A STUDY

STATUS OF MALNUTRITION IN NARKATIYAGANJ BLOCK

(W. CHAMPARAN, BIHAR)

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EXECUTIVE SUMMARY

Although India has made tremendous advances in science, medicine, information technology & many other fields & has experienced high economic growth over the past decade but still the rates of malnutrition remains unacceptably high.

The aim of our study was to study the status of Malnutrition in Narkatiaganj block, for this we prepared questionnaires for the Aanganwadi kendras, community members & the staff of the PHC & conducted interviews with them. We explored the primary & secondary sources for our data & used Excel method for data analysis. Our study was based on a random survey & we used an open ended method for it. We undertook the study in two Panchayats _ Kehunia & Binwalia focusing on two villages from Binwalia(Binwalia & Manjharia) & two villages from Kehunia(Kehunia & Roari)each village covering the sample size of 25 respondents thus, covering 100 respondents in all. We also covered 12 Aanganwadi Kendras & 1 Primary Health Centre to analyse the efforts & implementations used by them to eradicate Malnutrition from their area.

Thus our study was a small but effective study which focused on the status of Malnutrition in the surveyed area.

KEY RESEARCH FINDINGS OF OUR SURVEY

- Diet taken by our respondents was not satisfactory as most of them belonged to the BPL families;
- Intake of iron/folic acid pills was irregular as most of the respondents were unaware about the dose of the pills;
- Status of feeding with colostrums & exclusive breastfeeding till 6 months was good & appreciable;
- Some minority groups showed least interest in regular checkups & immunizations;
- The Aanganwadi Kendras surveyed lacked the proper infrastructure & basic amenities;
- Health cards were not used by the Aanganwadi Kendras;
- Supply of vitamin A drops was irregular.

LITERATURE REVIEW

Although it is clear that malnutrition still remains a major threat for India, existing research on this seems insufficient to influence the stakeholders to pertain the impact of various schemes & programmes for the benefit of the people.

A report on "Malnutrition in Women" by Manju Dewan in 2008 relates gender inequality in India with the nutritional deprivation in women leading to malnutrition. The study had been carried out in the Sangrur district of Punjab. Her research related malnutrition in women with poverty, lack of development, lack of awareness & illiteracy. The ratio of malnourished males to females was 20.2%: 25.2% with the value of body mass index >30kg/m2 8.31% in females. The study showed the prevalence of gender difference in nutrition in the population of Sangnur(Punjab) & a wide variety of development actions were suggested to improve their food security & nutrition.

A case control study of maternal knowledge of malnutrition & health care seeking attitudes in rural south India was carried out by K. Saito, J.R. Korzenik & S. Bhattacharji. the purpose of the study was to explore maternal knowledge of the cause of malnutrition, healthcare seeking attitudes & socio economic risk factors in relation to children`s nutritional status in south India. Poor nutritional status was associated with socio economic variables such as sex of child & father`s occupation as a labourer. Based on their traditional beliefs the mothers did not believe that medical care was an appropriate intervention for childhood illness such as malnutrition or measles. The result suggested a need for intensive nutritional programmes targeted towards poor female children & their mothers.

A study on knowledge & practice of mothers regarding infant feeding & nutritional status of under 5 children attending immunization in Nilratan Sirkar medical college & Hospital Kolkata was carried out by S. Chatterji & S. Saha in 2007. In his study more than 25% of the study population was born with low birth weight & most of the deliveries (87.27%) had taken place in hospitals & nursing homes. There was a poor knowledge of mothers regarding proper time of initiation of breastfeeding & correct age of weaning. There was no gross difference in practice of colostrums feeding among literate & illiterate mothers but there was a marked difference between the same practices of pre lacteal feeding (47.06% & 66.67%) respectively.

CONTENTS

GLOSSARY & ABBREVIATIONS

- Aanganwadi - Government healthcare worker & primary school teacher
- NFHS - National family health survey
- ANM - Auxiliary & midwife
- AWC - Aanganwadi centre
- AWW - Aanganwadi worker
- CDPO - Child development project officer
- ICDS - Integrated child development scheme
- SNP - Supplementary nutrition program
- RCH - Reproductive & child health
- PHC - Primary health centre
- PHSC - Primary health sub centre
- WHO - World Health Organization
- UNICEF - United Nations Children Fund
- SHG - Self help groups
- BPL - Below poverty line
- APL - Above poverty line
- A.K - Aanganwadi Kendra
- DPO - District program officer
- LS - Lady supervisor
- THR - Take home ration

ACKNOWLEDGEMENTS

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We would also like to thank the associates of Aanganwadi centres for sharing their precious time & providing us with essential information needed for our project.

The study would not have been completed if the respondents were not kind enough to spare their valuable time to give response to the questionnaire & other important information significant for the study. They deserve special appreciation.

INTRODUCTION

Worldwide over 100 million children are underweight. While it is a serious problem in sub Sahara Africa, even higher rates of stunting are found in south Asia particularly in India. The WHO has reported hunger & related malnutrition as the greatest single threat to the world`s public health. The WORLD BANK estimates that INDIA is one of the highest ranking countries in the world for the number of children suffering from malnutrition. The prevalence of underweight children in India is among the highest in the world.

According to UNICEF one in every three malnourished children lives in India. Around 1/3rd of all adult women are underweight. Inadequate care of women & girls especially during pregnancy results in low birth weight of the babies. Nearly 30% of all new born have a low birth weight, making them vulnerable to further malnutrition & diseases. Vitamin & mineral deficiencies also affects children survival & development. Anaemia affects 74% children under the age of 3, more than 90% of adolescent girls & 50% of women. Iodine deficiency which reduces the learning capacity is widespread because nearly more than ½ households do not use iodised salt. Vitamin A deficiency which causes blindness & increase morbidity & mortality among pre -school students also remains a public health problem.

Women & children are more at a risk of Malnutrition. Due to pregnancies & breastfeeding women need additional nutrient requirements & if these requirements are not fulfilled it leads to malnutrition in women & children. Malnutrition is a condition that results from eating a diet in which certain nutrients are lacking, in excess (too high in intake) or in wrong proportion.

Children can be at risk for malnutrition even before birth, as their nutritional levels are directly tied to the nutrition of their mothers. A lack of adequate breastfeeding leads to malnutrition in infants & children, associated with deaths of an estimated 1 million children annually. Breastfeeding can reduce rates of malnutrition & mortality in children.

One of the major causes of malnutrition in India is gender inequality. Due to the low social status of the Indian women, their diet often lacks both quality & quantity leading to Malnutrition. Women who suffer from malnutrition are less likely to have healthy babies. In India mothers generally lack proper knowledge in feeding their children with their milk. Consequently the new born infants are unable to get adequate amount of nutrition from their mothers.

Emergency measures of malnutrition include providing deficient micronutrients through fortified candies, sachet powders or directly through supplements. WHO, UNICEF & the UN world food programme recommend community management of severe acute malnutrition with ready to use therapeutic foods which have been shown to cause weight gain in emergency situations. One way to fix the problem is to teach the mothers about right nutrition for their children & themselves. Distributing information is an important part of a solution although it does not always leads to behavioural changes. Mothers are advised that when the child has diarrhoea they should increase the child`s fluid intake & continue to feed them normally but according to the NHFS-3 nine out of ten mothers do not follow this recommendation. In fact four out of ten

mothers reduce their child`s fluid intake. Medical solution to the problem of malnutrition include de -worming & nutritional supplements. De worming campaigns are quite effective & is made compulsory in all schools. Popularly used nutritional supplements include vitamin A, Zinc, Iron & various minerals. Iodised salt is also used as a supplement to prevent goitre & developing the brains of the children.

MALNUTRITION IN BIHAR

Bihar is the 3rd most populous state in India & has recorded the highest population growth during the nineties. Despite impressive economic growth the benefits have not reached the poor. Around 40% of Bihar`s population lives below the poverty line. The major health indicators such as infant & maternal mortality are also much higher than all India level, reflecting the poor status of child health in the state. Children under 5 mortality rates in Bihar are 8.5% as compared to all India average of 7.4%. According to NHFS -3 (2005-2006) malnutrition among children & woman has increased in recent years. Malnutrition among children has increased from 54% to 58%. Anaemia has gone up from 81% to 88% among children of 6mnths-3 yrs & from 46% to 60% in pregnant woman. Around one third of child`s death in Bihar is associated with malnutrition. Malnutrition stuns physical, mental & cognitive illness. Malnourished children are also more likely to die as a result of common & easily preventable childhood diseases than those who are adequately nourished. The 2008 State Hunger Index (ISHI) ranked Bihar 15th of 17 states surveyed. Thus despite Bihar`s high growth rate in recent years malnutrition persists as a barrier to its development.

INTEGRATED CHILD DEVELOPMENT SCHEMES (ICDS)

India`s ICDS programme was started by the Govt. Of India on 2nd October 1975 and today the ICDS scheme represent one of the world`s largest and most unique programmes for early childhood development. The ICDS programme in India is one of the largest welfare programmes in the world. It reaches more than 75 million children aged 0-6 yrs & 16 million pregnant & lactating mothers across India through a chain of more than 1.3 million Aanganwadi centres.

The broad objectives of ICDS programmes are:

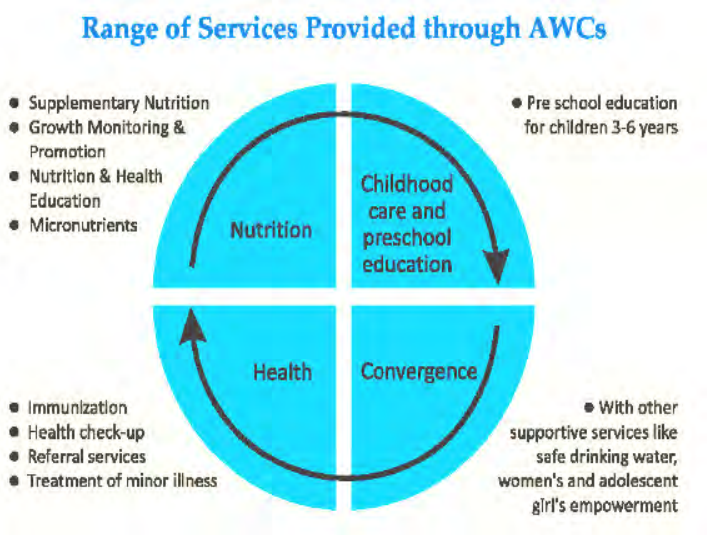
- To improve the nutritional & health status of children in the age group 0-6 yrs.
- To lay the foundation of proper psychological, physical & social development of child.
- To reduce the incidence of mortality, morbidity & malnutrition.
- To achieve effective co-ordination of policy & implementation amongst the various departments to promote child development.
- To enhance the capability of the mother to look after the normal health & nutritional needs of the child through proper nutrition & health education.

Two new programmes targeting the adolescent girls, pregnant & lactating women respectively called as SABLA & IGMSY programme have been launched by ICDS in 2010. Sabla is targeted towards nutritional health & life skills training needs of adolescent girls (11-18 years) that are in school or out of school. IGMSY is a conditional cash transfer scheme for pregnant & lactating women with an objective to improve their & their new born health & immunization status.

SERVICES PROVIDED BY ICDS

The services provided by the ICDS are as follows:

- … Supplementary nutrition
- … Immunization
- … Health check-up
- … Referral services
- … Pre-school non-formal education
- … Nutrition & health education



Services	Target Group	Service Provided by
Supplementary Nutrition	Children below 6 years: Pregnant & Lactating Mother (P&LM)	Aanganwadi Worker and Aanganwadi Helper
Immunization*	Children below 6 years: Pregnant & Lactating Mother (P&LM)	ANM/MO
Health Check-up*	Children below 6 years: Pregnant & Lactating Mother (P&LM)	ANM/MO/AWW
Referral Services	Children below 6 years: Pregnant & Lactating Mother (P&LM)	AWW/ANM/MO
Pre-School Education	Children 3-6 years	AWW
Nutrition & Health Education	Women (15-45 years)	AWW/ANM/MO

Source: ICDS
*AWW assists ANM in identifying the target group.

Three of the six services namely Immunisation, Health Check-up and Referral Services delivered through Public Health Infrastructure under the Ministry of Health & Family Welfare.

⇒ **Nutrition including Supplementary Nutrition:** This includes supplementary feeding and growth monitoring; and prophylaxis against vitamin A deficiency and control of nutritional anaemia. All families in the community are surveyed, to identify children below the age of six and pregnant & nursing mothers. They avail the supplementary feeding support for 300 days in a year. By providing supplementary feeding, the Aanganwadi attempts to bridge the caloric gap between the national recommended and average intake of food taken by children and women in low income and disadvantaged communities. Children below the age of three years of age are weighed once a month and children 3-6 years of age are weighed quarterly. Weight-for-age growth cards are maintained for all children below six years. This helps to detect growth faltering and helps in assessing nutritional status. Besides, severely malnourished children are given special supplementary feeding and referred to medical services.

⇒ **Immunization**

Immunization of pregnant women and infants protects children from six vaccine preventable diseases- poliomyelitis, diphtheria, pertussis, tetanus, tuberculosis and measles. These are major preventable causes of child mortality, disability, morbidity and related malnutrition. Immunization of pregnant women against tetanus also reduces maternal & neonatal mortality.

⇒ **Health Check-ups**

This includes health care of children less than six years of age, antenatal care of expectant mothers and postnatal care of nursing mothers. The various health services provided for children by aanganwadi workers and Primary Health Centre (PHC) staffs include regular health check-ups, recording of weight, immunization, management of malnutrition, treatment of diarrhoea, de-worming and distribution of simple medicines etc.

⇒ **Referral Services**

During health check-ups and growth monitoring, sick or malnourished children, in need of prompt medical attention, are referred to the Primary Health Centre or its sub-centre. The aanganwadi worker has also been oriented to detect disabilities in young children. She enlists all such cases in a special register and refers them to the medical officer of the Primary Health Centre/ Sub-centre.

⇒ **Non-formal Pre-School Education (PSE)**

The Non-formal Pre-school Education (PSE) component of the ICDS is considered to be the backbone of the ICDS programme, since all its services essentially converge at the aanganwadi. These AWCs have been set up in every village in the country. The PSE is a joyful play-way daily activity, visibly sustained for four hours a day. It brings and keeps young children at the aanganwadi centre - an activity that motivates parents and communities. PSE, as envisaged in the ICDS, focuses on total development of the child, in the age up to six years, mainly from the underprivileged groups**.** Its programme for the three-to six years old children in the aanganwadi is directed towards providing and ensuring a natural, joyful and stimulating environment, with emphasis on necessary inputs for optimal growth and development.

⇒ **Nutrition and Health Education**

Nutrition, Health and Education (NHED) is a key element of the work of the Aanganwadi worker. This forms part of BCC (Behaviour Change Communication) strategy. This has the long term objective for the capacity-building of women with special focus in the age group of 15-45 years so that they can give priority to their own health, nutrition and development needs as well as they can provide proper diet for their children and families.

AREA PROFILE OF NARKATIAGANJ/ PASHIM CHAMPARAN

Narkatiaganj is a subdivision region in West Champaran district in the Indian state of Bihar. Narkatiaganj block has 27 Panchayat. It is well connected by roads and railways to all major places of Bihar and neighbour states. Railway lines are well connected with Barauni–Gorakhpur, Raxaul and Jainagar. Hindi and Bhojpuri are the common and widely spoken language of this region. Additionally, speakers of Nepali and Punjabi are also present in significant numbers. Narkatiaganj has historical Chanaki Garh situated nearby, which is said to be a palace of Chanakya in the region of Chandragupta of the Mauryan period. An Iron Pillar (also known as Ashoka Stambha) established by one of the greatest ruler of India Ashoka is another center of attraction, representing the glorious history of India. New Swadesi Sugar Mills Ltd., a Sugar Factory of Birla group is the prominent source driving the economy of the town. There's a newly SSB camp is located near the Narkatiaganj Railway Station contributing to the security and prosperity of the town.

Demographics of Narkatiaganj (according to Census 2011)

As of 2011 India census, Narkatiaganj has a population of 377842. Males constitute 197531 of the population and female's 180311.Sex ratio of total population is 912/per thousand males. Literacy rate of total population in Narkatiaganj is 45 %. Female literacy rate is only 38 % which is much poor as compare to male literacy rate. Male literacy rate is 62%. Out of total number of 77819 population of children between 0-6 years, total population of male children is 39850 and female children is 37969.Sex ratio of the child(0-6 years) population is 955/per thousand

Demographics of the 4 villages covered (according to Census 2011)

According to 2011 census, **Binwalia** has a total population of 2230 out of which the female population is 1051 and male population is 1179. Total literate population is 955 out of which total number of literate females is 346 and male literates are 609. Total 0-6 child population is 434 out of which 237 is male population and 197 is female population. **Manjharia** has a total population of 1074 out of which the female population is 494 and male population is 580. Total literate population is 400 out of which total number of literate females is 134 and male literates are 266. Total 0-6 child

population is 246 out of which 122 is male population and 124 is female population. **Roari** has a total population of 4627 out of which the female population is 2204 and male population is 2423. Total literate population is 2072 out of which total number of literate females is 706 and male literates are 1366. Total 0-6 child population is 988 out of which 516 is male population and 472 is female population. **Kehunia** has a total population of out of 4866 which the female population is and 2378 male population is 2488. Total literate population is out 2408 of which total number of literate females is 975 and male literates are 1433. Total 0-6 child population is 984 out of which 495 is male population and 489 is female population.

ICDS IN BIHAR

ICDS Directorate under social welfare department (SWD) is mandated to run this largest welfare programme in the state targeted at children up to age of 6 years, pregnant women, new mothers & adolescent girls providing essential nutrients, health & other related services to the target population. In Bihar the ICDS programme today reaches out to more than 6.5 million children under 6 years of age, around one million adolescent girls & same number of expected & nursing mothers. Of these nearly 3 million children below the age of three to six also participate in centre based preschool education activities. The targeted population is reached through around 91,000 Aanganwadi centres. Each AWC has a trained community based Aanganwadi worker (AWW) & an equal no. of Aanganwadi helpers (AWH)

ORGANIZATIONAL DESIGN OF ICDS

As per the existing guidelines the ICDS programme is supposed to have one AWC for a population of 800- 1000. Each AWC is managed by one AWW & one AWH. Lady supervisor (LS) oversees a cluster of 25-30 AWWs. At the field office level, the programme is managed by child development project officer (CDPO) in each block & a district programme officer (DPO) at the district level. There are total around 180 thousand people that are involved in the implementation of ICDS program in Bihar.

AIMS & OBJECTIVES OF THE STUDY

The objective of this report is to study the status of malnutrition among women & children in Narkatiaganj block & to study the access of various schemes which are run by the government of India through ICDS to control malnutrition.

According to a recent NFHS-3 2005-2006 report, malnutrition among children & women have increased. The latest consolidated revised NRHM report 2012-2013 for Bihar brings a gloomy picture

of malnutrition among children below 0-5 yrs. The report says that malnourishment in Bihar in the age group 0-3 yrs has increased by 3% since 2002. It has put the latest figure at 55%. Around 80% children below 5 yrs of age in Bihar are malnourished. Malnourishment in women in reproductive age group (15-49) yrs has also worsened in Bihar. According to the report it went up from 60% in 1998 to 68.2%in 2012.

Thus, we undertook a small study to bring out the causes of malnutrition & to observe the implementation of various schemes at the grass root level.

Specific Objectives

- To study the socio economic status of the community.
- To study the status of diet taken by the respondents.
- To check the status of immunizations among respondents.
- To check the status of awareness among respondents regarding the nutritional benefits of colostrums, initiation of exclusive breast feed (6mnts) & continued breast milk along with solid food (2yrs).
- To check the status of supplementary diets among children below 6yrs of age & use of iodised salt.
- To check the status of health checkups facilities among the respondents at the Aanganwadi/PHC.
- To check the status of kit, tools & various other equipments used at the Aanganwadi/PHC.
- To study the access of various schemes & facilities provided by the govt. & stakeholders

DATA COLLECTION (LOCATION OF STUDY)

STATE	DISTRICT	BLOCK	PANCHAYAT	VILLAGE	Sample covered		
					Community	AK	PHC
Bihar	West Champaran	Narkatiaganj	Kehunia	Kehunia	25	4	1
				Roari	25	4	
			Benwalia	Manjharia	25	1	
				Binwalia	25	3	
					100	12	1

Our location of study was Narkatiaganj sub-division of West Champaran district of Bihar. We chose two panchayats Kehunia & Benwalia of Narkatiaganj block for our study. We targeted two villages from each panchayat. In Kehunia panchayat we chose Kehunia village & Roari village & in Binwalia panchayat we took Binwalia village & Manjharia village for our stud

Our sample size was 25 women (pregnant/lactating) from each village, thus we targeted 100 community members for our study. We also surveyed the Aanganwadi Kendras of Kehunia & Binwalia panchayat. There were 4 Anganwadi Kendras in Binwalia panchayat & 8 Aanganwadi Kendras in Kehunia panchayat. Thus, we surveyed 12 Aanganwadi Kendras in all. We also visited the Primary Health Centre (PHC) at the Narkatiaganj block which was the integral part of our study. The Primary Health Sub Centres (PHSC) was found to be non- functioning. We divided our survey in two groups. One group consisted of the community members which were the rural women either pregnant or lactating & children from age group 0-5 yrs. The other group consisted of the stakeholders who are responsible for smooth functioning of various schemes run by the govt. Our study helped us to sketch out a rough figure about the status of nutrition in Narkatiaganj block.

Our research study can be divided into two sections:

- **Community members**
- **Stake holders (A.K & P.H.C)**

METHODOLOGY

PROJECT DURATION – 1ST MARCH 2014 till 30TH APRIL 2014

LOGFRAME

Training on Research Methodology by Equity Foundations.	2 days
Preparation of questionnaire	10 days
Collected materials for literature review	5 days
Field survey	18 days
Data entry	10 days
Report writing	15 days

To achieve the objectives of our study both primary & secondary data sources have been explored. For the primary sources we conducted in depth interviews based on our questionnaire with the community members as well as the stake holders & for the secondary sources we relied on internet & various books.

The process started with the review of available literature on the status of malnutrition in Bihar & the implementations of various schemes run by the government. Based on the available literature we prepared three sets of questionnaire for the Community members, Aanganwadi kendras & the Primary health centres. Our study was based on open ended survey -& we used the Excel method for the Data Analysis.

The fieldwork covered the four villages of two Panchayats in Narkatiaganj block. The target group under the study was selected using stratified random sampling method. A sample size of 100 respondents were taken (i.e.25respondents per village*4 villages* 2 Panchayat* One Block=25x4=100. We selected 12 Aanganwadi Kendras for our study. We also surveyed a Primary Health Centre located in Narkatiaganj block while the rest Primary Health Sub Centres were found to be closed.

Number of Aanganwadi Kendras covered

क्र0	सेविका का नाम	सहायिका का नाम	केन्द्र कोड	केन्द्र का नाम	पंचायत/कोड	केन्द्र जिस भवन में अवस्थित है उसका नाम
1	निर्मला देवी	गंगोत्री देवी	20	बरवा	बिनवलिया/3	सरकारी भवन
2	जरीना खातुन	सुनैना देवी	21	मंझरिया	बिनवलिया/3	किराया पर
3	संध्या देवी	किरण देवी	22	बिनवलिया	बिनवलिया/3	किराया पर
4	रिंकी पांडे	कांबिना देवी	23	बिनवलिया	बिनवलिया/3	किराया पर
5	अर्चना देवी	तेतरा देवी	110	केहुनिया	केहुनिया–रोआरी/23	रा0प्रा0वि0केहुनिया
6	रंजना साही	उमा देवी	111	रोआरी 1	केहुनिया–रोआरी/23	किराया के मकान में
7	रीना देवी	रावली देवी	112	रोआरी 2	केहुनिया–रोआरी/23	रा0प्रा0वि0 रोआरी
8	शोभा देवी	रीता देवी	113	रोआरी 3	केहुनिया–रोआरी/23	रा0प्रा0वि0 रोआरी
9	शीला देवी	नीमा देवी	114	रोआरी 4	केहुनिया–रोआरी/23	रा0म0वि0केहुनिया
10	कुन्ति मिश्रा	किरण मिश्रा	115	केहुनिया	केहुनिया–रोआरी/23	किराया के मकान में
11	अनिता राय	धैलारो देवी	117	गावरधाना	केहुनिया–रोआरी/23	किराया के मकान में
12	पूनम राय	रीता देवी	284	रोआरी अ0 जा0	केहुनिया–रोआरी/23	किराया के मकान में

Types of questionnaires used

QUESTINNAIRE FOR THE COMMUNITY

QUESTIONNAIRE FOR THE ANGANWADI KENDRA

QUESTIONNARE FOR THE PRIMARY HEALTH CENTRE

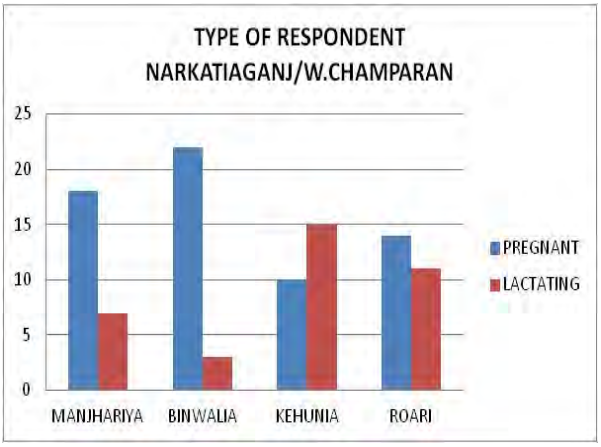
SECTION 1

DATA ANALYSIS

COMMUNITY MEMBERS

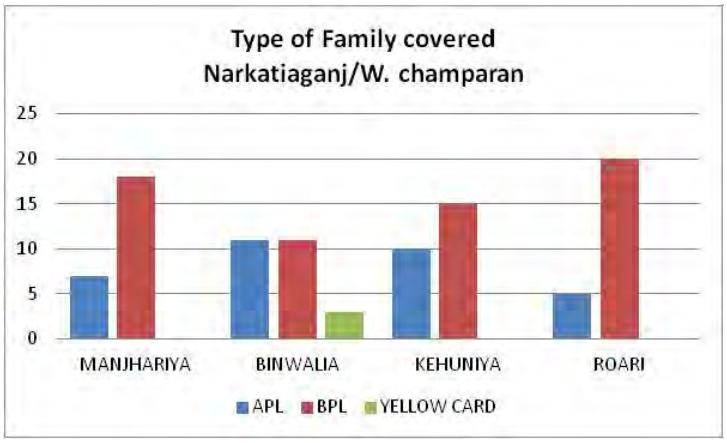
1. TYPE OF RESPONDENT COVERED

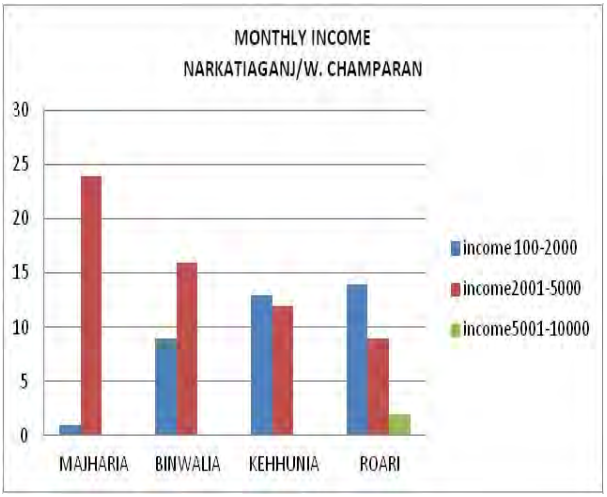
We have surveyed 100 women respondents in Narkatiaganj block who were either pregnant women or lactating women or both pregnant women and lactating women to check the nutritional support provided by Aanganwadi centres & level of awareness among them. In order to do so we targeted both the pregnant & lactating women in the community. 64% respondents surveyed were pregnant while 36%were lactating.



2. SOCIO – ECONOMIC CONDITION OF THE RESPONDENT

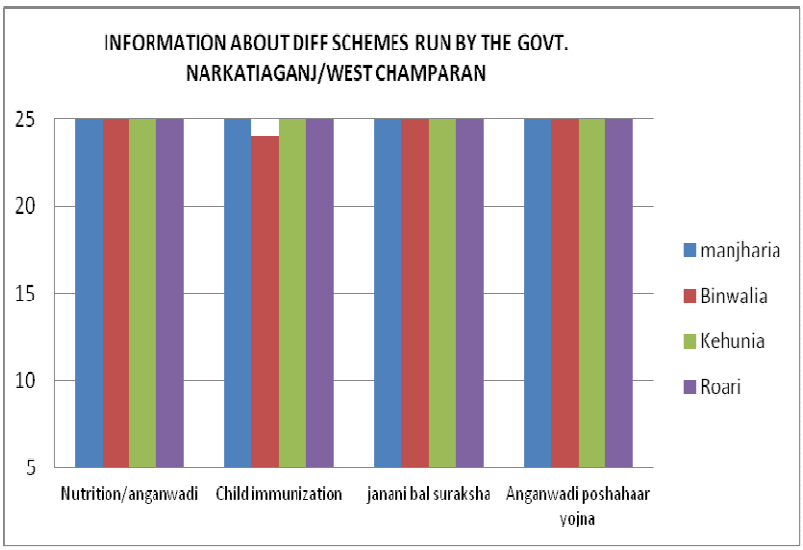
Considering the socio-economic condition of the respondent we noticed that most of the respondents covered belonged to the BPL & ANTODAYA group families (67%) while only 33% of the respondents belonged to the APL families. Thus the economic condition of the respondents was not good.





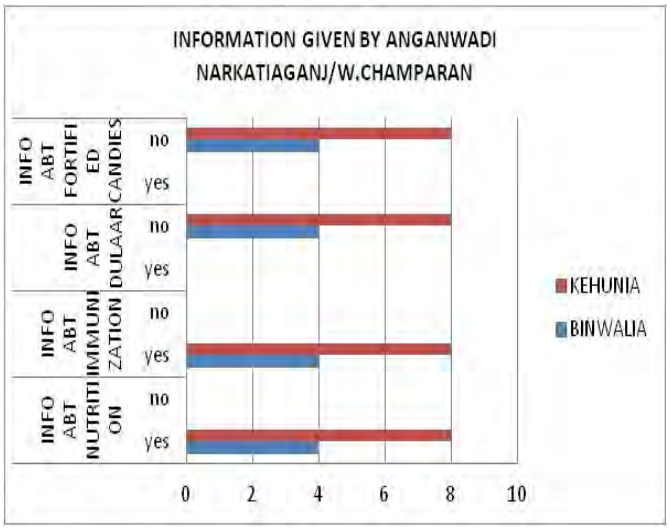
With regard to the source of income & monthly income of the family we noticed that most of the respondents belonged to labour class & Dalit groups of society & had their monthly income ranging from Rs.2001-5000. Thus, this part of the survey brought about a clear picture of the economic condition of the respondent & proved that they belonged to the economically weaker sections of the society where nutrition & taking healthy diet is not affordable.

3. INFORMATIONS TO THE COMMUNITY ABOUT VARIOUS SCHEMES



Among the services provided by the ICDS Nutrition & Health Education plays a very important part. It is the duty of the Aanganwadi workers to inform the people about various schemes run by the ICDS for the benefit of the people.

Regarding the information about various schemes we studied that 99% respondents had the information about nutrition, free child immunization, Janani Bal Suraksha Yojana & Anganwadi poshaahar yojna while 1 woman **Shababun Nisa of Binwalia panchayat & Binwalia village denied of having any information about free child immunization.** On further enquiry with the AWW an unbelievable fact came into light that some families from minority groups showed least interest in immunizations & in spite of several reminders they don`t turn up for immunizations. Considering the information about Dulaar & free distribution of Fortified candies we noticed that none of the respondents had any information about these two schemes. The respondents didn`t had information about these schemes because these schemes had become obsolete long before in these areas. On the other hand if we consider the information given to the respondents about various schemes by the Aanganwadi Kendra it was noticed that all the 12 Aanganwadi Kendras of both the Panchayats (Binwalia & Kehunia) gave the information to the respondents regarding nutrition & proper immunization while they accepted the fact of not giving any information about Dulaar or fee distribution of fortified candies because these schemes had become obsolete in these areas.

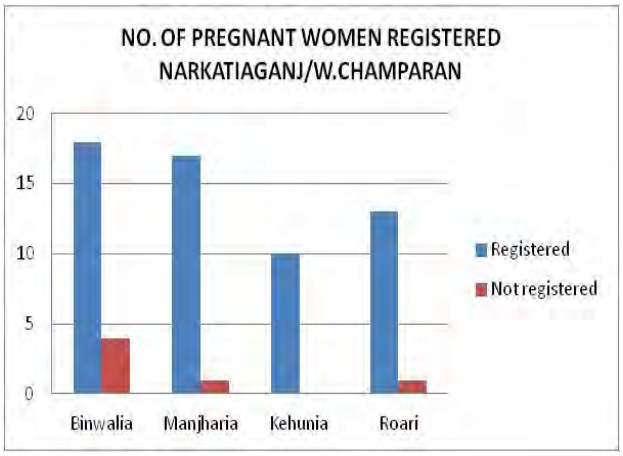


PREGNANT WOMEN

1) NO.OF WOMAN REGISTERED AT PHC/ANGANWADI

Janani Suraksha Yojna is a safe motherhood intervention under the NHRM being implemented with the objective of reducing maternal & neonatal mortality by promoting institutional deliveries among the poor women. JSY was launched on 12th April 2005.Janani Suraksha Yojana (JSY) under the overall umbrella of National Rural Health Mission (NRHM) was proposed by modifying the existing National Maternity Benefit Scheme (NMBS).

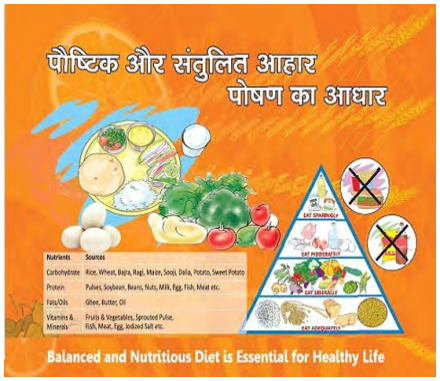
While NMBS is linked to provision of better diet for pregnant women from BPL families, JSY integrates the cash assistance with antenatal care during the pregnancy period, institutional care during delivery and immediate post-partum period in a health centre by establishing a system of coordinated care by field level health worker. The JSY is a 100% centrally sponsored scheme.



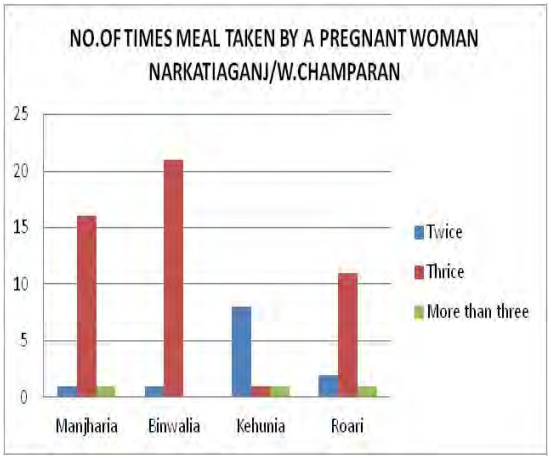
The main objective of this mission is to reduce overall maternal mortality ratio & infant mortality rate & to increase institutional deliveries in BPL households & of the age 19 yrs & above & is valid up to 2 live births.

Thus we see that according to the mentioned scheme the pregnant woman can avail the facility of free registration at the PHC or AANGANWADI. According to our survey 91.18% women were availing the facility. This reveals that a sufficient number of women respondents are utilising this facility.

2) DIET OF A PREGNANT WOMAN

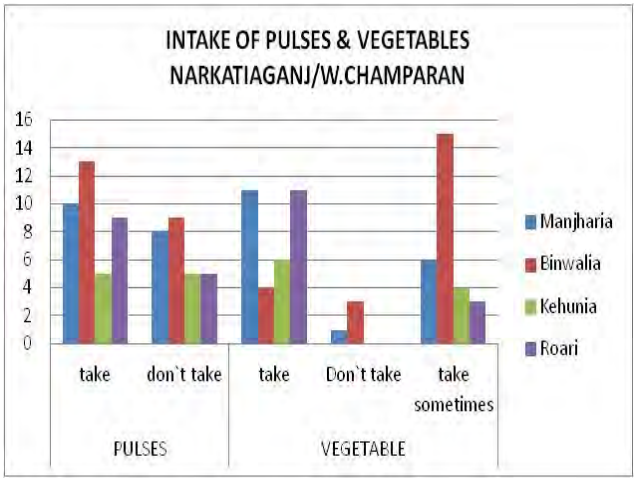


A Pregnant woman should have a proper & balanced diet so that at the child gets nutrition from her body. Basically a balanced diet must contain some or other things from entire food group. During pregnancy, the nutritional requirements of women increase to support optimum foetal growth & development. Poor maternal nutrition during pregnancy usually results in low birth weight & high pre-natal & infant mortality. A pregnant woman needs to ensure that her diet provides enough nutrients & energy for her baby to develop & grow properly & also to make sure that her body is healthy enough to deal with the changes that are occurring. For a healthy pregnancy, the mother`s diet needs to be balanced & nutritious-this involves the right balance of proteins, carbohydrates & fats & consuming a wide variety of vegetables & fruits.



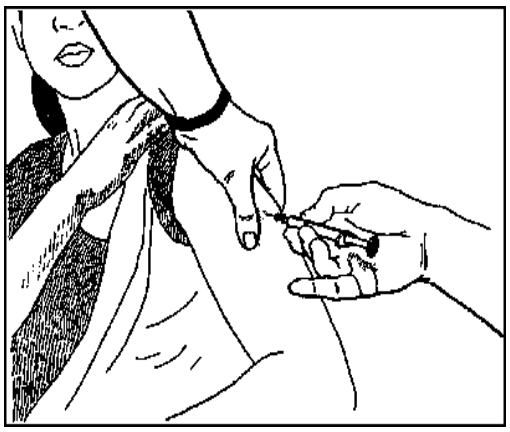
In India due to gender inequality & low social status of woman, their diet often lacks both quality & quantity. Poor maternal nutrition especially in rural areas especially affects pregnancy & birth outcomes. Thus focussing on the diet taken by the pregnant woman we conclude that only 76.56% of respondents had their meals three times a day while the rest could not manage to have their meals for three times a day.

Considering the intake of green vegetables & pulses our finding was that only 57.8% of the respondents had pulses in their diet while the rest 42.2% never had pulses in their diet. Considering the intake of green vegetables we found that only 50% of the respondents had consumption of green vegetables regularly in their diet. While the rest 43.7% had green vegetables



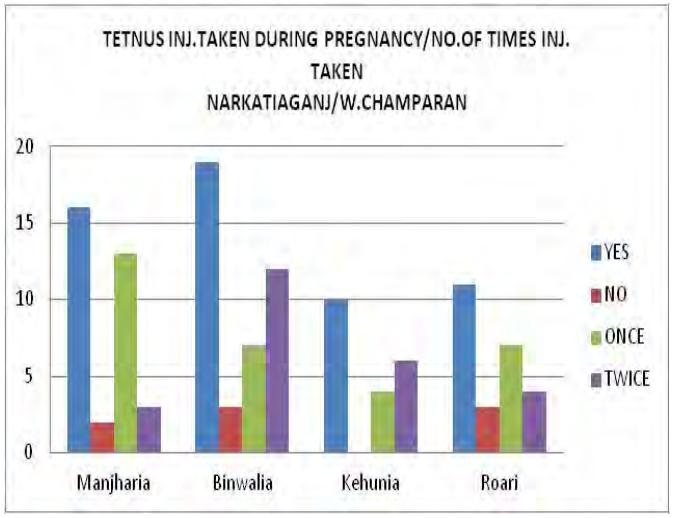
Sometimes in their diet & the rest 6.3% never had green vegetables in their diet. Thus we noticed that the nutritional status of the pregnant women surveyed was not up to the mark.

3) IMMUNIZATION STATUS OF PREGNANT WOMAN



The tetanus toxoid vaccine is given during pregnancy to prevent tetanus to the mother as well as the baby. Antibodies formed in the body of pregnant woman after the vaccination passes on to the baby & protects him for a few months after birth from tetanus. Tetanus injection also helps to prevent premature deliveries.

In the 1st pregnancy the doctor recommends at least 2 doses of tetanus vaccine. The 1st vaccine is given in the 1st trimester as soon as the pregnancy tests are confirmed & the 2nd dose of TT vaccine is given at least 4-8 weeks after the 1st. WHO also recommends that a 3rd vaccine dose be given 6 months after the 2nd one to provide protection for at least 5 years. If the woman becomes pregnant 2nd time before 2 years since her last pregnancy she is advised to take only a booster dose of T.T vaccine.



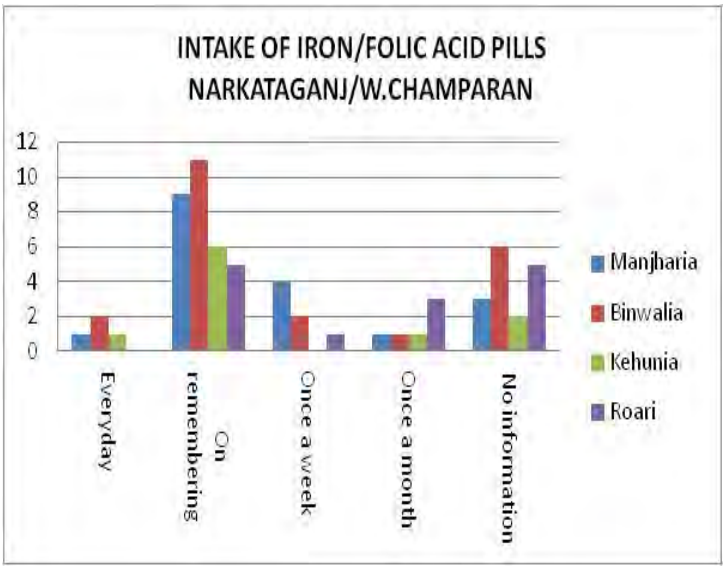
During our survey we noticed that among the 64 pregnant respondents only 87.5% respondents had been immunized by the tetanus injection while 12.5% women were still not immunized at all. Regarding the frequency of tetanus injection taken it was noticed that among the 56 women taking injection 55.3% had taken it once while the rest 44.6% of them had taken it twice.

When we enquired about the rest of the 8 respondents who were not immunized, a very different picture came out. According to the associates of Aanganwadi Kendra the women concealed the fact of their pregnancy from everyone till 5-6 months whereas the 1st tetanus injection is to be given during 3rd month of pregnancy. The Aanganwadi Kendra associates also revealed the fact that many women from minority group were against the immunization as they found it against their religion.

4) INTAKE OF IRON PILLS

All pregnant women in the areas of high prevalence of malnutrition should routinely receive iron & folic acid supplements, together with appropriate dietary advice, to prevent anaemia. Where the prevalence of anaemia in pregnant woman is high (40% or more) supplementation should continue for 3 months in the postpartum period. The iron & folic acid supplementation helps to prevent & treat iron deficiency anaemia in woman during pregnancy & in the postpartum period in order to improve maternal & prenatal health.

It is assumed that effective iron supplementing programme where anaemia is prevalent may reduce the incidence of low birth weight & prenatal mortality as well as maternal mortality. Iron/folic acid pills are recommended to be taken daily during pregnancy.



In our research the status of the intake of iron/folic acid pills among pregnant woman was very poor. Out of 64 pregnant women surveyed only 6.3% of them were found to be serious in taking the pills regularly while the rest were very irregular with the intake of pills. 48.4% of the respondents took the pills when they remembered while 11% of them took the pills once in a week & 9.3% of them took the pills once in a month. While25% women were totally unaware of the importance of the regular intake of iron/folic acid pills during pregnancy. These women denied about any information given to them regarding the importance of the pills. The respondents were not informed about the correct dose of the pills.

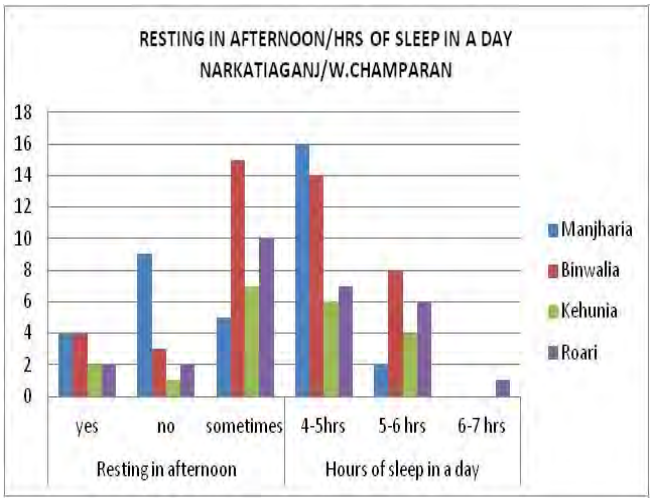
On the other hand the Aanganwadi Kendras said that they had given information to the respondent to take the iron/folic acid pills daily on regular basis. However, the associates of the Aanganwadi Kendras also accepted that sometimes there was a delay in distributing the pills due to their shortage at the Kendra or also, there was a delay in supply of the pills by the government.

5) ADEQUATE SLEEP REQUIRED FOR PREGNANT WOMAN

During pregnancy a pregnant woman needs at least 8-10 hrs of sleep in a day. A good sleep ensures a good blood flow from the mother to the foetus & thus it helps the child to be healthy & prevents premature deliveries. Inadequate sleep during pregnancy can bring on several health issues like diabetes & post-natal depression. It can also increase the risk of a prolonged labour as well as increases the risk of a C- section. A Pregnant woman who sleeps for less than 5 hours are ten times more at risk from pre-eclampsia which is a condition that causes high blood pressure leading to organ damage & even death to the unborn baby. There is compelling evidence indicating that sleep plays a critical role in immune health & that insufficient & poor quality sleep contributes to high levels of inflammation in the body & also leads to premature deliveries.

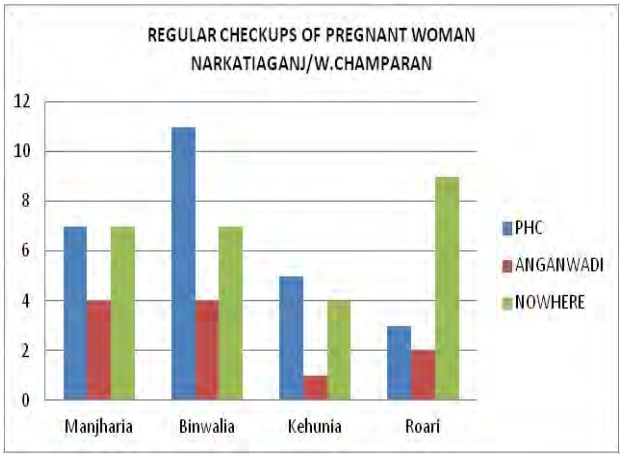
In our survey we surveyed the respondents about the total no. of hours that they rested at night & found that 67.25% woman slept for 4-5 hrs at night, 31.2% woman slept for 5-6 hrs at night while there was only one woman who slept for 6-7 hrs at night. Regarding the afternoon nap there were only 18.7% woman who slept or rested in the afternoon while the rest either did not sleep at all or rested only sometimes in the afternoon.

Thus we see that on one hand the Aanganwadi staffs claimed of giving all the information regarding safe pregnancy but on the other hand the respondents didn't show any sign of prior instructions regarding safe delivery. Hence, it becomes very difficult to state whether the respondents are given information regarding safe pregnancy or was it a total negligence on their part.



6) REGULAR CHECK-UPS OF PREGNANT WOMAN

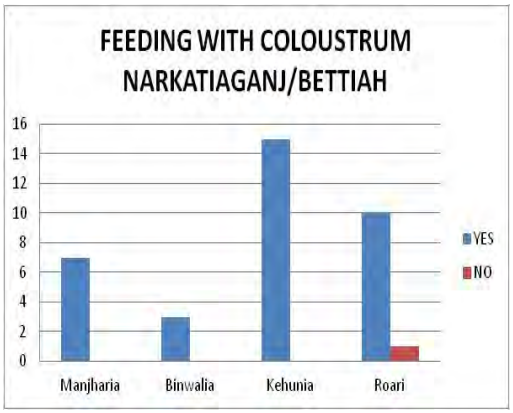
In India only 47 per cent of women have an institutional delivery and only 53 percent have their births assisted by a skilled birth attendant. In India 49 percent of pregnant women still do not have three antenatal visits during pregnancy. Only 46.6 percent of mothers receive iron and folic acid for at least 100 days during pregnancy. About half of the total maternal deaths occur because of haemorrhage and sepsis. A large number of deaths are preventable through safe deliveries and adequate maternal care. More than half of all married women are anaemic and one-third of them are malnourished (have a body index below normal). Considering the status of regular checkups of the respondents we came across the fact that out of 64 respondents covered 40.7% of them went to the PHC`S for their regular checkups while 17.1% of them went to the Aanganwadi Kendras & 42.2% of them were such women who did not believed in regular checkups & hence went nowhere for their regular checkups during pregnancy.



Thus this reflects that still much work has to be done by the AWW in educating & motivating the pregnant women to go for their regular checkups.

LACTATING WOMAN

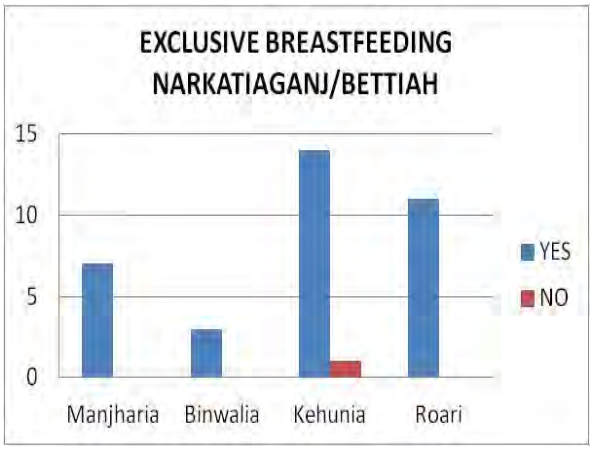
1. FEEDING WITH COLOUSTRUM AND EXCLUSIVE BREASTFEEDING



Commonly referred to as "baby's first milk," colostrum is the leftover mixture of materials present in the mammmary gland and ducts at delivery. It slowly becomes mixed with newly secreted milk, yet it differs from mature milk in composition and is not as plentiful.

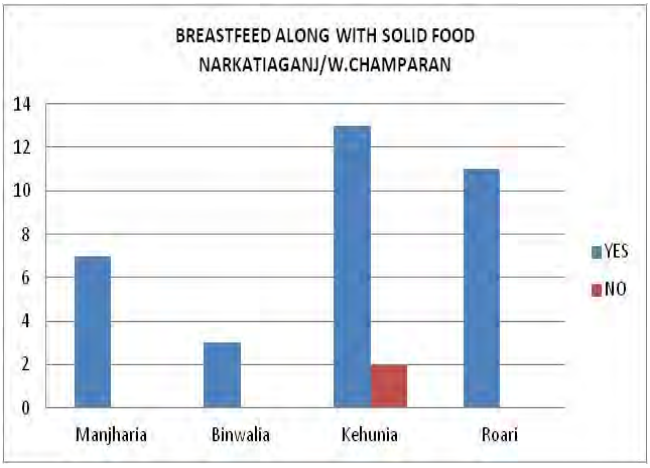
One of the major purposes of colostrum is to aid in the formation of the "good" bacteria, or Bifidus flora, in the GI tract. It also eases the movement of meconium. Colostrum is abundant in antibodies to protect the baby against bacteria and viruses in the birth canal and from human contact.Colostrums appear as a clear fluid or may be deep golden in colour.

Thus, colostrums act as the first vaccination for them. It is very important to start breastfeeding soon after delivery so that the baby receives the benefits of colostrums. Feeding the baby with colostrums acts as the protection shield for the baby & safeguards the baby from many diseases. Infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development & health. Breast milk is the ideal food for the healthy growth & development of infants. During our survey on lactating women we noticed that out of 36 lactating respondent covered 97.22% of them fed their babies with colostrums while one woman of Roari village (Kehunia panchayat) did not feed her baby with colostrums as her family considered it to be impure milk.



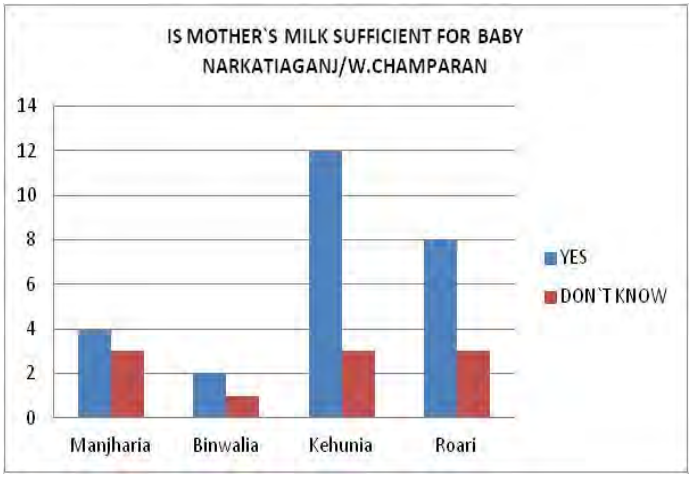
Breast milk is best for baby, and the benefits of breastfeeding extend well beyond basic nutrition. In addition to containing all the vitamins and nutrients baby needs in the first six months of life, breast milk is packed with disease-fighting substances that protect baby from illness. Considering the status of exclusive breastfeeding till six months we noticed that 97.22% women exclusively breast fed their child for six months. Thus, this gives a positive picture regarding the awareness among women to feed their newborns with colostrums & exclusively breastfeed till six months.

2. BREAST-FEED ALONG WITH SOLID FOOD (2 YRS)



WHO recommends the infants should start receiving complementary foods at six months of age in addition to breast milk. Foods should be adequate providing sufficient energy, protein & micro nutrients to meet a growing child`s nutritional needs. Foods should be prepared & given in a safe manner to minimize the risk of contamination. Feeding young infants requires active care & stimulation to encourage the child to eat. The babies who are breast fed for extended period of time are healthier overall. Considering the 36 respondents covered we noticed that 94.4% respondents continued breastfeeding their babies till two years along with solid food which is really appreciable. This presents a positive picture regarding the mothers accepting the positive impact of breastfeeding.

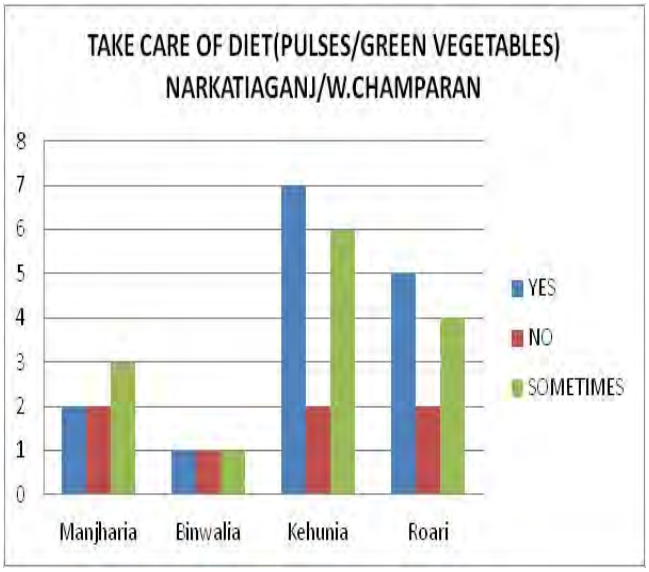
3.IS MOTHER's MILK SUFFICIENT FOR THE BABY?



Medical science advises to exclusively breastfeed the new born till 6 months as the mother's milk is considered to be the wholesome food and gives all the nutrition needed for its development but there are many cases when the mother's milk is not sufficient to satisfy the baby and the baby remains hungry and lapse the nutrition needed at that stage. In such cases the mother has to be aware whether her milk is sufficient for the baby or not and if it not sufficient she must arrange for other suitable option or consult a medical advisor. Many a times women cannot decide whether the breast feeding baby is getting enough nourishment or not.

During the survey it was found that 36 lactating women were aware about child nutrition. Our study found that out of the 36 lactating women 72.2% women were confident about their child being satisfied by breastfeed while the rest 27.8% women were not confident enough whether their milk was sufficient for the baby. This was due to lack of nutrition during pregnancy. This also reflects the fact that 27.8% women still were unaware regarding the importance of nutrition for them and their baby.

4. DIET OF A LACTATING MOTHER

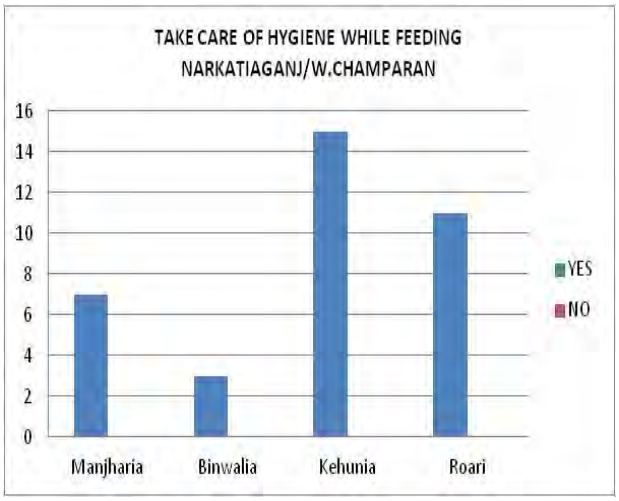


A healthy diet is essential for the production of nutritious mother milk for the new born child. A balanced diet with plenty of calcium should be eaten while nursing. Infancy is a period of rapid growth & plenty of energy & nutrients are needed for the new tissue development& the infants depends on mother`s milk & so the lactating mothers should have a balanced diet which should be rich in all nutrients. As a mother`s diet affects the foetus in her womb during pregnancy, her diet during breast feeding still affects the child`s development.

Considering the nutritional diet of a lactating mother out of 36 respondents covered 41.6% of them had pulses & vegetables in their diet regularly, while 39% of them had it sometimes and 19.4% respondents were such who did not have pulses and green vegetables in their diet at all. Thus, we noticed that only 41.6% of the lactating mother took care of their diet while the rest of them still had to be educated regarding the importance of nutritional diet (pulses, green veg.) as this enhances the nutritional quality of their milk and ultimately the newborns get benefitted by it.

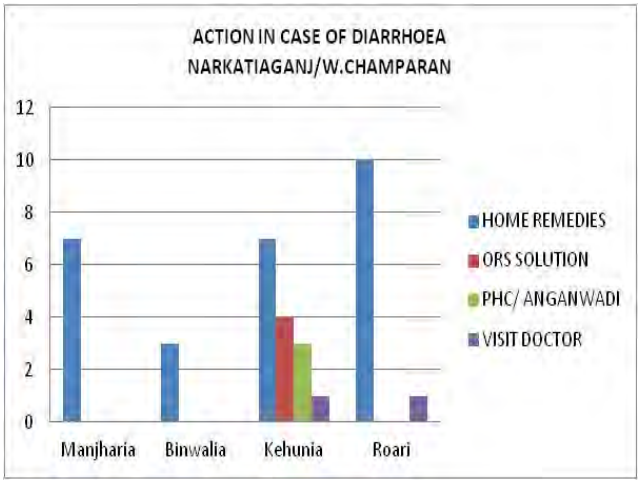
5. CARE OF HYGIENE WHILE FEEDING/ ACTION IN CASE OF DIARRHOEA

Malnutrition in India is not caused just because of lack of intake of proper nutritional diet but frequent ill health & diarrhoea is also the major cause of malnutrition. Poor hygiene causes attack of infectious diseases & thus the child's nutritional level decreases causing malnutrition in the child. Diarrhoea is usually a symptom of an infection caused by a variety of bacterial, viral & parasitic organisms. Infection is spread through contaminated food or drinking water or from person to person as a result of poor hygiene.



The most severe threat posed by diarrhoea is dehydration. During dehydration water & electrolytes are lost through liquid stools, vomit, urine & breathing. Dehydration occurs when these losses are no replaced. Acute dehydration can result in death if body fluids & electrolytes are not replenished through ORS solution & intravenous drip.

Diarrhoeal disease is the 2nd leading cause of death in children under 5 years & is responsible for killing around 7,60,000 children every year. Thus, in our survey, we surveyed 36 lactating women for analysing the practise of taking care of hygiene while feeding & their immediate action in case if the child suffers from diarrhoea. In the first case we came to a finding that out of 36 lactating women surveyed all the 36 respondents accepted that they took care of hygiene while feeding their children. When the 36 respondents were enquired about the immediate action taken by them in case of their children suffering from diarrhoea 75% of them relied on home remedies (sugar salt solution, giving mashed bananas etc.) 11.1% of them used the ORS solution, 8.3% of them visited the PHC/Aanganwadi & the rest 5.6% visited a doctor regarding the child health issues.

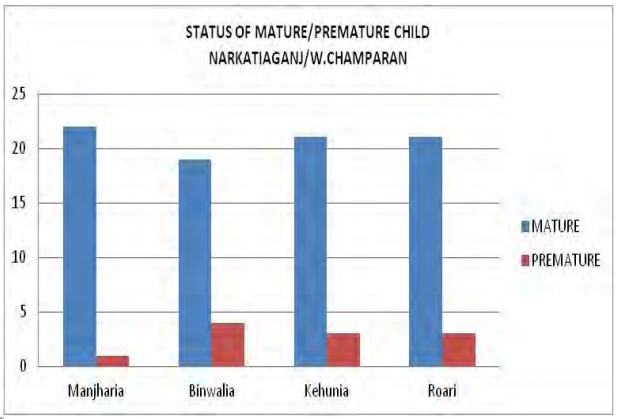


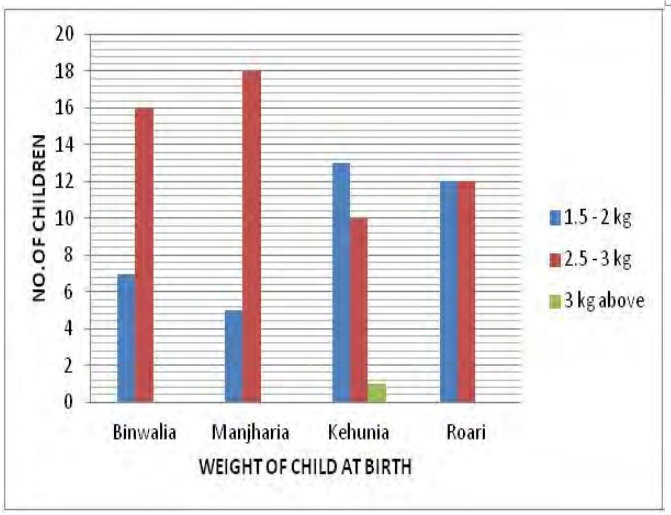
Thus it reveals that to some extent, the lactating women were aware of taking care of hygiene and taking immediate action in condition of diarrhoea in a child.

CHILDREN

1. STATUS OF PREMATURE BABIES/WEIGHT OF CHILD AT BIRTH

Premature birth is a condition when the baby is born before the developing organs develop enough to allow normal postnatal survival. Premature infants are at greater risk for short & long term complications including disabilities & impediments in growth & mental development. Premature birth is among the top causes of death in infants worldwide.





A baby`s birth weight is the body weight of a baby at the time of its birth. WHO terms any newborn weighing less than 2.5kg as a low birth weight baby irrespective of when the baby is delivered during the gestational cycle. In our study we surveyed 94 children & found that 60.70%of them had their weight within the normal range (2.5-3kg)

during birth whereas 39.3% of them had their weight below 2.5kg during birth**.**

Regarding the status of premature delivery we found that 88.30% of children were born on time whereas 11.70% of the children were born before time & were premature.

Thus, this brings a question mark for us because inspite of the education provided by the Anganwadi Kendras about taking care during pregnancy still there are premature deliveries & children are born underweight. This shows that either the women are not not informed to take care during pregnancy or they don`t show any behavioural change on their part by not implimenting & practising what they are taught by the associates of Anganwadi Kendra.

2. STATUS OF IMMUNIZATION

Immunization of pregnant woman & infants protects children from six vaccine preventeble dieases- poliomyelitis, diptheria, pertussis tetanus, tuberculosis & measles. These are major preventable causes of child mortality, disability, morbidity & related malnutrition. Immunization of pregnant woman against tetanus also reduces maternal mortality. Primary Health Centres (PHC) & Primary Health Sub Centres (PHSC) carry out immunization of infants & expected mothersas per the National Immunization Shedule. The Anganwadi workers assist the health functionaries in coverage of the target population of immunization.

In our study we noticed that out of 94 children surveyed 95.8% children were being immunized regularly while the rest 4.2% of them were not being immunized. Out of the 4 children not being immunized 2 children were from village Binwalia while the rest 2 were from Manjharia & Roari. On further enquiry about the children not being immunized brought a very strange theory that some of the minority families did not believed in immunizations as they considered it to be against their religion. On enquiry with the associates of the Anganwadi Kendra they also discussed about their difficulty in motivating them to take initiative in getting their children immunized regularly.

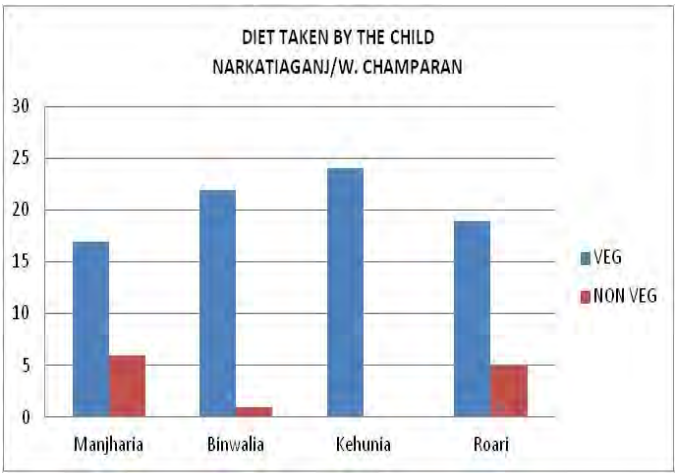
SHABABUN NISA & NOORJAHAN OF VILLAGE BINWALIA, SHAYADA KHATOON OF VILLAGE MANJHARIA & SHAHANA KHATOON OF VILLAGE ROARI DID NOT IMMUNIZE THEIR CHILDREN.

TABLE FOR CHILD IMMUNIZATION

S No	Vaccine& its presentation	Protection	Route	Number of doses	Vaccination Schedule
1	BCG (Bacillus Calmette Guerin)- Lyophilized vaccine	Tuberculosis	Intra- dermal	1	at birth (upto 1 year if not given earlier)
2	OPV (Oral Polio Vaccine)- Liquid vaccine	Poliomyelitis	Oral	5	Birth dose for institutional deliveries, Primary three doses at 6, 10 & 14 week and one booster dose at 16-24 month of age. Given orally
3	Hepatitis B – Liquid Vaccine	Hepatitis B	Intra-muscular	4	Birth dose (within 24 hours for institutional deliveries, Primary three doses at 6, 10 & 14 week.
4	DPT (Diphtheria, Pertussis and Tetanus Toxoid) – Liquid vaccine	Diphtheria, Pertussis and Tetanus	Intra-muscular	5	Three doses at 6, 10 & 14 week and two booster dose at 16-24 month and 5-6 years of age
5	Measles - Lyophilized vaccine	Measles	Sub-cutaneous	2	9-12 months of age and 2nd dose at 16-24 months.
6	TT (Tetanus Toxoid) – Liquid vaccine	Tetanus	Intra-muscular	2 2	10 years and 16 years of age For pregnant woman, two doses given(one dose if previously vaccinated within 3 Year)
7	JE vaccination (in selected high disease burden districts) Lyophilized vaccine	Japanese Encephalitis (Brain fever)	Sub-cutaneous	2	9-12 months of age and 2nd dose at 16-24 months (6 month after vaccination drive)
8	Hib (given as pentavalent containing	Hib Pneumonia and Hib	Intra-muscular	3	6, 10 & 14 week of age

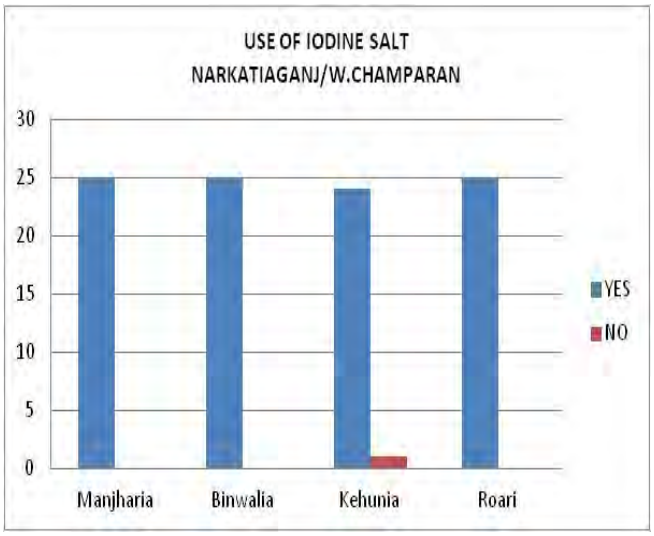
3. DIET OF CHILDREN

Children are in the growing stage which means that they need a lot of energy for their growth. Children under 5yrs of age need a diet higher in fat & lower in fibre but once they reach the age of 5 the diet of children can be made similar to that of an adult i.e. a healthy & balanced diet. A healthy intake of food can prevent the child from getting affected with malnutrition.



As the children are at the growing stage they need a good diet containing all the vital nutrients like green vegetables, pulses, milk, egg, fishes etc. If we look at our respondents answer, we find that 87.2% children did not have a proper & balanced diet while the rest 12.8% had a balanced diet including eggs, fishes & meat. According to our analysis the inappropriate diet intake by most of the children was because most of them belonged to BPL families with income range from Rs 2000- 5000. Also the average number of children in one family was 5 so we can well imagine the status of diet intake by them belonging to a low income group.

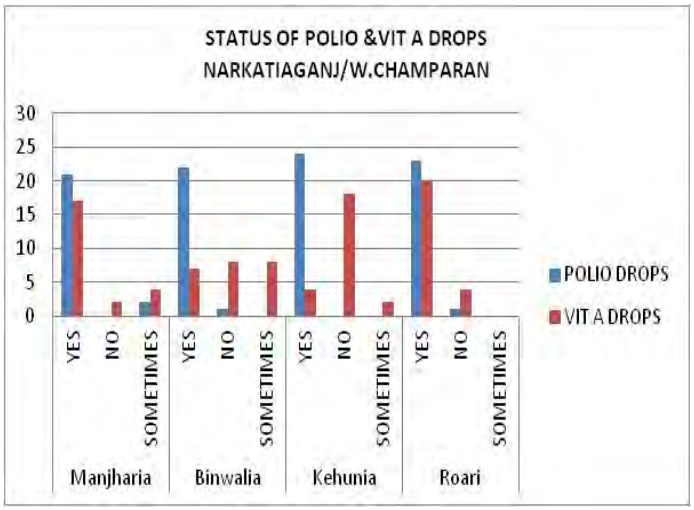
4. USE OF IODINE SALT



Iodine deficiency is the main cause of preventable brain damage & reduced IQ in children worldwide. It also negatively affects woman`s health. Most people need an additional source of iodine as it is found in relatively small amounts in the diet. WHO recommends universal salt iodization as the main strategy for eliminating iodine deficiency. The government also organises various campaigns to bring awareness among the people to use iodine salt in their food. In our research we noticed that 99% respondents used iodine salt in their food while *1 woman Sangita Devi of Kehuniya village of Kehunia Panchayat used any salt (iodised/non iodised) in her food. She accepted that she knew the importance of use of iodised salt but still she used any salt available to her. This showed that till today some people in spite of being aware of the ill consequences are still negligent about their health.*

5. STATUS OF PULSE POLIO & VITAMIN A DROPS

Pulse polio is an immunization campaign established by the Government of India in 1995 -1996 to eradicate polio myelitis (POLIO) by vaccinating all children under the age of 5 yrs against polio virus. Vitamin A deficiency is the leading cause of preventable childhood blindness & reduced immunity towards infections which results in increased mortality from childhood diseases.



If we consider the status of polio drop coverage in our area of research we found that out of 94 children surveyed 95.7% children were being given polio drops regularly while 2.1% children were not regularly given polio drops. The rest 2.1% children never had the polio drops as their parents were not interested in getting their children immunised.

Shayada Khatoon of village Manjharia, & Noorjahan of village Binwalia immunized their children with polio drops sometimes while Shahana Khatoon of village Roari & Shababun Nisa of village Binwalia never immunized their children with polio drops. They did not showed interest in giving their children the polio drops. On further enquiry it was revealed that some families belonging to minority groups have to be forced to give their children polio drops & vitamin A drops or any sort of vaccination.

The reason behind this was the lack of awareness regarding the importance of polio drops.

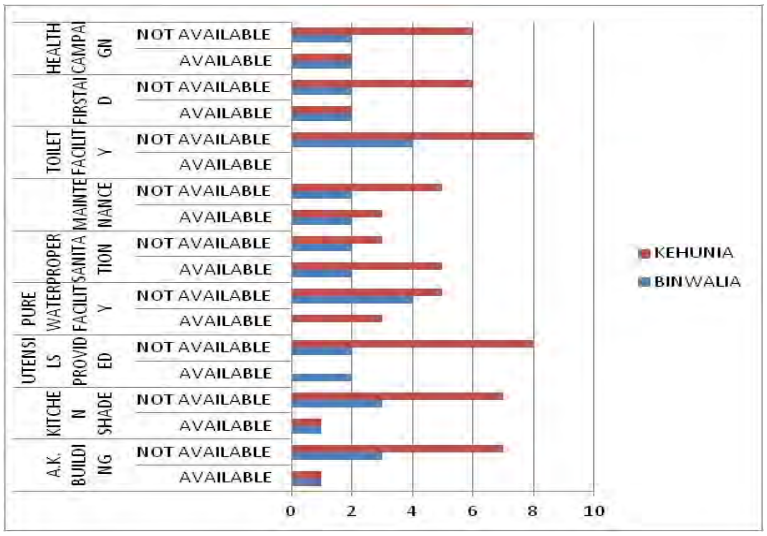
Regarding the intake of vitamin A drops, out of 94 children surveyed, 51% children of had had vitamin A drops regularly, depending on the nature of the availability, 15% of them had the drops sometimes while 34% of them had never had the drops. As per our findings it was not that the respondents did not want to get the vitamin A drops but it was its unavailability which restricted them to get the benefit. The community members complained of the irregularity in distribution of vitamin A drops. The vitamin A drop has to be given in every 6 months but due to irregular supply people were not benefitted by it. This reflects the improper functioning of the government schemes.

SECTION 2

DATA ANALYSIS

ANGANWADI KENDRA

1. FACILITIES PROVIDED BY ANGANWADI KENDRAS



A good infrastructure is the basic need for the smooth functioning of the Aanganwadi Kendras especially for indoor activities & outdoor activities of children. Apart from this the basic amenities such as pure water facility, toilet facility; first aid facility, regular health campaigns & proper maintenance of the Kendra are also the basic necessities of an Aanganwadi Kendra.

Regarding the facilities provided by the Aanganwadi Kendras our research came to a finding that among the 12 A.K. surveyed of both the Panchayats only 2 had its own building & kitchen shade while the rest were either functioning in rented house or government schools having inadequate space. The kitchen shades were not used for cooking but were being used as the dumping ground for cow dung cakes etc. Among the 12 A.K. only 3 A.K. of Kehunia panchayat had pure water facility (hand pump) while the rest didn`t have any such facility. Similarly providing toilet facility is also very necessary for both the associates working there as well as the children but we were surprised to see that none of the Aanganwadi Kendras had any toilet facility.

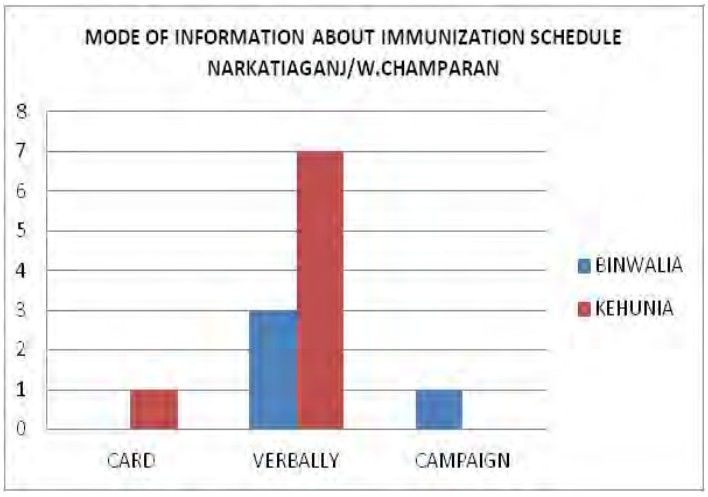
We were also shocked to see that only 2 Kendras provided the first aid facility. We also noticed that only 5 of the Aanganwadi Kendras practiced cleanliness & were well maintained while the rest were ill maintained. Regular health campaigns were organised by only 4 Kendras, while the rest did not do so. Hence, the Aanganwadi Kendras did not provide the basic essential facilities. Much work is to be done towards the improvement of its functioning.

2. INFORMATIONS GIVEN TO PREGNANT/LACTATING WOMAN BY AANGANWADI KENDRA

Aanganwadi Kendra associates are responsible to register the pregnant woman & give all the necessary information to the pregnant woman regarding safe delivery. It is their duty to advice & convinces them to take healthy diet, take iron & folic acid pills regularly, take proper sleep & rest & go for regular checkups.

It is the duty of the Aanganwadi Kendra workers to inform the pregnant women to prepare themselves with the basic amenities for the delivery. The Aanganwadi Kendra workers are also responsible to educate the lactating mothers for early initiation of breastfeeding (colostrums), exclusive breastfeeding (6months), continue breastfeed along with solids (2yrs), intake of iodine salt in food & practice hygiene while feeding. While talking to the AWWs they all claimed that the pregnant and lactating women were being regularly informed but when we surveyed the respondents we found that many of them did not have the basic information such as regular daily intake of iron pills, regular health checkups during pregnancy, getting registered at the A.K. or the PHC etc. Thus we can say that the AWWs have to put in greater effort to get the best result.

3. MODE OF INFORMATION ABOUT IMMUNIZATION SCHEDULE



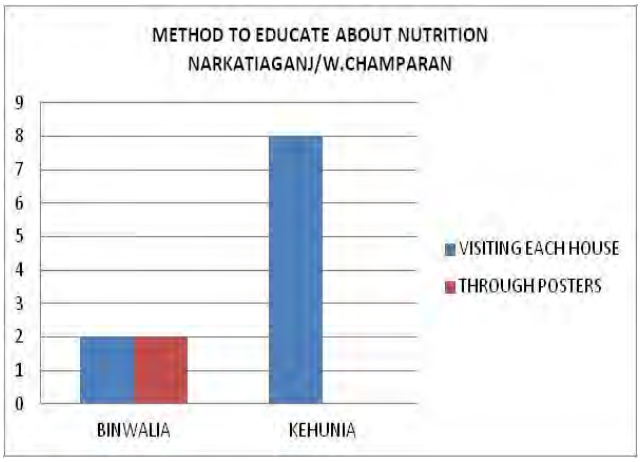
The Aanganwadi Kendra workers are expected to provide basic immunization to pregnant women & infants. The information regarding the immunization schedule is to be given through health cards but during the survey it was found that staffs of 10 out of the 12 Aanganwadi Kendras used to inform the respondents about their immunizations verbally **while only 1 of them gave information through card** & another 1 informed through campaign. This seems to be very impractical as it is not possible for a person to remember the immunization schedule of each one & move from door to door to inform them about the date of the immunization. Moreover ICDS provides health cards for immunizations which should be brought in regular practice

MOST OF THE ANGANWADI KENDRAS DID NOT USE THE HEALTH CARDS PROVIDED BY THE ICDS...

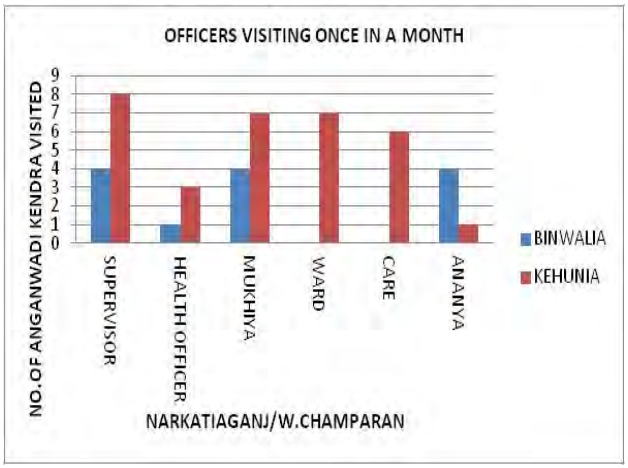
4. METHODS ADOPTED BY THE AANGANWADI KENDRA TO EDUCATE ABOUT NUTRITION

The Aanganwadi Kendra workers play a very important role in educating the people about nutrition. The main objective of ICDS is to improve the nutritional and health status of children in the age-group 0-6 years & to reduce the incidence of mortality, morbidity& malnutrition among them. Thus it becomes very important for the Aanganwadi kendras to adopt the best suited method to aware the community about nutrition & consequences of malnutrition so that maximum number of people get benefitted by it.

Regarding the method adopted by the Aanganwadi kendras we came to a conclusion that staffs of 10 Aanganwadi Kendras adopted the method of visiting each house & educating the respondents about nutrition whereas 2 relied on spreading the knowledge through posters.



5. OFFICERS VISITING AT THE AANGANWADI AT LEAST ONCE IN A MONTH



The ICDS team comprises of Aanganwadi workers, Aanganwadi helpers, supervisors, child development project officers (CDPOs) & District programme officers (DPOs). It becomes very important for the team to work together to achieve maximum goals. Regarding the officers visiting the Aanganwadi Kendras at least once in a month we noticed that the supervisor visited the Kendra at least twice in a month. Others like mukhiya, ward Parishad & health officer also visited the Kendras. NGO`s like Ananya & Care also visited the Kendras from time to time for the proper functioning of the Anganwadi kendras. But it was also observed that the post of CDPO was vacant since the last 2 years and the BDO was incharge. Holding an position such as that of looking after the sub division it is impossible for him to fulfil

additional duty of a CDPO. No visit and supervison was being made by him since the last 2 year due to shortage of time.

The L.S. visited the Anganwadi Kendras during our visit

SECTION 3

DATA ANALYSIS

PRIMARY HEALTH CENTRE

The Primary Health Centre(PHC) of Narkatiaganj block in West Champaran was the only functional Health Centre of this area while the other sub centres were found to be non functional. Regarding the basic infrastructure of the PHC we found that it had a good & spacious building & was well connected with concrete road.

The facilities provided by the PHC included pure drinking water, proper sanitation & free registration of the patients. Our further enquiry revealed that around 350 patients visited the PHC every day. There were only 8 doctors appointed at the PHC, while the other staff members included 10 nurses & 1 compounder. The total no. of bed (12) in the emergency ward was also inappropriate as compared to the number of patients visiting the PHC.

Considering the availability & condition of the medical equipments we noticed that though the health centre had all the necessary equipments such as weighing machine, B.P. machine, pregnancy kit etc., they were not in a good condition & seemed that they had not been replaced since a long time.

The PHC also offered the facility of ultrasound, X- ray & oxygen cylinders for the patients. However the facility of blood bank & pathological lab were not given by the PHC & this created a lot of inconvenience for the patients.

Free Immunizations of pregnant woman & infants were also carried out at the PHC & the patients were informed about their immunization schedule through cards. Health campaigns were also organized by the PHC from time to time. The PHC also delivered the facility of free distribution of required medicines for the patients. The medicines distributed at the PHC were Iron/folic acid pills, vitamin C, Zinc & ORS solutions. It also gave the Ambulance facility for the patients who were in serious condition & they were referred at the MJK hospital Bettiah.

Thus to some extent the PHC tried to deliver the facilities to the patients but the facilities rendered were inadequate because the no. of patients were much more in comparison to the number of doctors attending them. This created inconvenience for the doctors as well as to the patients.

OBSERVATIONS

Our Research Study focussed on the community members and the stake holders. Considering the socio-economic condition of the respondents we noticed that 64% respondents belonged to the BPL groups & were from the Dalit communities. They belonged to the labour group with their monthly income ranging from Rs.2000 – Rs.5000 only. The respondents had large families with average no. of members being 8, average children being 5 in one family. Since the respondents belonged to the weaker section of the society their intake of healthy nutritious food seemed to be affordable.

As far as the information about various schemes run by the ICDS & International Organizations for the benefit of the community was concerned, 99% respondents accepted of having all the information regarding nutrition, child immunizations, JSY & Aanganwadi poshaahar yojna. 100% AWW also claimed of providing all the necessary information regarding the schemes run by the government for the benefit of the community. *Schemes of Dulaar & Free distribution of fortified candies were non functional in these areas.*

The AWWs are responsible to give the pre – pregnancy & post – pregnancy information to the respondents for a safe delivery. They are also responsible to educate the pregnant woman to get them registered either at the Aanganwadi or PHC to avail all the facilities provided by the government. Considering the status of regular checkups of pregnant woman we found that although it was the duty of the AWWs to motivate the pregnant women to get their regular checkups done & encourage them to have institutional deliveries, still only 57.8% women went for their regular checkups during pregnancy while the rest 42.18% women did not go anywhere for their regular checkups. This imparts a question on the functioning of the A.K.

Considering the awareness among the mothers to decide whether the breast feeding baby was getting enough nourishment or not our study came to a finding that 27.7% feeding mothers were still not aware about the babies getting enough nourishment from their milk. Thus, the AWWs should focus more on this & must aware the respondents about the warning signs in babies not getting enough breast milk & must also suggest them to eat a healthy diet. Regarding the diet of the lactating mothers it was found that only 72.2% of the feeding mothers took care of their diet while the rest still have to be educated about the consequences of not taking a proper diet.

Since Malnutrition is life threatening among children so special care has to be taken for their prevention from Malnutrition. Considering the status of premature babies & weight of child at birth we found that 88.29% children were born on time whereas 11.7% children were born premature. Considering the weight of the child during birth we found that 59.5%children had their weight within the ideal range (2.5-3kg) whereas39.3%

children had their weight below 2.5kg. Thus this showed that the education provided by the AWWs to have safe delivery was not implemented properly & much more effort is required from both the sides to get the best results. The AWWs were also responsible to immunize the pregnant women with the T.T injection to prevent the mother & child from tetanus. During our survey we noticed that only 87.5% of the respondents had been immunized by the tetanus injection while the rest had not taken the T.T injection at all. On further enquiry we came across a very strange theory. According to the AWWs the women concealed the fact of their pregnancy till 5-6 months.

The AWWs also revealed the fact that many respondents from the minority group were against the immunizations as they considered it against their religion to get vaccinated.

Regarding the registration of the pregnant woman we observed that only 91.18% women got themselves registered while the others did not avail the facility of JSR under the NHRM. Under the pre pregnancy care the women were advised to take Iron/Folic acid pills as a daily dose to fight anaemia but our research showed that only 6.2% of the pregnant women were regular with the intake of Iron/Folic acid pills while the rest 93.7%were not regular with the intake of Iron/Folic acid pills which was a serious problem. The respondents also complained of unavailability of the pills at times & when it was cross checked with the AWWs they admitted that at times there was shortage of pills due to inadequate supply by the government agency.

The AWWs were also responsible to give the post delivery information regarding proper care of the infants well as the mother. In our study we found that 97.22% women fed their babies with the life saving colostrums & continued feeding their babies exclusively on their milk while 94.4% lactating mothers continued to breastfeed their babies till 2yrs along with the solid food which was really appreciable.

Our finding regarding the diet of pregnant woman was not very satisfactory. In spite of the fact that they were well aware that poor diet during pregnancy was one of the major cause of malnutrition among the unborn children, still only 76.56% pregnant women afforded to have their meals three times a day & only 57.8% of the respondents had pulses (source of protein) in their diet whereas only 50% of the respondents had green vegetables in their diet. The status of poor nutritional diet of the pregnant woman was mainly due to the large family having low income for living. The low social status of woman in the family also affects their diet. *The AWWs should focus to educate the community about family planning to overcome this problem.*

Considering the adequate sleep required for the pregnant woman our research came shows that 67.2% women slept for 4-5 hrs at night while 31.8% woman slept for 5-6hrs at night & only one woman had adequate sleep of 6-7hrs at night. Regarding the afternoon nap only 12.7% women were found to taking rest in the afternoon. Thus the

pregnant women were found to be having inadequate sleep & as a result were more likely to have complications leading to premature deliveries.

Regarding the status of Immunizations among the children we found that 95.7% children had their regular immunizations while 4.2% are still not immunized (due to religious beliefs). Thus the AWWs should target such families & arrange for their counselling to aware them about the consequences of not immunizing their children. They should also motivate them to take initiative in getting their children immunized properly.

Considering the status of taking care of hygiene while feeding & action in case of diarrhoea it was noticed that 100% respondents claimed of taking care of hygiene while feeding their children & were aware of taking immediate action in case diarrhoea in children which was highly commendable

Considering the diet of the children was again a serious issue. Since most of the respondents were from the weaker section of the society with average no. of children being 5 in one family so we can well imagine the status of nutrition among the children. However 99% respondents admitted of using iodine salt in their food. Regarding the status of polio & vitamin A drops we found that 95.7% children had their polio drops regularly while 4.2% children were irregular with the polio drops. Vitamin A drops were also not received by the children regularly due to the irregularity in supply & distribution of the vitamin A drops from the government. Considering the status of Aanganwadi Kendras we noticed lack of infrastructure & basic amenities essential for their smooth functioning. Although the AWW claimed of giving all the information necessary for the benefit of the community members but still we could not analyse the implementations at the grass root level. The Aanganwadi Kendras were not found to be organizing health awareness campaigns. They were also not found to making use of the health cards provided by the ICDS. As a result the AWW did not keep any record of the respondent immunized which was the greatest drawback of the Aanganwadi Kendras. Thus we observed that although efforts have been made, still much work has to be done by the AWW to achieve the targeted goal of eradicating Malnutrition

CONCLUSION

Our research showed the persistence of Malnutrition in all the 4 villages of the two Panchayats surveyed. As per the research the key factors leading to Malnutrition in these areas are improper knowledge & education given by the AWWs to the community members & the communities not showing any behavioural change.

Due to gender inequality & low status of women in these areas the diet of pregnant & lactating women are adversely affected. Only 57.8% pregnant mothers & 41.6% feeding mothers took care of their diet. Regarding the iron folic acid pills, 25% women were found to be totally unaware of the fact that iron/folic acid pills were to be taken every day during pregnancy this showed that the AWW did not imparted the information properly to the pregnant woman regarding the intake of the pills. Most of the pregnant women did not go for their regular checkups 42.18% pregnant women did not go anywhere for their regular checkups & this showed a drawback in the efficiency of AWW in motivating & educating the pregnant woman about the importance of antenatal checkups.

As the status of awareness about feeding with colostrums, exclusive breastfeeding & breastfeeding along with solid food was found to be very appreciating but still 27.7% respondents showed improper knowledge in deciding whether the child got enough nourishment from the milk or not. Considering the status of premature deliveries & weight of the children at birth we found that 11.7% children were born premature & 39.3% had the weight below the normal range which can be directly co-related with the improper diet & carelessness due to inadequate knowledge during pregnancy.

The economic condition of the respondents & having large number of children in the family affected their nutritional diet and balanced diet leading to symptoms of Malnutrition in children. These areas were found to have inadequate & irregular supply of vitamin A drops which should be seriously monitored by the government.

Although the government of India has announced several schemes for the benefit of the people they have not yet reached the people at the grassroots. They need to be implemented properly in order to benefit the masses.

RECOMMENDATION

- Expanded & improved nutrition education & awareness for healthy living at community level should be initiated with the help of campaigns organised by A.K with the help of Panchayat & local NGOs. For this they should focus more on bringing awareness among the community regarding intake of iron/folic acid pills, taking proper diet & regular health checkups.
- Improve the infrastructure of AWC buildings, basic facilities such as toilets & safe drinking water. Basic supplies such as weighing scales, growth charts, basic medicines etc should be made available in adequate quantity & regular supply in every AWC to increase quality & utilization. Number of beds in the emergency ward should also be increased.
- Properly train the AWW on growth measurements. Many A.K. do not have the scales to weigh the children.
- To use the health cards provided by ICDS by the A.K as they are providing verbal information to the community, which was very impractical trait.
- AWWs must plan a strategy to convince & motivate the minorities for regular immunizations.
- Vitamin A biannual campaign should be done regularly.
- The PHSC should be made functional in order to avoid inconvenience among the community members, especially during emergencies.
- The PHC should have more number of doctors in order to cater to the demands of the large number of patients
- The old equipments at the PHC should be replaced from time to time in order to avoid their ineffectiveness.
- The Government should ensure that the AWWs enforce the use of kitchen sheds in order to provide hygienic and nutritious food.

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10. Photos from field survey
11. Map of Narkatiaganj from Census 2001

ANNEXURE I

Questionnaires for Community Members /Aanganwadi/PHC








ANNEXURE II

Details of Stakeholders interviewed








Details of Stakeholders interviewed
NARKATIAGANJ BLOCK

PHC /BLOCK

S.NO	Name	Designation	Contact no
1	Srinath Prasad	Doctor	9431226113
2	Ramesh Prasad	Compounder	9162013451
3	Preeti kumara	Lady supervisor	8271614431

Aanganwadi Kendra

S No	Anganwadi Kendra	Code	Village	Panchayat	Sevika	Contact no	Sahaika	Asha
1	Barwa Anganwadi Kendra	20	Barwa	Binwaliya	Nirmala Devi	9199532007	Gangotri Devi	Suhashani Devi
2	Benwaliya	22	Binwaliya	Binwaliya	Sandhya devi	9801146966	Kiran Devi	Sunaina Devi
3	Aganwadi Kendra Binwaliya	23	Binwaliya	Binwaliya	Rinki Pandey	7352406518	Kobiya Devi	Asha Nirmal Kumari
4	Manjhariya	21	Manjhariya	Binwaliya	Zarina khatoon	9934647377	Sunaina Devi	Asha (Gita Devi)
5	Roaari Harijan Tola	284	Roaari	Kehuniya	Punam rai	7352522186	Gita Devi	Antima Devi
6	Roaari	112	Roaari	kehuniya	Rina devi	9931852186	Rawali Devi	Rubi Mishra
7	Roaari Uttar Tola	113	Roaari	Kehuniya	Shobha Devi	7352037639	Rita Devi	Kanak Lata

8	Roaari Madhayam Tola	111	Roaari	Kehuniya	Ranjana Sahi	9955104747	Uma Devi	Rdhiya Nesha
9	Kehuniya Mdai Bhag	114	Kehuniya	Kehuniya	Shila Devi	8986419215	Nima Devi	Rubi Devi
10	Gobardhana	117	Gobaardhana	Kehuniya	Anita Rai	9934657527	Dhawalaru Devi	Saroj Kumari
11	Kehuniya Dakshin Tola	110	Kehuniya	Kehuniya	Archana Devi	8651722738		Asha Sundaram Mishra
12	Kehuniya Uttar Tola	115	Kehuniya	Kehuniya	Kunti Mishra	7352556280	Kiran Mishra	

Source: Field survey


State- BIHAR
District-Pashchim Champaran
Narkatiaganj