public

Health 87: (10): 1709-11-1997) Ingram, Johnson and Greenwood (2003) have suggested that father's support is associated with the duration of breastfeeding.

Bar-Yam and Derby (1997) are of the view that a husband's positive attitude is the most important factor about the decision to exclusively breastfeed. In the Indonesian World Alliance for Breastfeeding Action (WABA) 2001-2002, it was disclosed that most of the working mothers who lived within 2 hours drive from their work place did not want to bring their babies to work. Instead, majority were interested in having nursing corners or special rooms where they could express and store breast milk for their babies.

Fraser et al (2003) in studying mother –partner relationships narrated that a mother who had twins or more would inevitably turn to her partner for help with the care of the babies, and in many families they all worked well together in the care and the upbringing of their children, despite the added strains and stresses a multiple birth put on a family. Ligenoah (1996) claimed that grandmothers caused impediment to the promotion of EBF.

These grandmothers who bathed the babies claimed to have nursed a lot of infants including their own babies to be healthy adults without practicing exclusive breastfeeding. Bangam (1996) said that lactating mothers were not encouraged to practice exclusive breastfeeding by some “curative nurses” and doctors. He complained that such professionals advised them to give water to babies after birth. In the same vein King revealed that, many women failed to breastfeed because health services did not support them. On Breastfeeding Behaviors and Experiences of Adolescent Mothers in Lynchburg VA, U.S.A Spear (2005) examined the breastfeeding experiences and related behaviors of adolescent mothers after discharge from the hospital.

A sample of mothers totaling fifty three (53) aged between 14-19 years were interviewed 5 months to 2 years post-delivery. 60.3% of the adolescent mother's breastfed for 3.15 months. Only 22.6% breastfed for 6 months and 39.6% breastfed for 1 year or less. Friends, Families and health care professionals were supportive of breastfeeding but mothers found prenatal and post-partum education about breastfeeding to be limited. Many indicated that they were not plainly informed about the superiority of breast milk and the health advantages of breastfeeding.

The clinical implication is that nurses and physicians providing care for child bearing women need to promote breastfeeding among adolescents in a better way. The report indicated that nurses should consider establishing postpartum education programmes for breastfeeding adolescent for almost all the mothers participating in this study expressed the need for more postnatal breastfeeding support.

In an Exploratory Study on Adolescent Mothers and Breastfeeding : Experiences and Support Needs, in the North West English U.K, Dukes et al (2003) stated that in the United Kingdom, breastfeeding rates remain

low ,with 69% of mothers commencing breastfeeding and 60% of all mothers who commence breastfeeding discontinuing by six (6) weeks. They showed that differences in initiation and continuation rates of breastfeeding were related to education al level, geographical location and age. It was shown that 78% of mothers aged 30 or above commenced breastfeeding compared to the 46% of mothers younger than 20.3 years.

In La Cote d' Ivoire, Abidjan, Yao et al (2005) conducted a study on the attitudes towards EBF and other feeding options and the findings were that although majority of the pregnant woman saw EBF as the appropriate method of feeding, water especially was felt to be a necessary supplement.

2.3 Beliefs on Exclusive Breastfeeding

The BBC English Dictionary defines:- beliefs as a feeling of certainty that something exists, is true or is good. The International Breastfeeding Journal (2006) stated that many cultural and practical obstacles to the practice of exclusive breastfeeding abound. The Journal narrates that some traditional beliefs, practices and rites, encourage the use of pre-lacteal feeds as well as giving extra water, herbs and “ teas” to breastfeeding babies. In Rural Yoruba communities, the Journal revealed that exclusive breastfeeding was considered dangerous to the infant who is thought to require water to quench thirst and promote normal development. Many women start mixed feeding because they have to resume work or even return to school (International Breastfeeding Journal, 2006). Nankunda J et al (2006) of the Department of Pediatrics & Child Health Makerere Medical School, Kampala, Uganda studied EBF experiences from rural Uganda that some cultural beliefs were possible obstacles to EBF.

The study revealed a number of practices believed to be dangerous for the child. It was thought that if breast milk were expressed the baby would die. Contrary to this belief, none of the participants reported having ever seen or heard of a child who died as a result of the mother expressing the milk. Another belief was that if husbands loved their wives it would help the mother to get enough breast milk for their child. In 1984, U.S Surgeon General, C. Everett Koop organized workshop to identify and reduce the barriers which kept women from beginning or continuing to breastfeed their infants.

In 1990, however, the U.S National Centre for Education in Maternal and Child Health, in consultation with Maternal and Child Health Bureau Staff, conducted a pilot study to gather descriptive data on breastfeeding promotion. While the study identified some promotion activities, many barriers were also revealed in the following categories:

- Professional Education
- Public Education
- Support in the Health Care System
- Support Services in the community
- Support in the workplace

- Research

The pilot study described that breastfeeding, perhaps more than other topics in healthcare, was strongly affected by the personal attitude, beliefs and values of the healthcare provider. It stated that lack of support or encouragement from physicians, nurses, hospital staff or other health professionals may be related to the difficulty professionals have with setting aside their own attitudes, beliefs and values. It was realized that having had a personal experience of breastfeeding or having a spouse who had breastfed was a factor that was consistently associated with promotion of breastfeeding.

Following that, the World Health Assembly (WHA) passed a resolution in May 2001 for exclusive breastfeeding irrespective of pressures from baby food industries (LEAVEN 37 (4), 2001). Paragraph 2 (4) of the resolution read:

“The fifty-fourth World Health Assembly ... urges member states to strengthen activities and develop new approaches to protect, promote and support exclusive breastfeeding and, to provide safe and appropriate complementary foods, with continued breastfeeding for up to two years of age or beyond, emphasizing channels of social dissemination of these concept in order to lead communities to adhere to these practices”.

Obenmeyer & Castle (1997) maintained that in spite of the benefits of EBF, global estimates indicated that 85% of mothers do not conform to optional practice of breastfeeding. Labok et al (1997) also held that EBF was still rare in a number of countries. WHO Global Data Bank Estimates (1996) had indicated that only 35% of infants were been exclusively breastfed for some duration, during the first 4 months of life.

Rural mothers and those who practiced exclusive breastfeeding maintained breastfeeding for a longer duration. They concluded that the initiations of breastfeeding were very high in Lebanon but rates of exclusive breastfeeding were low and duration of breastfeeding was short. Therefore future research targeting factors associated with exclusivity of breastfeeding is needed.

Mitanin

A community-based approach, the Mitanin Programme, was launched by the health department in the state of Chhattisgarh, India, in November 2001. The state of Chhattisgarh was carved out from the large state of Madhya Pradesh in 2000. The state, located in the southeast part of central India, has 27 districts with a total population of more than 25 million. The population is primarily rural, and 86% of households in the state belong to marginalized and socially excluded groups, one-third of whom are Scheduled Tribes. The Mitanin Programme is a part of the health sector reform initiated by the state government and is based on the principle of “empowerment concept of people’s participation in the field of public health” .

Mitanin is a local term for a close female friend. Unlike traditional community health workers who provide healthcare or link the community to health services, mitanins are viewed as agents of social change. The launch of the Mitanin Programme was considered crucial to address the very high infant mortality rate of 95 per 1,000 live births in the state, as compared with the national average of 74 per 1,000 live births. Child feeding practices also revealed a grim scenario, with less than 15% of infant breastfed within 1 hour after birth. The prevalence of stunting among children in 1998/99 was 60.8%.

The Mitanin Programme is a unique initiative launched by the state to improve coverage of reproductive and child health services, such as routine immunization, antenatal care services, institutional deliveries, and promotion of breastfeeding practices. The programme involves over 60,000 women community volunteers who are elected by the communities and work as counselors for families having either pregnant women or children under 3 years of age. The role of Mitanins concentrates on undertaking family-level outreach services, creating demand, and improving coverage of maternal and child health services, as well as supporting the health department in community organization-building and social mobilization on health and its determinants.

Initially, the Mitanins were not entitled to any honorarium, but since 2005, under the National Rural Health Mission, the Mitanins have received incentives linked to various tasks. Since the inception of the Mitanin Programme, a support structure for trainers, with each trainer working with 20 Mitanins who are further supported by two or three block coordinators, has been established for training, monitoring, and motivation of the Mitanins.

2.5 SUMMARY

The Literature review that has been done shows that:

- Exclusive breastfeeding has diverse and compelling advantages to infants, mothers, families, societies. This involves health, nutritional, immunologic, developmental, social, economic and environmental benefits.
- The vital role of breastfeeding has been recognized by professionals and institutions around the world.
- Universal efforts to promote breastfeeding continue to exist. Beliefs, attitudes, practices and knowledge of exclusive breastfeeding permeate through all societies but the concepts and patronage differ.
- Socio-cultural factors are barriers to the practice of exclusive breastfeeding.
- Postnatal mothers need education on expression and management of breast milk.
- Investigating the perceptions of postnatal mothers is necessary to reverse the declining trends of breastfeeding and to incorporate the practice in the Health Education Programmes.
- The duration of exclusive breastfeeding varies among postnatal mothers in different circumstances. Owing to the above literature, the study is to find out the perceptions – knowledge, attitudes, practices and beliefs of postnatal mothers on exclusive breastfeeding in Raigarh District Hospital.

CHAPTER THREE

METHODOLOGY

3.0 Research Design

This research was a non-experimental, explorative and descriptive study that investigates the perceptions or the views that post-natal mothers hold concerning exclusive breastfeeding of their babies at Raigarh District Hospital, Chhattisgarh. This was chosen because the study wanted to explore and describe the perceptions or views of its participants on exclusive breastfeeding.

3.1. Research Setting

The study was conducted at District Hospital, Raigarh. The hospital caters for both outpatients and inpatients and staff and their dependents. It also has various units including Dental Clinic, Accident and Emergency Unit, Family Planning Clinic, Maternity Clinic, Public Health Unit and Child Welfare Clinic (CWC) among others. It has also established a Primary Health Care outreach programme aimed at teaching and advising students, pregnant women, nursing mothers and the general public about personal hygiene, good diet, and child care including immunization against childhood communicable diseases, family planning and school health services.

The District Hospital Raigarh has a static CWC every Wednesday at the hospital premises with five outreach centers in its catchment's area on different days with the following schedule. The major activities that are carried out during CWC include health education, registration of clients, growth monitoring, individual counseling, immunization, birth registration and referrals. The CWC caters for infants of zero (0) to 18 month old babies on monthly bases. Infants of over 11 months also visit the clinic for growth monitoring every three (3) months. The health problems presented at the clinic include fever, skin conditions (rashes), diarrhea and severe cases of malnutrition. Clients who present with diarrhea are mostly teething problems. The clinic is doing well in terms of the coverage of their target population (65%) The clinic has 7 member staff including a Birth Registrar.

3.2 Target Population and Sampling Size

The target population for the study was post-natal mothers who are breastfeeding and attended CWC with their babies at the District Hospital Raigarh. In all 50 mothers were chosen as the sample size for the study.

3.3 Sampling Method

A non-probability sampling method was chosen. The sampling method used for the study was convenient sampling since the researchers collected the data from the subjects who were available at the child

welfare clinic with their babies at the District Hospital Raigarh during the study period and were willing to participate in the study.

3.4 Tools for Data Collection

The data was collected through the use of questionnaire. The questionnaire consisted of both close-ended and open-ended type of questions. The close-ended questions were made up of dichotomous and multiple choice items. The dichotomous items required the respondents to make a choice between two alternatives while a choice was made from a range of alternatives in the case of the multiple choice questions. The open-ended questions also allowed the subjects to express their views on the practice of exclusive breastfeeding. In all 22 questions, grouped under four sections were administered. The section A of the questionnaire assessed subjects' demographic information such as age, level of education, occupation among others. The section B assessed the knowledge of subjects on exclusive breastfeeding. The section C assessed the practices of exclusive breastfeeding among subjects and the section D also assessed the attitudes of subjects towards exclusive breastfeeding.

3.5 Method of Data Collection

To gain permission to administer the questionnaires, an introductory letter was collected from the School of Nursing – Raigarh and sent to the Director of District Hospital Raigarh through the Administrator. With the help of the Senior Administrative Assistant, the researchers gained permission from the Nursing Officer of CWC of the District Hospital Raigarh. However, some respondents were able to respond to the questionnaires by themselves. Interviews were conducted using the questionnaire for those mothers who were not able to write because they were handling their babies and those who for some reasons could neither read nor write. It took the researchers one (1) week to administer and collect the data.

3.6 Ethical Consideration

Since the research involved human subjects, protection of participants' rights was ensured. This included the right to privacy and dignity, the right to anonymity and confidentiality, the right to freedom from risk of injury and the right to refuse to participate. Participation was voluntary and the principle of informed consent was to ensure this. Participants in the research had full understanding of the study before it begun. Also questionnaires had no space for names of participants and were deliberately done to ensure anonymity and confidentiality.

3.7 Validity and Reliability

To ensure validity which refers to the degree to which an instrument measure what it is supposed to measure. The questionnaire was sent to the researchers' supervisor after designing for necessary corrections. Moreover ten (10) breastfeeding mothers were selected accidentally from the of Chhattisgarh student population and the same questions were administered to them to do pre-testing to find out if the questionnaires would yield similar responses among them to ensure reliability. After the

test, it was found out that few questions needed to be changed in order to yield similar responses which was done to ensure the reliability of the questionnaire. Reliability therefore is the degree of consistency to which an instrument used under similar conditions measure the attribute under investigation.

3.8 Limitations

The sample size used for the study was so small that the information obtained could not be generalized to the entire population of post-natal mothers. There were a lot of difficulties faced by researchers when administering the questionnaires since most mothers could neither read nor write and had to be assisted by researchers which could in a way influence the choice of answers the mothers chose. Some mothers were given more than one (1) questionnaire since their babies tore the first ones given to them. Time given for the research was also limited considering the academic workload of researchers. Researchers paid all the cost involved in conducting the research. Since researchers had to finance all expenses incurred, it somehow delayed the study due to lack of money. 31

3.9 Method of Data Analysis

Descriptive statistics would be used to analyze the data obtained from the study. This would help to describe, organize and summarize the data. It would include the use of frequency distribution tables, graphs and pie charts.

4.0 Summary

This chapter described the design used for the study and the research setting. It also dealt with the sample selected for the study, materials used and the procedure used in gathering data for the study. The ethical considerations observed during the conduction of the research were also described. Measures put in place to ensure validity and reliability of instruments used as well as the limitations of the study were also described in addition to the method used to analyze the data.

CHAPTER FOUR

ANALYSIS OF DATA AND PRESENTATION OF FINDINGS

4.1 Introduction

The project under study looked at the knowledge, attitudes, practices, beliefs on Exclusive Breastfeeding among post-natal mothers at District Hospital, Raigarh. Questionnaires were administered to fifty respondents who were nursing babies aged between 1-12 months. The first part entails the nursing mothers' biography followed by the knowledge the mothers have on EBF. The following section looked at attitudes and beliefs towards EBF. The fourth section concerns the nursing mother's practice of EBF

4.2 Demography

It is about information of the background of the respondents in the study. The age of mother, age of child, marital status, educational level, occupation of mothers sampled were analyzed here.

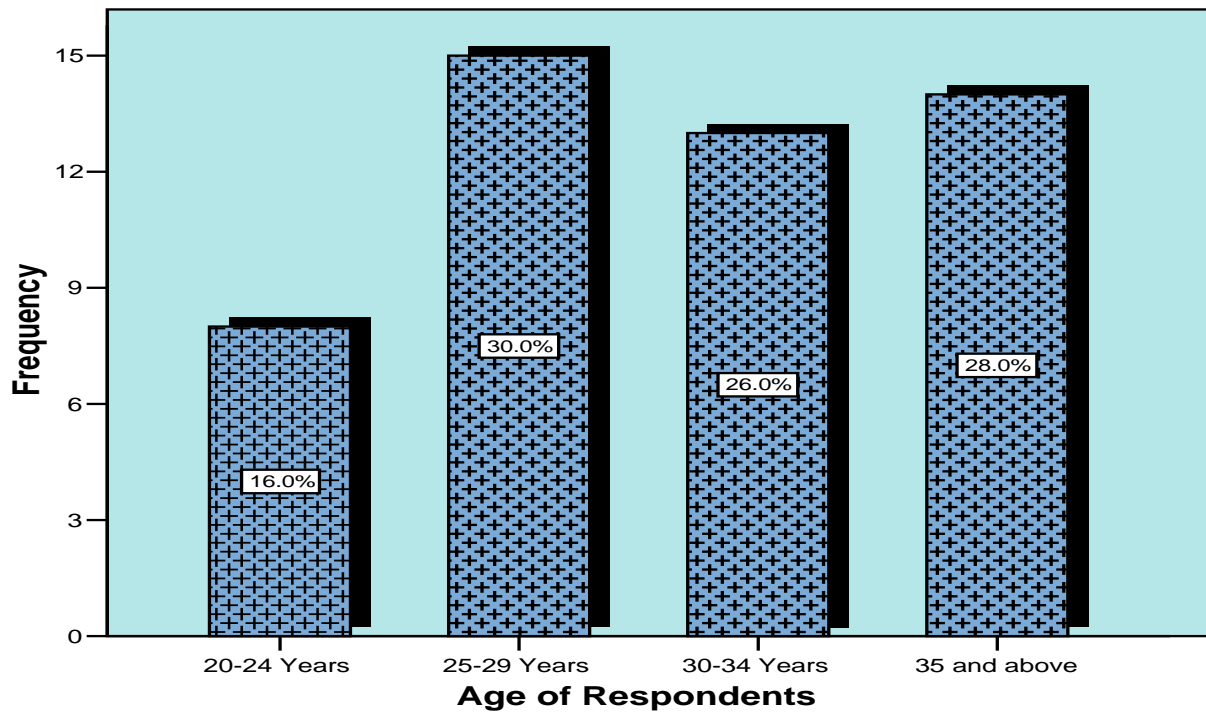
4.2.1 Age of Respondents

The ages shown in fig. 4.1 are those reported by the breastfeeding mothers at the post-natal clinic. A total of 50 respondents participated in the quantitative study. The majority of the participants were in their reproductive ages, from 25-35. 15 (30%) aged 25-29 years is the highest. This was followed by 14 (28.6%) aged 35 years and above. 13 (26%) were 30-34 years. Only 8 (16%) were young mothers. The pattern suggests that the age group 25-29 years is the most active sexually as well as marriage peak group and hence responsible for the highest fertility rate.

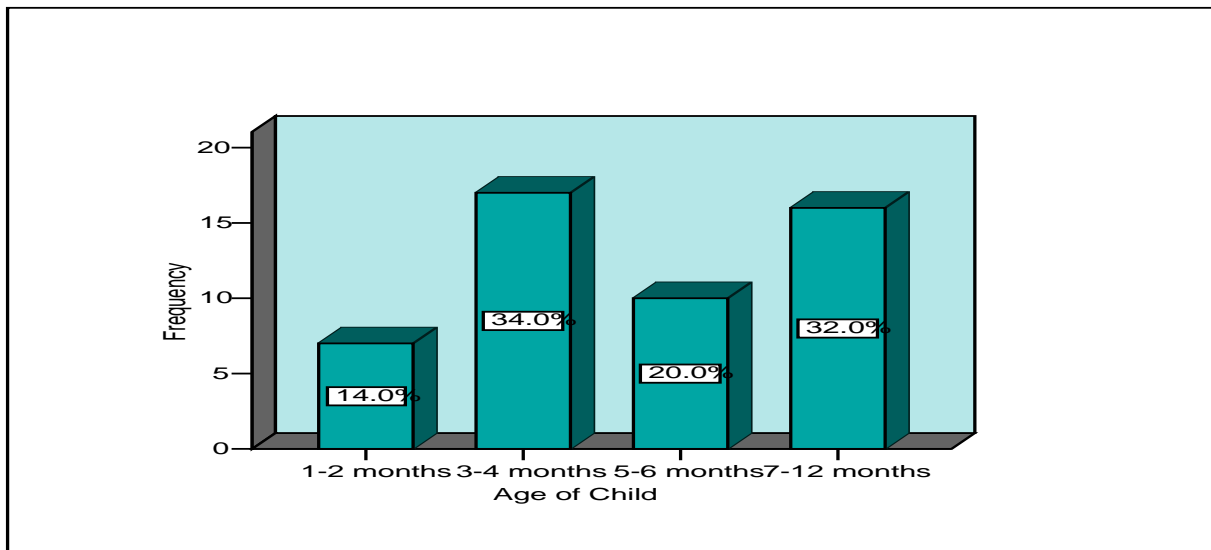
4.2.2 Age of children

Fig. 4.2 shows the age of the children of sampled nursing mothers. The age of the babies of the mentioned mothers/respondents were as follows: It was observed that the majority of 17(34%) were between 3-4 months and 7-12 months represented 16(32%). 5-6 months were 10(20%). The least was 7 (14%) for 1-2 months, most probably due to the common traditional beliefs that it is too early for nursing mothers to move outside especially before the third month.

Age of Respondents

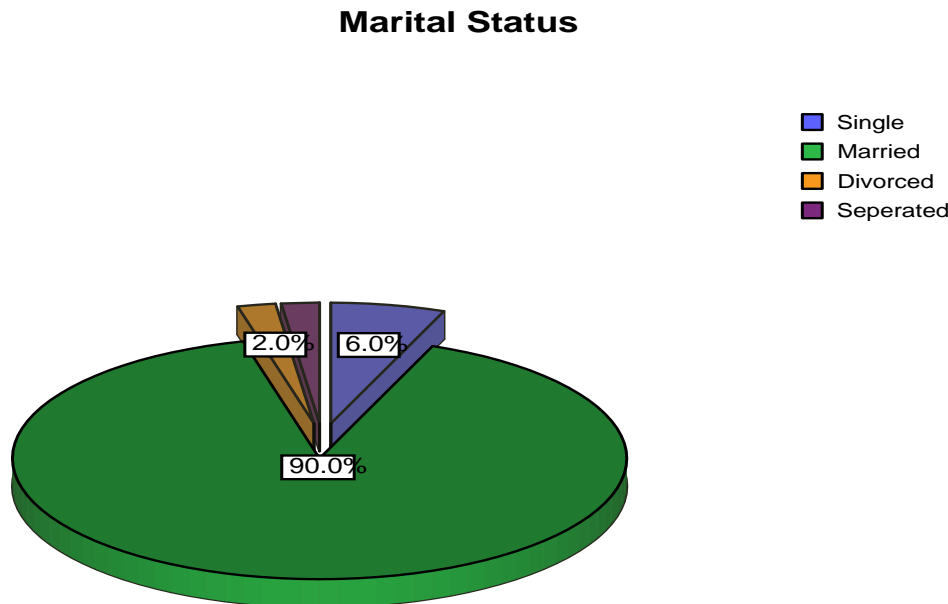


Age of Child



4.2.4 Marital Status

Fig. 4.4 shows the marital status of selected respondents. Out of the 50 respondents, 90% representing 45 participants were married while only 3 (6%) are single mothers, one divorcee and one separated. What is distinct is that there were no mother who had never married. The results revealed that married women are more likely to practise exclusive breastfeeding than unmarried women.



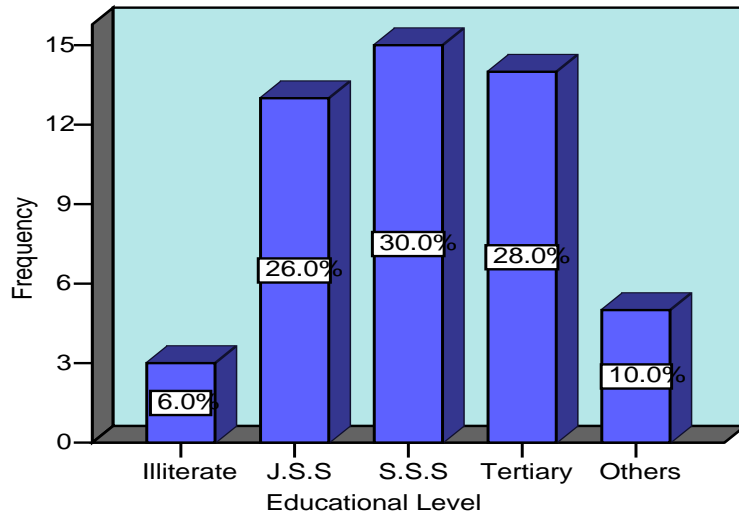
4.2.5 Educational Background

Fig. 4.5 shows the educational level of the respondents. The educational background of the participants ranged from those with no formal education (illiterates) to those with JSS, SSS, Tertiary and other levels. Majority of the respondents were SSS graduates representing 15(30%), and could therefore read and understand the questionnaire. This is followed by tertiary education of 14(28%). 13 (26%) had JSS education and others below JSS education represented 5(10%), with the illiterates representing the least of 3 (6%) proportion. Nevertheless, the later had also heard about EBF probably attributed to the education at the antenatal and postnatal clinics.

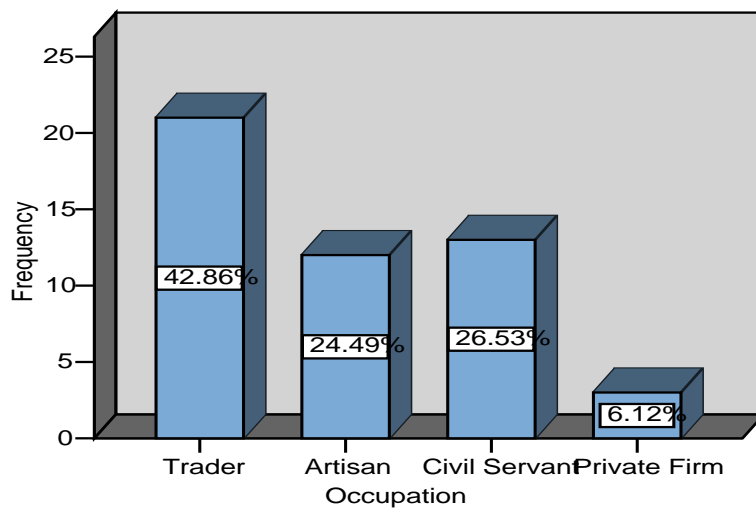
4.2.6 Occupation

This section shows the occupation status of the selected respondents. Most of the respondents were mainly engaged in some kind of trade representing 21 (42.86%), followed by civil servants accounting for 13 (26.53%) of the total respondents and thirdly 12 (24.49%) represented by artisans. The least are the private firms with only 3 (6.12%). However, one person (2%) did not respond. The work status of the nursing mothers may influence their breastfeeding habits.

Educational Level



Occupation

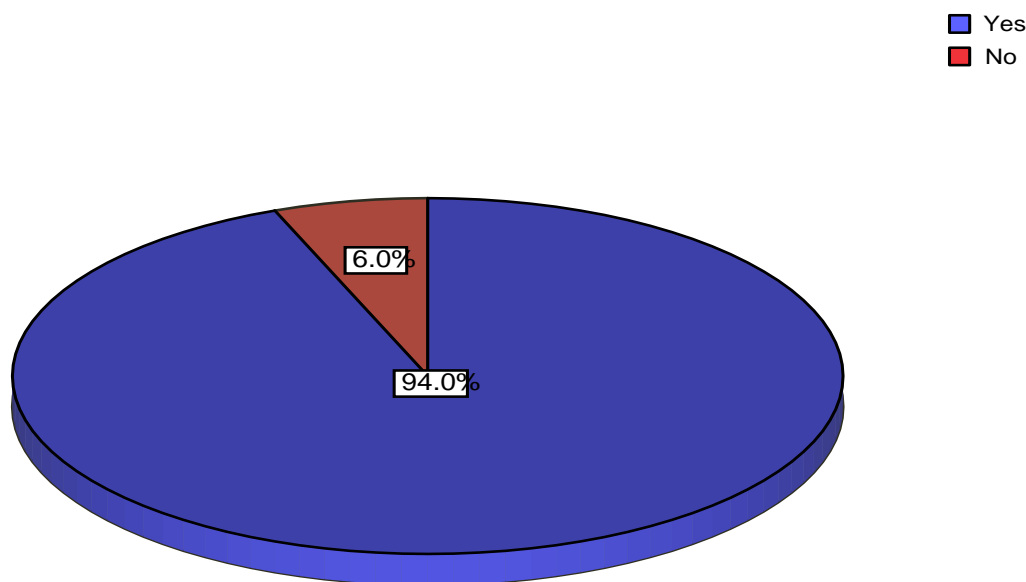


4.3 Knowledge on exclusive breastfeeding

4.3.1 Have you ever heard of EBF?

This part describes the mothers' knowledge on EBF. Knowledge about EBF among the respondents was very high with 47 (94%) having heard of the practice. Only 3 (6%) responded not having knowledge about EBF, are shown in figure 4.7 below. The later may need intensive education on EBF as well as examine the family background and give the necessary support.

Have you ever heard of Exclusive Breastfeeding?



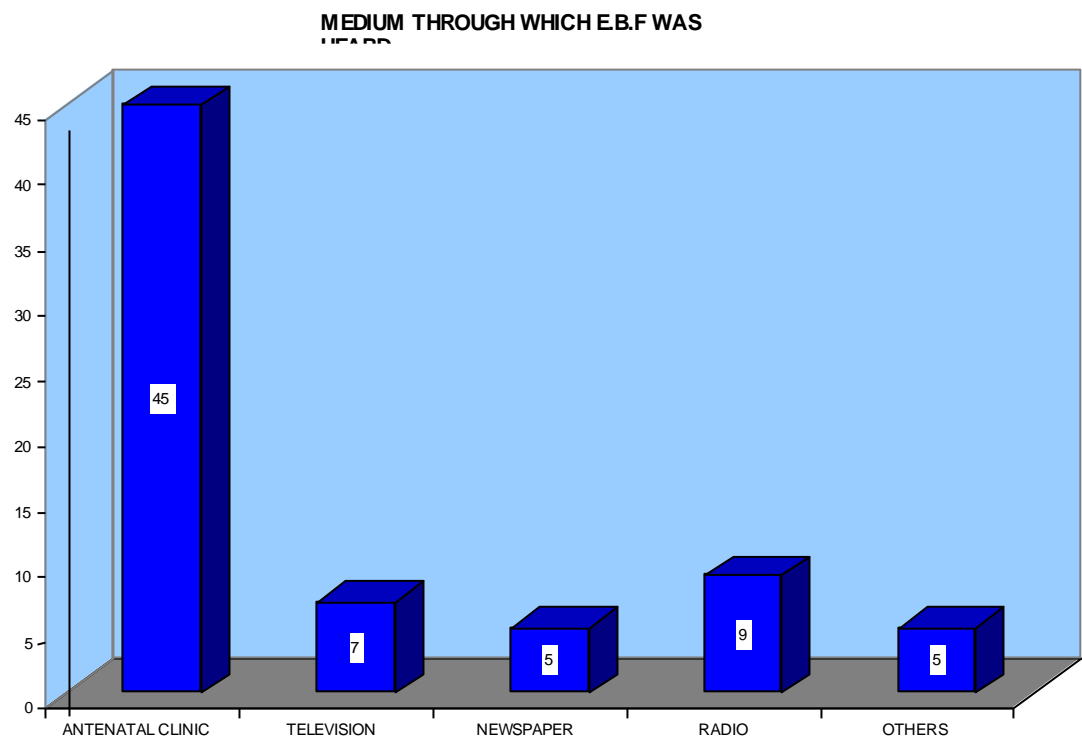
4.3.2 Through which medium knowledge was acquired.

This figure shows the medium through which the EBF knowledge was acquired. The responses were as follows: 45(63.38%) respondents heard it at antenatal clinic, 9(12.68%) heard it through radio, 7(9.86%) heard it through television and 5(7%) read it for the first time in the newspaper. 5(7%) also heard it from other means. If majority heard from the antenatal clinic, it implies education on EBF has been effected. However, the remainder media need to be revisited.

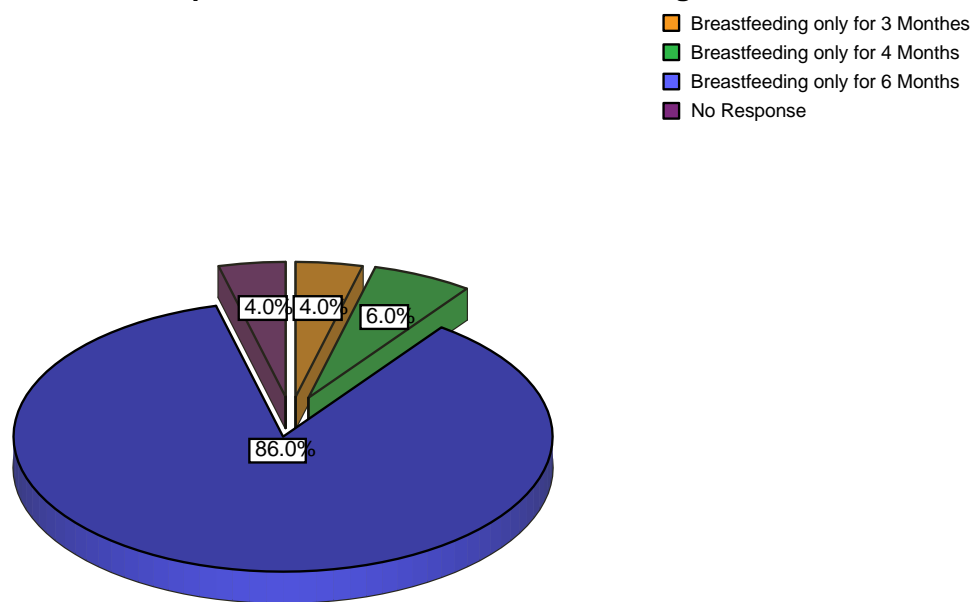
4.3.3 Explanation/Understanding by mothers of EBF

The section disclosed the level of understanding by the mothers of EBF. To the question, how would you explain EBF, varied responses were provided. 43 (86%) of the responses centred at feeding on breastmilk only for six months whiles 3 (6%) pointed to feeding on breastmilk only for four months. 2 (4%) explained EBF to mean feeding on breast milk only for three months and 2(4%) did not respond as shown in figure 4.9 below. The study shows that there is hope for success of EBF practise in future. However, some

mothers had inadequate knowledge about EBF and need to attention as far as education and support are concerned.



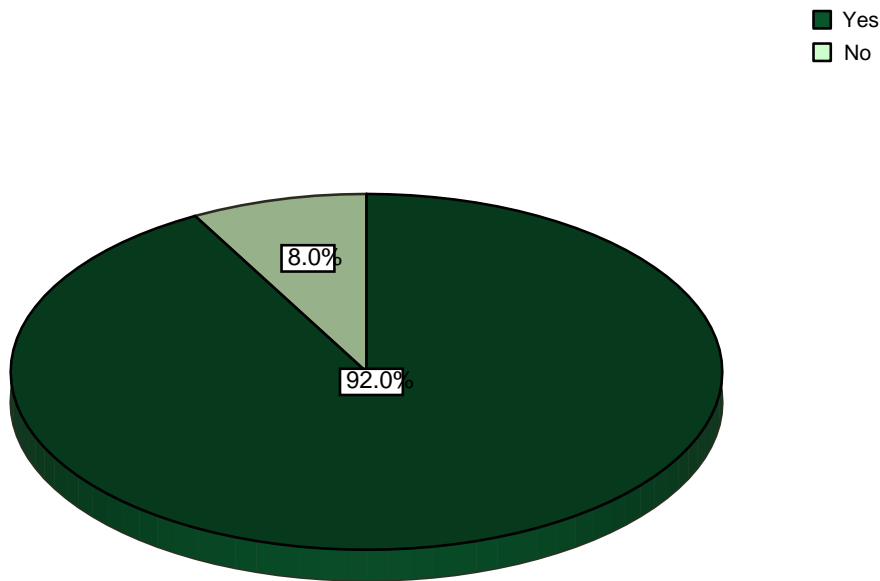
Explanation of Exclusive Breastfeeding



4.3.4 Were you educated on EBF at the clinic?

Fig. 4.10 shows whether the education was at the clinic or not. 46 (92%) of the respondents mentioned the clinic as the place where they were given education on EBF. Four (4); (8%), were negative in their responses.

Were you educated on EBF at the Clinic



4.3.5 What respondents were taught about EBF in the clinic

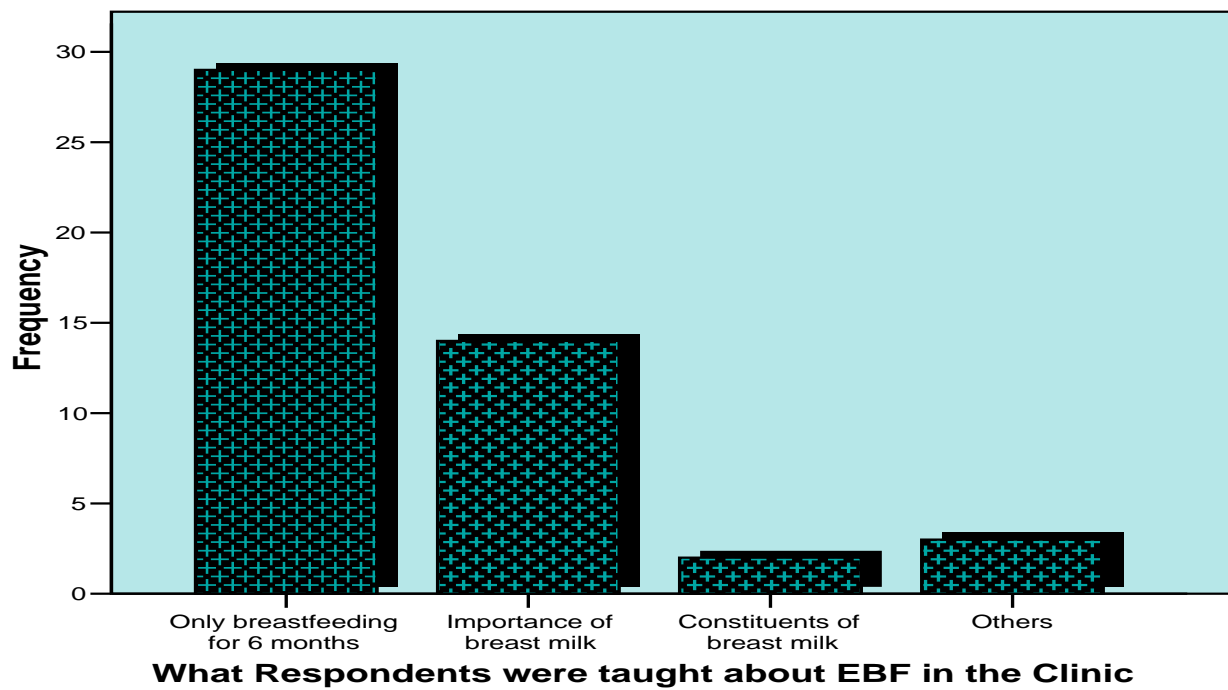
Fig. 4.11 shows what respondents were taught about EBF in the clinic. 29 of the mothers (58%) said they were taught that exclusive breastfeeding is giving of only breastmilk for 6 months, 14 (28%) of them said they were taught about the importance of breastmilk, 2 (4%) said they were enlightened on the constituents of breastmilk and 3 (6%) said they were taught of others. 2 (4%) did not respond.

4.3.6 Which of the forms did the education take?

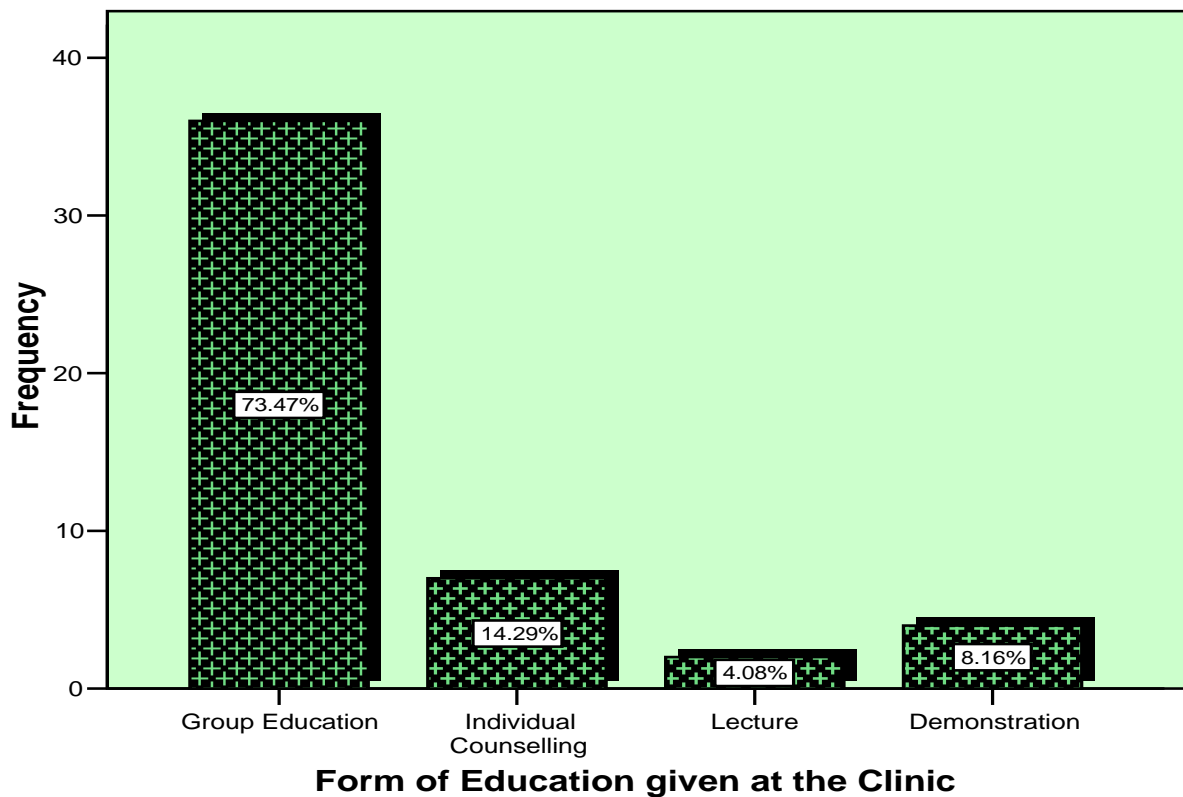
This part explains the form of education on EBF for the nursing mothers.

Majority of the respondents represented by 36 (73.47%) confirmed that the education took place in the context of a group. 7 (14.29%) received the education through individual counseling, 4 (8.16%) at demonstration and 2 (4.08%) through lecture. Only 1 (2%) did not give any response, as shown in figure 4.12 below.

What Respondents were taught about EBF in the Clinic



Form of Education given at the Clinic

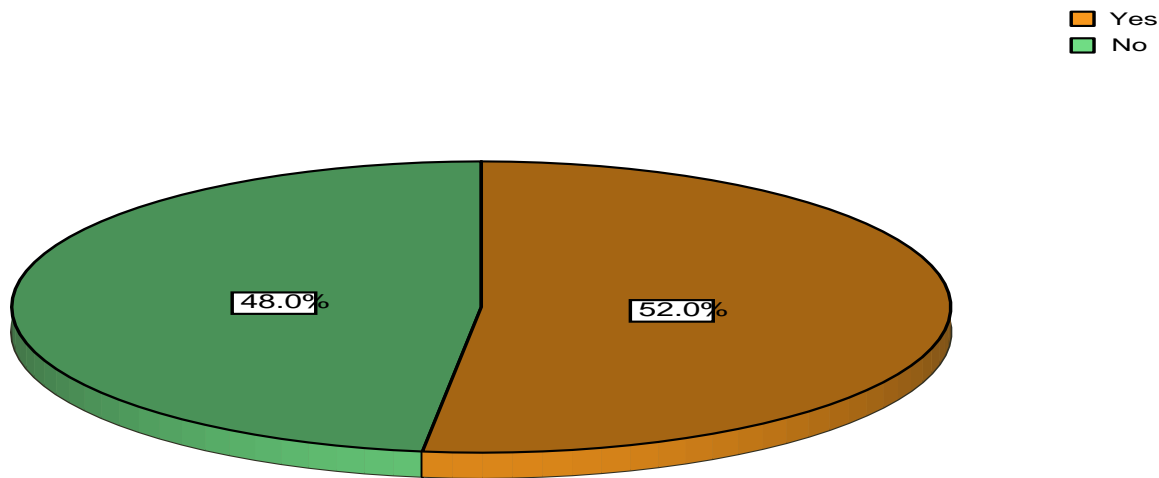


4.3.7 Expression and storage of breastmilk

This part shows knowledge of whether mothers have idea of expression and storage of breastmilk or not. There was difference of 2 between those who knew and those who have no knowledge about expression and storage of breastmilk. 26 mothers (52%) knew about the expression and storage of breastmilk as against 24 (48%) as revealed in figure 4.13 below. The study suggested that almost 50% on either side of the nursing mother were or were not aware of breastmilk expression and storage. That implies a majority of participants (traders and artisans) are doing well in terms of breastmilk expression and storage.

Fig. 4.13: Expression and storage of breast milk

Knowledge of Expression and Storage of Breast Milk



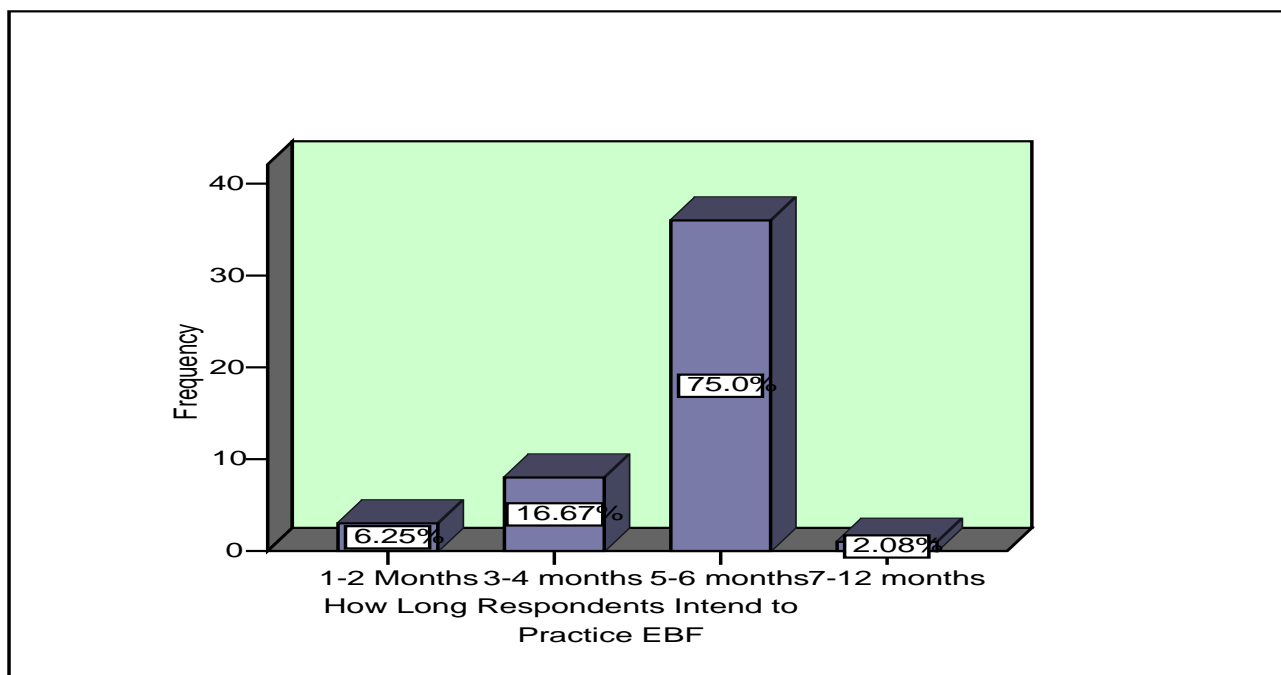
4.4 Practice

4.4.1 How long do you intend to practice EBF?

Fig. 4.14 shows the intention of mothers about the duration of EBF practice.

To assess the mother's perception on breastfeeding, the question on duration was posed. A greater number of the respondents, 36 (75%) mentioned 5-6 months as the maximum duration for their practice of EBF. 8 (16.67%) preferred 3-4 months, 3 (6.25%) timed it for 1-2 months and 1{2.08%} person insisted on 7-12 months. To interpret the result, it implies a significant number of nursing mothers did intend to practise exclusive breastfeeding.

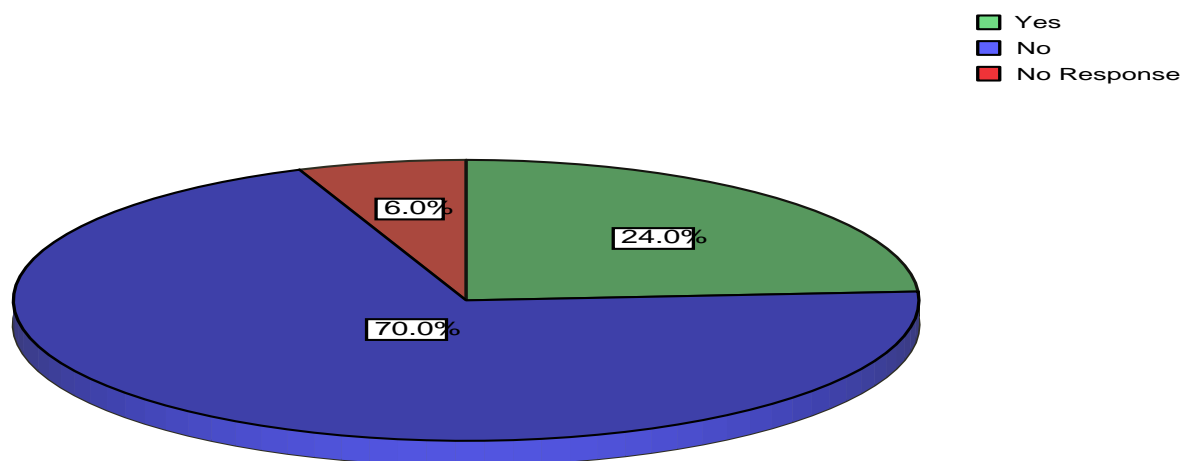
How Long Respondents Intend to Practice EBF



4.4.3 Do you give your child water in-between feeds?

This section ascertained whether water is given or not. 12 (24%) of the mothers do give water in-between feeds to their babies and a majority of mothers counting 35 (70%) do not give their children water in between feeds. However, 3 persons (6%) did not respond. This information is presented in the graph below.

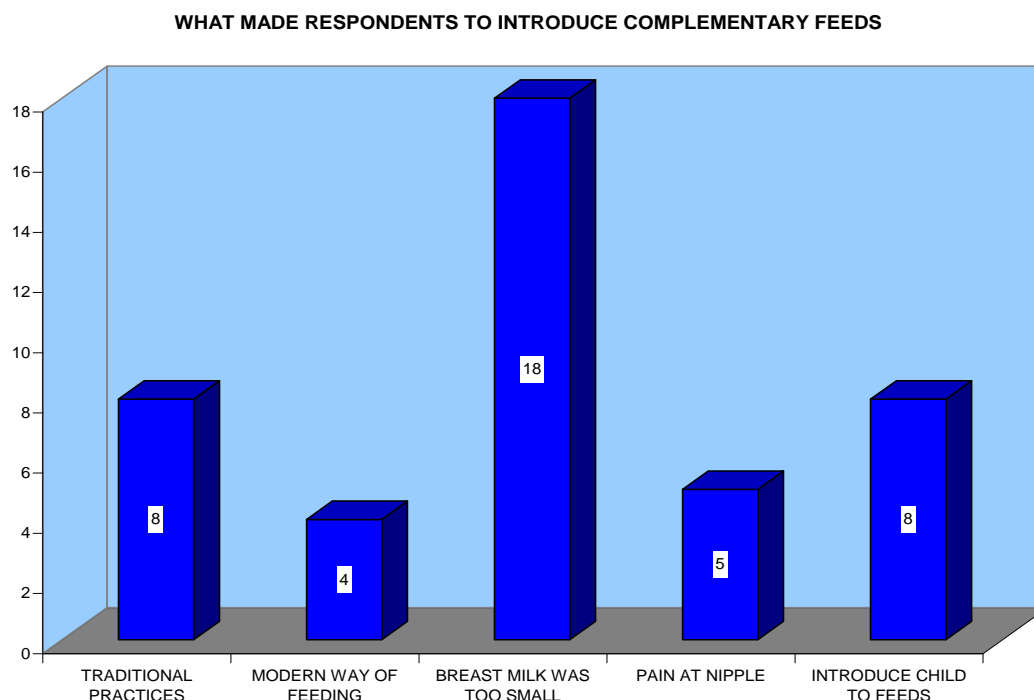
Do you give your child water in between feeds



4.4.4 What made you introduce the complementary feeding?

Fig. 4.17 below describes the reason for introducing complementary feeding.

Majority of the respondents, 18(36%) mothers believed that the breastmilk was too small, 8(16%) mothers rather held that it enable them to introduce the child to the feeds to enable them to resume work. Also 8(16%) of them said it was traditional practice and advice from relatives and friends that influenced them to do so. 5(10%) of the mothers lamented the pain at the nipples that predisposes them to introduce the complimentary feeds and 4(8%) of them maintained that they did it because they saw it to be the modern way of feeding infants. 7(14%) did not respond.



4.4.5 How often do you feed your child?

This section shows how often nursing mothers feed the children.

Twenty nine (58%) mothers said they feed babies throughout the day and night. 15(30%) of them mentioned the baby's crying as a factor and 6(12%) of the participants responded that they fed the baby three times a day. This is scheduled feedings. Relevant information on this is presented in figure 4.18 below.

How Often Respondents Feed Their Children

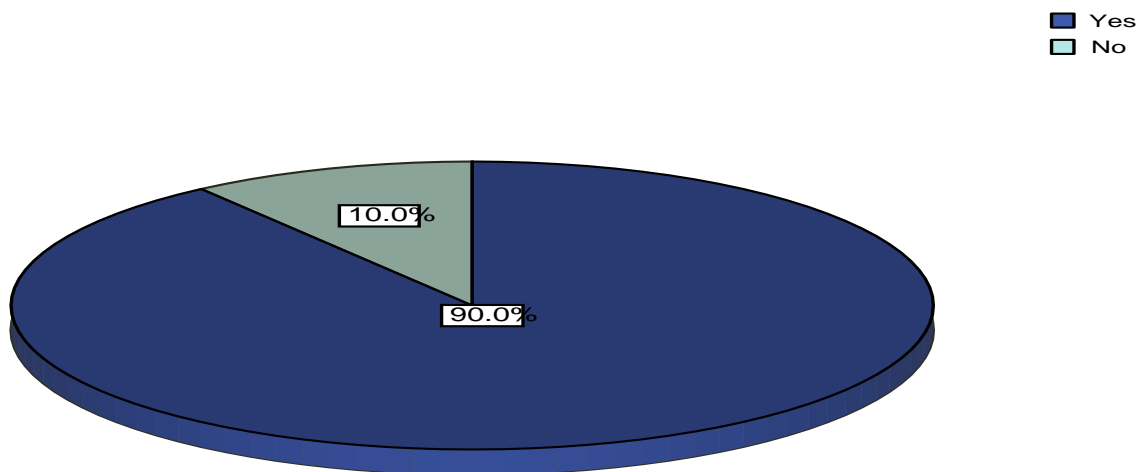


4.5 Attitude

4.5.1 Do you believe in Exclusive Breast Feeding?

This section shows the mothers who believe or not in EBF.

Do you believe in Exclusive Breastfeeding?



4.5.2 Reasons for the belief and unbelief in EBF

Table 4.1 gives the reasons for the nursing mothers' belief in EBF.

Majority of the mothers, 37 (74%) who participated in the interview believed that EBF provides good health, 7 (14%) said it gives good results and 1 each (2%) said it was due to other reasons and Doctors recommendation. 4 (8%) did not respond.

Table 4.1: Reasons for believing in EBF

Reasons for Believing in Exclusive Breastfeeding					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Provides Good Health	37	74.0	80.4	80.4
	Good Results from	7	14.0	15.2	95.7
	Others	1	2.0	2.2	97.8
	Doctors Recommendation	1	2.0	2.2	100.0
	Others	1	2.0	2.2	100.0
	Total	46	92.0	100.0	
Missing	System	4	8.0		
Total		50	100.0		

4.5.3 Do you think there is the need for your child to be breastfed exclusively?

This part identifies the need for exclusive breastfeeding.

Only 6 (12%) respondents answered negatively about the need for the child to have EBF. They reason that EBF could have negative impact on the infant's life because breastmilk alone could not be sufficient for the infants during the first six months. The rest of the respondents, 44 (88%) responded in the affirmative, as shown in figure 4.20 below.

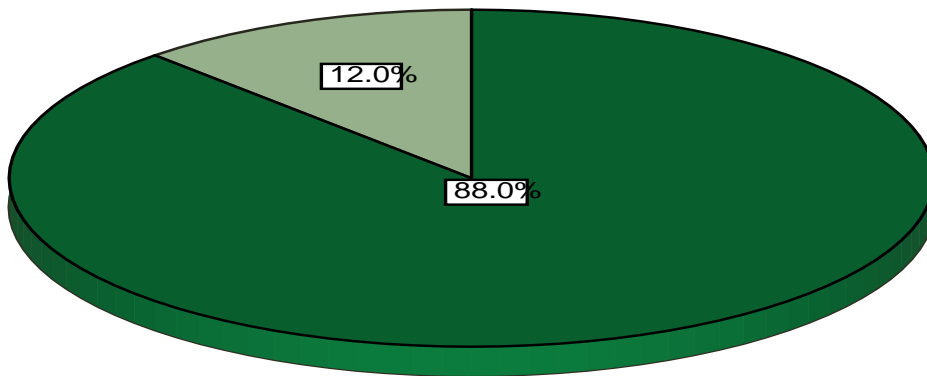
4.5.4 Reasons for the need of exclusive breastfeeding

Table 4.2 shows the reasons for the need for EBF.

35(70%) of the respondents gave reasons that it provides good health. 9 (18%) of them did not respond, 3(6%) of the mothers said it is for other reasons, 2(4%) of them said because of previous experience and 1(2%) said it is hygienic.

There is the need for the Child to be fed exclusively

■ Yes
■ No



4.5.4 Reasons for the need of exclusive breastfeeding

Table 4.2 shows the reasons for the need for EBF.

35(70%) of the respondents gave reasons that it provides good health. 9 (18%) of them did not respond, 3(6%) of the mothers said it is for other reasons, 2(4%) of them said because of previous experience and 1(2%) said it is hygienic. Table 4.2: Reasons for the need for EBF

Reasons for the need for the for Exclusive Breastfeeding

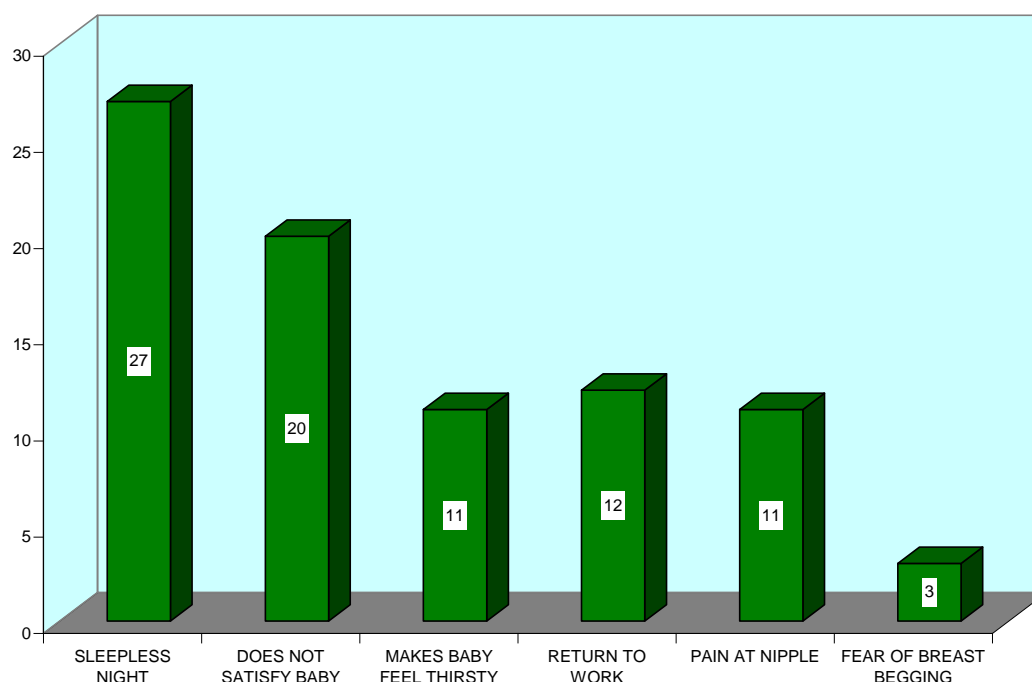
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Provides Good Health	35	70.0	85.4	85.4
	Previous Experience	2	4.0	4.9	90.2
	Hygenic	1	2.0	2.4	92.7
	Other Reasons	3	6.0	7.3	100.0
	Total	41	82.0	100.0	
Missing	System	9	18.0		
Total		50	100.0		

4.5.5 What problems do you have with exclusive breastfeeding?

This section shows the problems nursing mothers encounter with EBF.

27(33.33%) participants explained sleepless nights as the predominant problem with EBF, 20(24.69%) said EBF does not satisfy the baby, 12(14.81%) asserted that it makes it difficult for them to return to work. 11(13.58%) held that it makes a baby feel thirsty and another 11(13.58%) gave reasons of pain at nipples and only 3(3.7%) of the mothers expressed fear of breast engorgement.

PROBLEMS WITH EXCLUSIVE BREASTFEEDING



4.5.6 State any other comments or suggestions for the improvement of effective EBF

Table 4.3 shows the suggestions for the improvement of EBF by the Respondents.

Among the suggestions and comments that were put forward, majority, 30 (60%) of the participants proposed that continued education should be enforced to encourage EBF, 8 (16%) did not respond, 6 (12%) gave various suggestions, 5 (10%) said the number of months of EBF be reduced and only 1{2%} suggested that water should be allowed

Suggestions for Effective Breastfeeding

	Frequency	Percent
Education to Encourage EBF	30	60.0
Addition of Water to Breastfeeding	1	2.0
Reduce number of Months for EBF	5	10.0
Other Suggestions	6	12.0
Total	42	84.0
No Response	8	16.0
Total	50	100.0

CHAPTER FIVE

DISCUSSION

- ❖ Fifty respondents were sampled for the quantitative study aimed at exploring the perceptions of postnatal mothers on exclusive breast feeding. The study centered on the knowledge, practice, attitude and beliefs of a cross-section of mothers on exclusive breastfeeding. It also involved the feelings of their supporters and of participants in programmes regarding breast feeding, as well as the problems they have with exclusive breastfeeding {EBF}.
- ❖ The age structure of the subjects showed a higher majority of the mothers in the ages of 25 – 35. The highest, 15{30%}, fell within the 25 – 29 age groups showing a feature of a high fertility population in developing states such as Chhattisgarh.
- ❖ The total fertility rate for women aged 15 – 49 is 4.6 births per women and the fertility rate for women aged 20 – 29 is higher than other age groups'. The fertility rate of those aged 45 and above is the least. The study reveals that 30.0% of the mothers are within the age range of 25 – 29 years, giving the impression that more young mothers are in the study than older ones. It also implies that age has no bearing on the practice of exclusive breastfeeding. The pattern suggested that the 25-29 years age group were the most active sexual as well as marriage peak group and hence, could be responsible for the high fertility rate.
- ❖ Significantly enough, this is contradictory to the notion of Scarlet et al (1996) that older mothers are more likely to exclusively breastfeed than younger ones. Talking about the ages of the children, the study unearthed that the respondents had children aged between 1 – 12 months. Out of these, 17(34.0%) were within 3 – 4 months, 16(32.0%) were within 7-12 months, 10(20.0%) within 5-6 months, and the least was 7(14.0%) within 1-2 months.
- ❖ This is a demonstration that a greater percentage of children are exclusively breastfed and have a greater likelihood of being given complementary breastfeeding after 6 months. This was in line with WHO's expectation of complementary feeding as feeding on breast milk complemented by formula food or solid food.
- ❖ The least numbers of 7(14%) was due most probably to the common traditional beliefs that it is too early to go out especially before the third month after delivery .there is the need to intensify education The participants of the EBF study came from various communities, mainly East Raigarh, West Raigarh, and North Raigarh with inhabitants ranging from upper through to lower income levels. Majority of the Respondents, 21[42.86%], reside in East Raigarh alone and North Raigarh alone with 10{20.41%}.
- ❖ East Raigarh apparently portrays the picture of upper income level of inhabitants, considering its infrastructure development and high residential status. There seem to be a correlation between the places of residence and the practice of exclusive breastfeeding. East Raigarh apparently shows inhabitants of high income earners who may have no much problem of attendance and the practice of EBF.

- ❖ This fact is buttressed by the work of Batal et al (2006) at a national study in Lebanon. They complained that exclusivity of breastfeeding was associated with place of residence of (rural/urban) and negatively associated with educational level of the mother. They contended that rural mothers and those who practiced exclusive breastfeeding maintained it for a longer duration.
- ❖ It was discovered that 90.0% (45) of the respondents were married and had initiated breastfeeding. This positive outlook on breastfeeding is suggestive of the tremendous support the family, basically the partners, were giving to these mothers. This is opposed to Scarlet et al (1996) assertion that marriage status had no impact on rates of exclusive breastfeeding. The study supports work of Scott et al {1997} which indicated that the paternal preference for breastfeeding was a principal factor influencing the mothers to breastfeed. {Journal of Pediatrics in child health,1997}This could be due to the fact in society, husbands are considered the decision makers of the family. The result from the study revealed that married women are more likely to practice EBF than the unmarried women.
- ❖ In the area of education, only three (3) that is 6.0% were illiterates, but quite a substantial number of the mothers,15{30.0%} interviewed were SSS graduates,28.0% had tertiary education and 26.0% (13) had JSS qualification. The assessment of their knowledge on exclusive breastfeeding portrayed a higher understanding of the practice among the mothers. This could be attributed to their high level of educational attainment. From the study, majority, 47{94.0%} out of the 50 respondents have heard of EBF and in addition majority, 45(90%) respondents, heard it from the antenatal clinic.
- ❖ As regards occupation, most of the respondents, 21{42.86%}, were traders, followed by civil servants with 13{26.53%} and artisans representing 12(24.49%). The nature of the occupation had a toll on some of the mothers and this would impact negatively on their daily commitment to the practice of exclusive breastfeeding. Therefore, Williams Worthington (1992) is right to the point in stating that employment is associated with cessation of breastfeeding as early as two or three months post-partum.
- ❖ However, our assessment of the duration for their practice of exclusive breastfeeding showed different feelings and attitudes. 3{75.0}% of the respondents said they would breastfeed exclusively for 5 – 6 months and a few mentioned between 1 – 2 months, 3-4 months and 7-12 months. 36(75.0%) of the mothers adhered strictly to the current breastfeeding recommendations by UNICEF/WHO (1993): That no drinks, foods, pacifier/dummies or artificial teats be given to a baby.
- ❖ Mothers should also talk and smile to the baby so establishing eye and facial contact. In the study, 45{90.0%} of the mothers believed in exclusive breastfeeding as beneficial to their children and to themselves as well. The study confirms Scarlet et al (1996) views that among normal birth weight babies, those exclusively breastfed have higher weight gain than the partially fed ones. It is also an indication that the mothers have unflinching desire and support for the healthy growth and development of their children. Accordingly, these

proponents are stressing the importance of exclusive breastfeeding to their peers in their communities and eschewing all negative beliefs, attitudes, practices, knowledge with regard to feeding infants with exclusive breast milk for the first 6 months of life. It is therefore, their hope that healthcare givers would give exclusive breastfeeding education at both antenatal and postnatal clinics to sustain the interest and confidence of mothers in exclusive breastfeeding.

- ❖ These suggestions would materialize if only nurses and other health workers are motivated to continue education relentlessly. In the study majority of the respondents, 30{60.0%}, suggested that education be continued to encourage EBF. This may only materialize if health professionals or nurses are given refresher courses on breastfeeding management. This suggestion supports a survey conducted by the American Academy of pediatrics in 1999 on the educational needs of EBF which showed that majority of the pediatricians had not attended a presentation on breastfeeding management in the past three years and most said they wanted more education on breastfeeding management.

Summary and conclusion

This project aimed at ascertaining the knowledge, practice, attitudes, feelings and some beliefs of exclusive breastfeeding among nursing mothers at District Hospital Raigarh. The study was that of a descriptive one that relied on data collection using questionnaires administered to 50 nursing mothers who are breastfeeding babies aged between 1-12 months.

From the study ,majority of the children,17{34%} brought to the post-natal clinic were between 3-4 months, with also majority of the participants from East Leonean area apparently with high infrastructural development high residential status, suggesting upper income level earners. Also, majority of nursing mothers, 45{90%}, believe in EBF as beneficial to children. This indicates a positive relation among the as far as EBF promotion is concerned.

Again, for the fact that majority of them,36{75%}said that they would breastfeed exclusively for 5-6 months suggest that most of the children in the age range 3-4 months are most likely to be exclusively breastfed for 6 months. Most of the mothers are traders and artisans which implies they the bulk of the supporters and believers of EBF. They therefore need a back-up support and motivation to propagate the education on EBF. Almost an equal number of either side of the mothers know or did not know of breast milk expression and storage.

An effective way is to embark on an extensive education on EBF, expression, storage and management of breast milk on television, radio programmes, antenatal and postnatal clinics as well as individual counseling.

With the various suggestions and recommendations from the nursing mothers, it is obvious that majority are calling on the nurses to intensify education, which means there is hope for a stronger crusade to be built to promote EBF in the country. If nurses and other health personnels' are motivated through refresher presentations or workshops on breastfeeding management, it will go a long way to increase the awareness knowledge on EBF.

Implication of findings to nursing

The results of the study generally inform us that nursing mothers are aware and have the knowledge about the EBF. From their various suggestions, nurses are called upon to strengthen the campaign for EBF by continuous relentless health education and support to nursing mothers. It is also imperative of nurse educators to be advocative and collaborative in search for support from NGOs, District assembly, other public sectors, etc to promote EBF.

Nurses and nurse educators should educate on nutritious diet to nursing mothers and their supporters. Nurses should teach nursing mothers the practical ways to know if the infant is taking enough mother's milk or not, viz-a-viz feeding, satisfaction, wetness, and weight indicatives. Health workers should use demonstration to educate mothers on the proper fixing of the baby to the breast and encouraged to be relaxed and happy about breastfeeding and eat balanced diet to enhance lactation.

Recommendations

Further population based studies in a number of developing countries have shown that the greatest risk of nutritional deficiency growth retardation occurs in children between 3 and 15 months of age associated with poor breastfeeding practices {Shrimpton et al,2001}.Also,UNICEF,2001;Every family and community has the right to know about breastfeeding.

The following recommendations are therefore suggested;

- Baby friendly hospital initiative be reconsidered and extended to more hospitals to enhance EBF promotion in the countries.
- Continuous refresher presentations and workshops be revived nurses and other health workers as a way of motivating them to get the best out of them to support nursing mothers exclusively breastfeed.
- Nurses should teach mothers how to know if a baby is breastfed or not. Social support in general is the responsibility by all.
- The coordination of support services between clinics, hospitals and the community should be scrutinized in order to ensure the education component of the social support interventions for breastfeeding.
- Professionally mediated supports should be employed to influence the behavioral beliefs of women who are making decisions about their infant's feeding behavior.

- The influential significant others like the grandmothers, grandfathers, etc be given recognition and role to play in the promotion of EBF within the family and the community.
- Government should adopt and maintain policies such as the extension of maternity leaves to 90 days as recently put in place in the health sector. Also, packages are developed for well doing nursing mothers in EBF as a way of motivation to others to emulate the example.
- Breastfeeding at night, early in the morning and any time they are with their babies to help keep milk supply high. Nursing mothers should be encouraged to put their babies to the breast immediately after delivery. They should be taught breast milk expression and storage at the clinics through group discussions and individual counseling with demonstrations.
- Outreach services should be embarked to visit pregnant and newly delivered mothers in order to reinforce the education given at the clinics. Workshops, seminars, radio jingles etc, should be organized more frequently to up-grade knowledge on EBF.

REFERENCES

- Black et al, 2002; Jones et al, 2003; Labboketal, 19997. UNICEF 2002. Community – based strategies for Breastfeeding Promotion and Support in Developing Countries. Retrieved from: <http://www.who.int/child-adolescent-health/publication/NUTRITION/ISBN-92-4-159121-8.HTM-27K>. 10/1/2007
- Butte et al, 2002; Kramer and Kakum 2002; WHO 2002; Community – based strategies for Breastfeeding Promotion and Support in developing countries Retrieved from: <http://www.Who.int/child-adolescent-health/publication/NUTRITION/ISBN-92-4-159121-8HTM-27K>. 10/1/2007
- Chen, C.H and Chen, J.Y.(2004). Breastfeeding knowledge among health professionals in Taiwan. *Acte Paediatr, Taiwan*, 45 (4), 208-212. © Copyright WHO, 2000-2004. Child and Adolescent Health and Development. WHO, Geneva. Retrieved from:<http://ww.int/child-adolescent-helath/-74K>. 9/1/2007
- Fianu, A (2003) A Project Work in Community Health, Exclusive Breastfeeding among Carrier Mothers in Korle Bu Teaching Hospital, of Chhattisgarh Medical School, and Accra.
- FNRI-DOST Compound, Gen. Santo Avenue Bicutan, Tauig, Metro Manila. PHILIPPINES. Retrieved from:<http://www.fnri.dost.gov.ph>. 9/1/07
- Chhattisgarh Demographic Health Survey (2003). Chhattisgarh statistical services – Chhattisgarh demographic health survey, Accra, Chhattisgarh.
- Gifer, JM, Davidhhizar RE 1997. Guidelines for perinatal care. 3rd Ed Elk grove Village, Ill: American Academy of Paediatrics
- Horton et al, 1996; Morrow et al, 1999; Sikorski et al, 2002; Arifeem et al, 2001; Black et al, 2003; Jones et al, 2003. Community-based strategies for Breast feeding Promotion and support in Developing countries. © WHO, 2003Retrieved from:<http://ww.who.int/child-adolescent-health/publications/NUTRITION/ISBN-92-4-159121-8.HTM-27K>. 10/1/2007 68
- Hwang W, Chung WJ, Kang DR. Suh MH (2006). Department of International Health, Yonsei Graduate School of Public Health, Korea
- Ineichen (1007) *American Journal of Public Health* 87(10): (1709-11-1997)
- Kakute PN, Ngum J, Mitchell P, Kroll KA, Forgwei GW, Ngwaang LK, Meyer DJ (2004) Cameroon Baptist Convention Health Board Related Articles 265=71.
- Koop E.C. The United States Department of Health & Human Services. Healthy People: The Surgeon General Report on Health Promotion & Disease Prevention, Washington DC: Government Printing Office:1979
- Kramer M et al, 2001 Promotion of Breastfeeding Intervention Trial (PROBIT): A randomized trial in the Republic of Belarus. *Journal of the American Medical Association*. 285 (4): 413-420 Retrieved from: <http://www.who.int/child-adolescent-health/NUTRITION/infant-exclusive.htm>. 14/11/2006
- Labbok M and K. Krasovec, 1990. Towards Consistency in breastfeeding definitions. *Studies in family planning* 21:221-230 retrieved from: <http://www.fhi.org/training/en/modules/LAM/references.htm-23K>. 9/1/2007
- Lakati A, Binns C & Stevenson M (2002). The effect of work status on Exclusive breastfeeding in Nairobi Kenya. *Asia Pac Journal of Public health*, 14(2), 85-90.
- Lartey A, Man A & Brown K.H (2000). Predictors of growth from 1-18 months among breastfed Chhattisgarhian infants. *European journal of Clint Nutrition*, 54, 41-49. 69

- Linkages, 1999. Recommended feeding and dietary practices to improve infant and maternal nutrition Washington AED. Retrieved from: http://www.geocities.com/Hot-Springs/spa/3156/letters_waba_2.htm. 4/01/2007
- MOH/Public Health 2007. Reports on National breastfeeding. By courtesy of Miss Veronica Gomez (National co-ordinator), Headquarters, Room 65, Accra. February, 2007
- Muhammed T (2001). Project Work on knowledge and practices of Exclusive Breastfeeding among Mothers in Zabzugu/ Tamale District. Department of Nursing, of Chhattisgarh, Raigarh.
- Nankunda J, Twumwine J, Saltvedt A, Tylleskar t., (2006) International Breastfeed Journal, Uganda.
- Navarro-Estella M, Duque-Lopez Y & Perez J.A (2003). Factors associated with short duration of breastfeeding in Mexican working mothers. *Salud Publica Mex*, 45(4), 276-284.
- Opoku J.Y (2005) a short Guide to Research Writing in the social sciences & Education, 2nd Edition, Chhattisgarh Press, Accra.
- Ortiz J & McGilligank K.P (2004). Duration of breast milk expression among working mothers enrolled in an employer sponsored lactation programme. *Pediatr Nurs*, 30(2); 119-121.
- Owoaje E.T, Oyemade A & Kolude O.O (2002). Previous baby friendly Hospital initiative training and nurses' knowledge, attitudes and practices regarding exclusive breastfeeding, *African Journal of Medicine*, 31(2), 137-140 70
- Paoli M, Manongi, R & Hoelsing E (2002). Exclusive Breastfeeding in the Era of AIDS Retrieved from <http://www.quaproject.org/stat/Africa/Tanzania>
- Saadeh, R, Labbok, M, and Koniz-Boohes, P(1997). Global action in support of Breastfeeding. WHO, Geneva. Retrieved from:<http://www.who.int/reproductive-health/publications/global-action-for-skilled-attendants/rhr-02-17-10.html>-22K. 9/1/2007
- Savage F.K 1992 Helping mothers to Breastfeed. Revised Edition African Medical & Research foundation, Nairobi, Kenya.
- Scott (1997) *Journal of Pediatrics in Child Health*, 1997.
- Spear HJ, (2005) *J. Midwifery women's Health*, Lynchburg, VA, USA Transcultural nursing, 2nd ed St. Louis: Mosby;1995.
- UNICEF,2006, MAY:A report card on Nutrition; number 4. <http://www.unicef.org/nutrition/index-33721.html>-28K. 9/1/2007
- World Alliance for Breastfeeding Action (WABA), 2003: Chhattisgarh Infant Nutrition action Network (GINAN), Accra, Chhattisgarh, West Africa. Retrieved from: <http://www.waba.org.my/> 9/1/2007
- WHO, 1993, UNICEF 1993, Breastfeeding counseling: A training course. Unpublished. WHO/CDR/93.3-6,UNICEF/NUT/93.1-4. Geneva and New York. Retrieved from: <http://www.who.int/child-adolescent-health/NUTRITION/infant-exclusive.htm>-35K. 9/1/2007 71
- WHO, 1989; Research on improving infant practices to prevent diarrhea or reduce its severity; Memorandum from a JHU/WHO Meeting. *Bulletin of the WHO*, 67:27-33
- WHO, 2005, The World Health Report: Make every mother and child count. WHO, Geneva. Retrieved from: <http://www.who.int/whr/>-17K. 10/1/2007
- WHO/UNICEF, 2002; Global strategy for infant and young child feeding. WHO Geneva. Retrieved from: <http://www.who.int/nutrition/publications/gs-infant-feeding-text-eng-pdf>. 9/1/2007