

**Summer Training at
Jatan Sansthan, Udaipur**

Profiling of Factors for Prevalence of Low Birth Weight

**By
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**Under the guidance of
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**MBA Hospital & Health Management
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CERTIFICATE

This is to certify that **Dr. Ilma Farooq** has undergone summer training in Jatan Sansthan from 2nd April to 2nd June '2018.

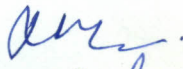
The candidate herself completed the project assigned to her during summer training. Her approach to the project was sincere and proactive. This summer training is in partial fulfillment of the course requirement recommended for the award of MBA in Hospital and Health management.

I wish her success in all her future endeavors.


Dr. Mohan Bairwa

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To whomsoever it may concern

This is to be certified that Ms. Ilma Farooq D/o Mr. Paker Farooq is a student of IIHMR Jaipur pursuing MBA in Hospital and Health Management. She completed her internship to understand the "Nutritional Status of Children and the Factors affecting it" in Jatan Sansthan for the period from 02/04/2018 to 02/06/2018:

This certificate provided to her on successful completion of her internship for above mentioned period.

We wish her a bright future.

(Dr. Kailash Brijwasi)
Executive Director

ACKNOWLEDGEMENT

I would take this opportunity to express my deep sense of gratitude to our institute, Institute of Health Management and Research, Jaipur for encouraging me to undertake training and to gain enough knowledge and skills in different aspects of Health Management.

I am very thankful to Dr. Kailash Brijwasi- Executive Director, JATAN Sansthan, and Rajdeep Singh Chundawat- District Programme Manager for their valuable guidance, keen interest and encouragement at various stages of my training at the organization.

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Dr. Ilma Farooq

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ACRONYMS/ABBREVIATIONS

ASHA	Accredited Social Health Activist
ANM	Auxiliary Nurse Midwifery
AWC	Anganwadi Centre
AWW	Anganwadi Worker
NGO	Non-Governmental Organization
SC	Scheduled Caste
ST	Scheduled Tribe
OBC	Other Backward Classes
LBW	Low Birth Weight
NBW	Normal Birth Weight

PART I – ABOUT THE ORGANIZATION

JATAN SANSTHAN, UDAIPUR

JATAN SANSTHAN is known as a grassroots not-for-profit organization working with rural as well as resource poor communities in the state of Rajasthan , India. Jatan is present in more than 250 villages of Rajsamand, Udaipur and Bhilwada in total, which traditionally have poor social indicators.

Since its establishment in 2001, Jatan has created and implemented various initiatives focused towards improving social and demographic indicators by working with youth groups. In the last decade, Jatan has worked on programs related to children, young people and women in the field of health and education.

VISION

Jatan envisions a society which leads a healthy, safe and empowering life, free from all discrimination.

MISSION

- Jatan empowers communities by giving them spaces to freely express their concerns.
- Jatan aims to provide information that will encourage communities to seek social and scientific solutions, so that communities can become self-sufficient and their own agents of change.
- Jatan encourages active participation of youth in decision making, policy formulation and advocacy across various forums at national and international level

Source: www.jatansansthan.org

PART II

INTRODUCTION

The growth of the fetus depends on both the seed and the soil. The soil, the mother, is further influenced by multiple factors such as environment, socioeconomic status, cultural practices, education and age status of mother herself. The seed, the fetus, has its own growth potential based on the nourishment of the soil. The net result of these two factors is a wide distribution of birth weight at any given gestational age and a wide variation in the state of nutrition at birth.

Birth weight of a child is an important indicator of its vulnerability for childhood illness and chances of survival. A large number of infant deaths can be averted by appropriate management of low birth weight babies and prevention of factors associated with low birth weight.

Birth weight is the first weight of the foetus or newborn obtained after birth. Low birth weight refers to birth weights below 2500 grams(1).

A baby's weight at birth is a strong indicator of maternal and newborn health status and nutrition. Being undernourished in the womb itself increases the risk of death in the early months and years of a child's life. Those who survive tend to have impaired immune function and increased risk of disease.

More than 20 million infants worldwide representing 15.5% of all births are born with low birth weight, 95.6% of them in developing countries(2).

There are numerous factors contributing to LBW, both maternal and foetal. The maternal risk factors are biologically and socially connected. The mortality of LBW can be reduced easily, by modifying the maternal factors by its early detection and simple techniques.

The determinants of LBW can be categorized into genetic, constitutional, obstetric, nutritional, related to maternal morbidities in the antenatal period, toxic exposure-related, and linked to antenatal care (ANC). Other factors may include smoking, maternal age; birth spacing, ANC, anemia, genital infections, maternal ill health, and stress have also been reported.

In this study the key determinant factors are grouped as

- Social factors- Mother's education, caste, sanitation
- Biological factors- Sex of the child, birth order, interval between births, age of the mother.

Therefore, the aim of this study is to do profiling of the factors that influence the prevalence of LBW in KHAMNOR block of Rajsamand region. This study may contribute by providing relevant information for policy makers and health system planners for possible modifications and changes of strategies to reduce LBW. It is also important for clinicians and health workers such as ASHA who are working in maternity area to adjust and give emphasis in giving care during ANC

OBJECTIVE- To perform profiling of factors that influence the prevalence of Low Birth Weight in Khamnor district, Rajsamand.

METHODOLOGY

SAMPLE

A cross-sectional descriptive study method was used and the study was conducted during the month of APRIL in the rural areas of KHAMNOR district of Rajsamand, Udaipur.

A total of 82 mothers having children aged 0-6 years were selected from 8 AWCs. The mothers selected had their child registered at the AWC. Systemic random sampling was done. Women who did not have any child nor had a child above the age of 6 years were excluded from the study

DATA COLLECTION TECHNIQUE

Semi-structured schedule was used to collect data.

FINDINGS

- Out of 82 children, 27 were of LBW giving a prevalence of 33percent and 67 percent prevalence of the NBW.

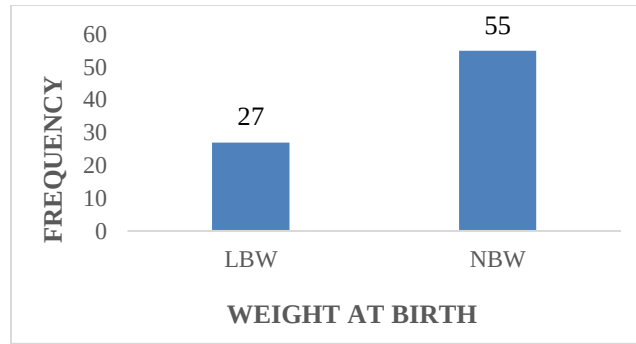


FIGURE 1- Graph representing Weight at Birth

- The overall Mean birth weight was 1.67. Among LBW(<2.5kg), the mean was 1.00 and that of NBW(>=2.5kg) was 2.00
- The mean age of child of LBW was 2.19 and that of NBW was 2.09
- The female children were more as compared to the male in both the LBW and NBW

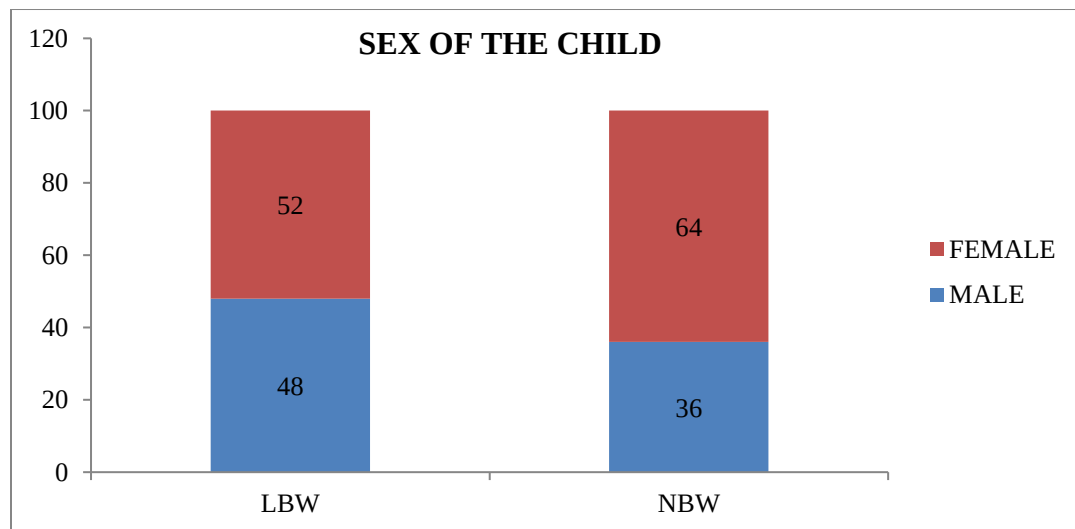


FIGURE 2- Graph representing sex of the child

- Maximum percentage of mothers of low birth weight children were in the age group of 15-24 years.

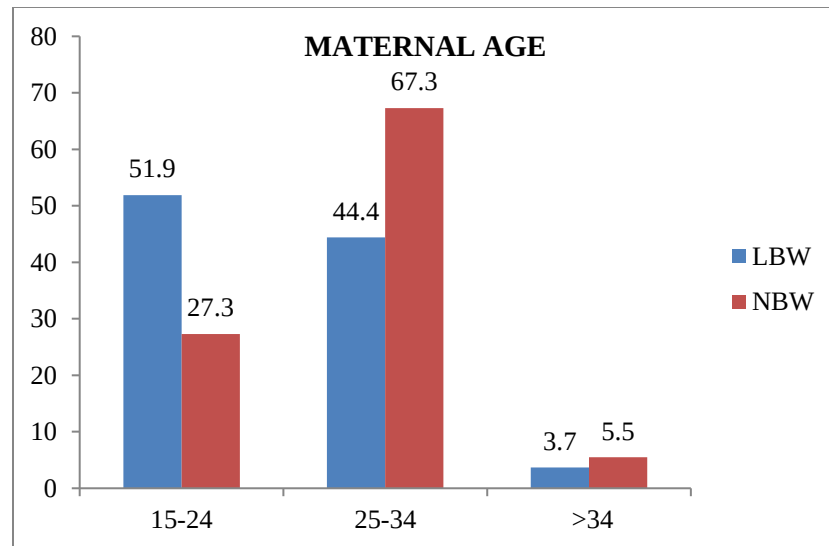


FIGURE 3- Graph representing the maternal age of LBW and NBW children

- It was observed that 37 percent of the LBW children were falling in the category of 2nd birth order

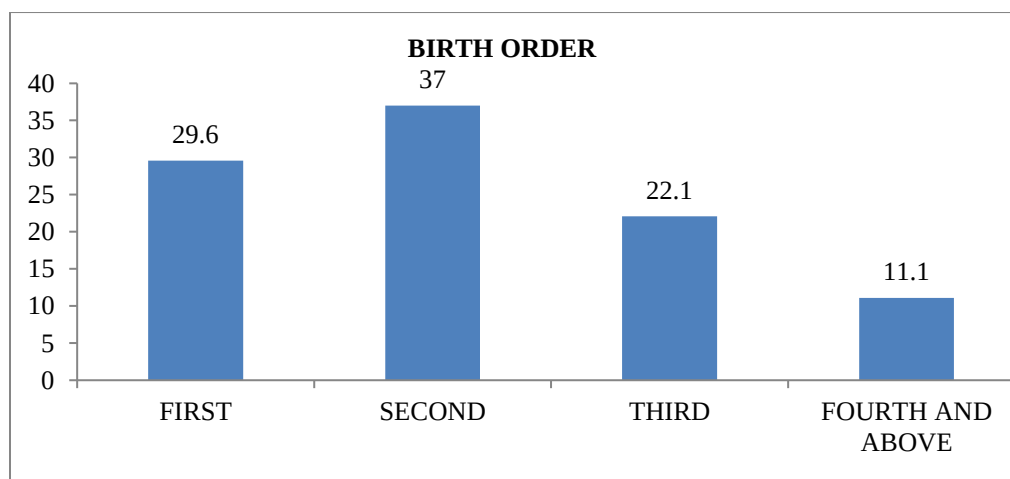


FIGURE 4- Graph representing birth order of LBW children

- A larger percentage i.e. 63 percent was constituted of mothers who had one to three years of interval between births in case of children of LBW

- The literacy status of mothers was very poor and it accounted of only 70 percent of literates.

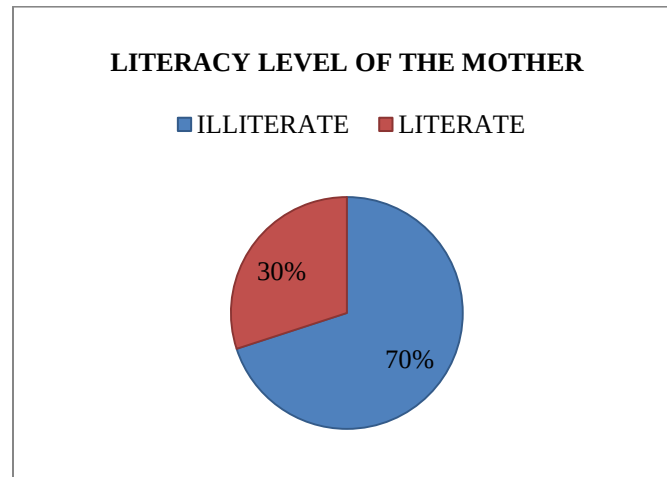


FIGURE 5- Pie chart representing the literacy status of mother of LBW children

- The sanitation facilities were not taken care of in the community and its absence was accounted by 37 percent and 30 percent in cases where they were present but not in use, seen in cases of LBW
- The ST caste was the one with highest no of percentage of LBW followed by OBC caste.

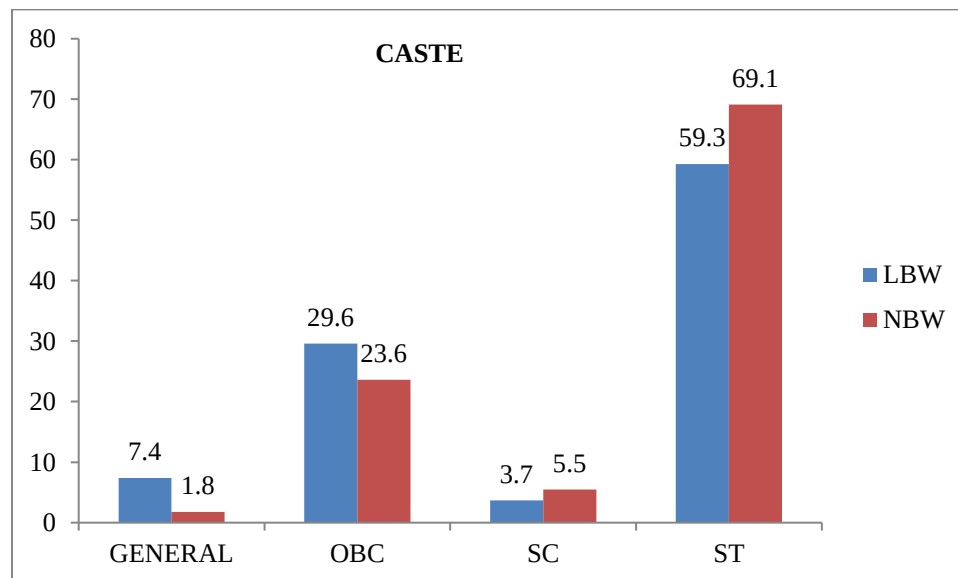


FIGURE 6- Bar Graph representing the caste of LBW and NBW children

VARIABLE		LOW BIRTH WEIGHT (%)	NORMAL BIRTH WEIGHT (%)
AGE OF CHILD		MEAN=2.19 S.D.=.681	MEAN=2.09 S.D.=.823
SEX OF CHILD		MEAN=1.52 S.D.=.509	MEAN=1.64 S.D.=.485
BIRTH INTERVAL	1-3 YEARS	63	72.7
	3.1-5 YEARS	7.4	10.9
	FIRST CHILD	29.6	16.4
BIRTH ORDER	FIRST	29.6	23.6
	SECOND	37	27.3
	THIRD	22.2	30.9
	FOURTH AND ABOVE	11.1	18.2
AGE OF MOTHER	15-24 YEARS	51.9	27.3
	25-34 YEARS	44.4	67.3
	MORE THAN 34 YEARS	3.7	5.5
LITERACY STATUS OF MOTHER	ILLITERATE	70.4	69.1
	1-5 TH CLASS	11.1	5.5
	6-7 TH CLASS	7.4	12.7
	8-10 TH CLASS	7.4	5.5
	GRADUATE AND ABOVE	3.7	7.3
INCOME	50,000-99,000	34.6	33.3
	1,00,000- 1,49,000	57.7	59.3
	1,50,000- 2,00,000	7.7	7.4
CASTE	GENERAL	7.4	1.8
	OBC	29.6	23.6
	SC	3.7	5.5
	ST	59.3	69.1
SANITATION	PRESENT AND IN USE	33.3	34.5
	PRESENT AND NOT IN USE	29.6	25.5
	ABSENT	37	40

TABLE 1 Representing factors for prevalence of LBW and NBW

RECOMMENDATIONS

Parents and community at large must be educated and motivated to avoid early age of marriage and large family.

Special care new born units should be encouraged and regulated in the hospitals. Pregnant mothers should be taken care of and their nutritional intake should be proper. Weak mother should be given special care as chance of delivering low birth babies is high. Family planning practices should be encouraged and proper counseling should be done for it.

The ASHA worker should be motivated and encouraged to deliver services and take proper care of the pregnant mothers.

All efforts must be made at the level of individuals, parents, treating obstetrician and pediatricians, health care delivery system and country, to improve the biological outcome of each pregnancy. This will lead to improvement in overall quality of man power of our country.

CONCLUSION

Birth weight is an important factor affecting the neonatal and infant mortality and morbidity. LBW children are more likely to have disabilities in the form of developmental delay and poor growth. Maternal factors like socioeconomic status, maternal age, interval between births are important risk factors for low birth weight. Other factors such as age of the child, birth order, and caste of the family, sanitation facilities also influence the low birth weight.

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ANNEXURE

QUESTIONNAIRE

Q.1 Area/Village:

Q.2 Name of the AWC:

Q.3 Name of the AWW:

Q.4 Name of the interviewer:

General Information:

Q.5 Name of the reference child:

Q.6 DOB:

Q.7 Age of the reference child:

Q.8 Sex:

- 1. Male**
- 2. Female**

Q.9 Weight at birth:

- 1. Less than 2.5kg**
- 2. Equal and greater than 2.5kg**
- 3. Not recorded**

Q.10 Present weight:

Q.11 Present height:

Q.12 Nutrition grade of child:

1. Green
2. Yellow
3. Red
4. Don't know

Q.13 No. of children:

1. 1
2. 2
3. 3
4. 4
5. 5
6. More than 5, _____

Q.14 Birth order (nth child?):

1. First
2. Second
3. Third
4. Fourth
5. Fifth and above

Q.15 Interval between last two births:

Q.16 Name of the respondent (parent):

Q.17 Age:

Q.18 Literacy status:

1. Illiterate
2. Read & write
3. 1 – 5 Class
4. 6 – 7 Class
5. 8 – 10 Class
6. Intermediate

7. Graduate & above

8. NA

Q.19 Occupation of child's father:

1. Agricultural labour
2. Other labour
3. Owner Cultivator
4. Land lord
5. Artisan
6. Service
7. Business
8. Others
9. NA

Q.20 Occupation of child's mother:

1. Agricultural labour
2. Other labour
3. Owner Cultivator
4. Service
5. Business
6. Housewife
7. Others

Q.21 Household annual income: _____

Q.22 Caste:

- 1. General**
- 2. OBC**
- 3. SC**
- 4. ST**

Q.23 Family size:

1. 1 -4
2. 5 – 9
3. ≥ 10

Q.24 Type of house:

1. Kutcha
2. Semi Pucca
3. Pucca

Q.25 Source of drinking water:

1. Open Well
2. Tube Well
3. Tap
4. Handpump

Q.26 Sanitary Latrine:

- 1. Present and in use**
- 2. Present and not in use**
- 3. Absent**

Q.27 Undergone ANC check-up:

1. Yes
2. No

Q.28 If yes, total number of ANCs:

1. One
2. Two
3. Three
4. Four

Q.29 If no, then why?

1. Not aware of the need

2. Loss of wages
3. No faith
4. No ANC held in the village
5. Timings are not convenient
6. Place is not accessible
7. Others

Q.30 Received IFA tablets:

1. Yes
2. No

Q.31 Place of delivery:

1. Home
2. Institutional delivery

Q.32 Child given pre-lacteals:

1. Yes
2. No

Q.33 Child fed with colostrum:

1. Yes
2. No

Q.34 If no, reasons for discarding colostrum:

1. Child could not suck
2. Difficult to digest
3. Not good for health
4. Others

Q.35 Time of initiation of breast feeding after delivery:

1. Within 1 hr after birth

2. After 1 hr and within 24hr
3. Between 1 to 3 days
4. After more than 3 days

Q.36 Reason for the same: _____

Q.37 Feeding practices:

1. Solely breast fed
2. Breast fed+ water
3. Breast fed+ complementary feeding

Q.38 Age of initiation complementary feeding:

1. Before 6 months
2. At 6 months
3. After 6 months

Q.39 Foods generally included in homemade foods: (multiple responses)

1. Cereals & Millets
2. Pulses & legumes
3. Green Leafy Vegetables
4. Other Vegetables
5. Fruits
6. Milk & milk products
7. Eggs
8. Flesh foods

Q.40 Do you know what baby mix is?

1. Yes
2. No

Q.41 Do you receive/bring baby mix from anganwadi centres?

1. Yes

2. No

Q.42 If yes, how often?

1. Weekly
2. Biweekly
3. Monthly

Q.43 If no, why not?

1. No awareness
2. No use
3. Anganwadi centre too far
4. No one came to give
5. Others

Q.44 How do you use baby mix?

1. For feeding the reference child
2. Consumed by all family members
3. Fed to the cattle
4. Sell it off
5. Not using it at all
6. Others

Q.45 Did your child receive immunization?

1. Yes
2. No

Q.46 Any illness in last 15 days:

1. Yes
2. No

Q.47 If yes, which?

1. Fever

2. Diarrhoea
3. Cough
4. Other _____

Q.48 According to you, what all services are provided by Anganwadis? (multiple responses)

1. Health check-ups
2. Immunization
3. Pre-school education
4. Nutrition supplementation
5. For referrals
6. Don't know