

## A Study on the Factors Associated With Low Birth Weight of Tribal Women in a Rural Area of West Bengal

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**Abstract:** Low Birth Weight (LBW) Is A Major Public Health & Obstetrics Problem, Which Should Be Investigated. The Determinants Should Be Identified And Rationally Rectified To Decrease The Incidence Of LBW In Rural Areas Among The Tribal Mothers. Present Study Is Conducted In The Rural Field To Detect The Causative Factors Of LBW In The Rural Tribal Population. 720 Cases Of LBW Are Included In The Study. Cases Are Taken From Rural Institutional Delivery Of The Tribal Mothers From January To December 2015. The Incidence Of LBW Is 36.80% Among Tribals. The Maternal Factors Like Age, Education, Economic Status, Hb% & ANC Check Up Are Included And Their Consequences Are Hereby Analyzed

**Keywords:** Factors, Low Birth Weight, Tribal Women

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### I. Introduction

Low birth weight (lbw) is an important determinant of childhood morbidity and mortality. Child's birth weight is a significant factor which determines vulnerability for risk of childhood illnesses and childhood survival. Consequently, children who are born with weight less than 2.5 kg are vulnerable to death during their early childhood. Moreover, research highlights strong associations between low birth weight and increased risk of infections, malnutrition, poor academic performance and problems relating to mental, behavior and learning difficulties during childhood. Consequences of low birth weight trek into adulthood and can cause range of chronic diseases, e.g., ischemic heart disease, stroke, hypertension, diabetes, metabolic syndrome, malignancies, dementia, and osteoarthritis.<sup>1</sup> LBW Also Reflects Inadequate Nutrition And Ill Health Of The Mother. There Is A Strong And Significant Positive Correlation Between Maternal Factors And Birth Weight Of The Babies <sup>2</sup>. Majority Of The Tribal Population Are Poor & To Some Extent , Neglected Mass, Particularly In The Rural Areas. They Suffer From Various Health Problems Including LBW. Thus Birth Weight Is Important, Hence The Present Study Was Carried Out To Identify Maternal Factors Associated With Low Birth Weight Of Tribal Mothers.

### II. Material And Methods

The Present Study Is A Block Based Cross-Sectional Institutional Study Conducted At Sabang Block In Paschim Midnapur, West Bengal Among The Tribal Pregnant Women. Birth Weight Was Taken Half An Hour After Birth And The Mothers Were Interviewed Following Delivery. Total Sample Size was 720.

### III. Results

The Total Number Of Delivery Of Tribal Pregnant Women Was 726, Out Of Which 4 Mother Had Still Born & 2 Mothers Delivered Twin And Thus Both Were Excluded From This Study. Total Number Of Tribal Women Included In This Study Was 720. Maximum Mothers (63.19%) Delivered Babies Whose Birth Weight Was More Than 2.5 Kgs., Though More Than A Quarter Of The Babies Were Low Birth Weight (About 36.80%). Among Those Who Delivered A Low Birth Weight Baby, About Half Of The Mothers (46.93%) Was Aged Below 20 Years. Majority Of Them Were Uneducated (42.77%) Who Delivered A Low Birth Weight Baby. Around 39.13 % Belonged To The Below Poverty Level, And 37.23 % Had Haemoglobin Levels Below 10 Gm%. 35.55% Of Those Pregnant Women With Low Birth Weight Babies Received Less Than 4 Antenatal Checkups. The Present Study Emphasized That Young Age Of The Pregnancy, Lack Of Education, Poverty Were The Determinants Affecting Low Birth Weight And Among Clinical Parameters, Low Haemoglobin Levels As Well As Lack Of Proper Antenatal Checkups Were Responsible For The Poor Outcome.

#### IV. Figures And Tables

**TABLE NO 1: TABLE SHOWING THE DISTRIBUTION OF BABIES ACCORDING TO BIRTH WEIGHT (N=720)**

Birth Weight	Number Of Babies (%)
>2500grms	455 (63.19%)
1500grms-2499grms	257 (35.69%)
<1500grms	8 (1.11%)
Total	720 (100%)

**Table No 2: Table Showing The Association Of Maternal Factors & Birth Weight Of Babies (N=720)**

Maternal Factors	LBW (N=265)	NBW (N=455)	Total (N=720)
<b>Age</b>			
<20yrs	92 (46.93%)	104 (53.07%)	196
>20yrs	173 (33.01%)	351 (66.98%)	524
<b>Education</b>			
No Education	154 (42.77%)	206 (57.22%)	360
Primary Education	85 (32.56%)	176 (67.43%)	261
Secondary & Above	26 (26.26%)	73 (73.7%)	99
<b>Economics Status</b>			
BPL	236 (39.13%)	367 (60.86%)	603
APL	29 (24.78%)	88 (75.21%)	117
<b>Hb%</b>			
<10 Gm%	207 (37.23%)	349 (62.76%)	556
>10gm%	58 (35.36%)	106 (64.63%)	164
<b>Antenatal Checkup.</b>			
<4 Visit	192 (35.55%)	348 (64.44%)	540
>4 Visit	73 (40.55%)	107 (59.44%)	180

#### V. Discussion & Conclusion

Incidence Of LBW In The Present Study Of Tribal Pregnant Women Was 36.80%. This Is Comparable To The Study Conducted By M. M. Nagargoji Et Al. 3 Incidence Of LBW Among Tribal Women Was 46.9% In The Age Group <20yrs. This Co- Related With The Study Conducted By Slap GB Et Al, Among Adolescent Mothers That Included Both Tribal & Non Tribal Women. 4 Present Study Shows 42.77% Of The Tribal Women Were Illiterate And 39.13% Were In The BPL Group With LBW. Study Conducted By Radha Kumari.P Et Al And Sk. Azimul Et Al Shows That Socio Economic Factors Were Significant For LBW. Biswas Et Al Study Reflected That Education Is An Important Determinant For LBW.6 Our Study Shows Similar Results With These Studies. Poor Socio Economic Status With Poor Nutrition And Low Level Of Education May Be A Provocative Factor For Low Birth Weight Baby. Present Study Shows 37.23% Of The Tribal Mother Delivered LBW Were Anemic And This Conforms To The Study Of M. M. Nagargoji Et Al. 3 The Relationship Between Anemia And Low Birth Weight Seems To Be Complex & Needed Investigation. About 35.55% Of Those Tribal Mothers, Who Had Delivered LBW, Attended Less Than 4 Antenatal Check Ups During Pregnancy. There Is A Strong Association Between Lack Of Antenatal Care And LBW. Antenatal Care Provides Routine Monitoring In Pregnancy And Identifies Maternal And Fetal Problems & Provides Nutritional Advice And Early Intervention Which May Reduce Adverse Pregnancy Outcome Including LBW. Lack Of Access To ANC Could Be Influenced By Many Factors Including Lower Socio Economic Status & Poor Knowledge 1. From This Study Of Tribal Pregnant Women, We Can Conclude That The Incidence Of LBW Among The Tribal Women Of The Rural Area Can Be Decreased With The Improvement Of The Socio Economic Status, Level Of Education And Nutritional Status. Regular Health Check Up At ANC Coupled With Early Detection Of Growth Restriction And Its Associated Causative Factors With Corrective Measures Will Decrease The Incidence Of LBW Among Tribal Women.

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