"ASSOCIATION OF MATERNAL BMI AND ANTHROPOMETRY OF NEW-BORN- A HOSPITAL BASED CROSS SECTIONAL STUDY"

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Dr. PADMAJA R WALVEKAR$_{\text{M.D., Ph.D}}$
Professor and Head,
Department of Community Medicine,
J. N. Medical College, KAHER
Belagavi – 590010. Karnataka, India.

Date: . 10. 2018
Place: Belagavi

Dr. N.S.MAHANTASHETTI$_{\text{M.D.}}$
Principal,
J. N. Medical College, KAHER
Belagavi – 590010.
Karnataka, India.

Date: . 10. 2018
Place: Belagavi

Undertaking

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LIST OF ABBREVIATIONS USED

LBW	–	Low Birth Weight
SGA	–	Small for Gestational Age
WHO	–	World Health Organization
IUGR	–	Intra Uterine Growth Restriction
BMI	–	Body Mass Index
IOM	–	Institute of Medicine
SD	–	Standard Deviation
HIV	–	Human Immune Deficiency virus
LGA	–	Low for Gestation Age
HDL	–	High Density Lipoprotein
OR	–	Odds Ratio
MS Excel	–	Microsoft excel
CF	–	Correction factor
M^2	–	Square metre
%	–	Percentage
g	–	Gram
Kg	–	Kilogram
r	–	Correlation co-efficient

ABSTRACT

Background and Objective: Birth weight of the new-born is the single most predictor of its survival. As per world Health Organization, low birth weight is defined as birth weight less than 2500 g. The definition of Low Birth Weight does not take into account the gestational period. The reason for LBW could be prematurity or intra uterine growth restriction. In developing countries Intrauterine growth restriction constitutes major proportion of LBW. Maternal nutrition during pregnancy has been regarded as an important determinant for foetal growth, hence the study was conducted to know the association of maternal body mass index on anthropometry of New-born

Methodology: Study population: Registered pregnant women delivering at KLE's Prabhakar Kore Charitable Hospital. **Study design:** A hospital based cross sectional study. **Study period**: One year (1st January to 31st December 2017). Data was collected using pre-designed and pre-tested questionnaire.

Results: Mean maternal age of the study participants was 24.28 ± 3.34 years and mean parity was 1.68 ± 0.73. Mean Maternal Height was 155.25 ± 7.08 cm. The mean maternal weight at the third trimester was 52.95 ± 9.86 and the mean maternal BMI was 21.98± 4.3. Mean birth weight of the new-born was 2.83 ± 0.4 kg. Prevalence of low birth weight was 17.42%.Study showed significant association between maternal BMI at all trimester and birth weight of the new-born. 1st and 2nd trimester BMI showed positive association with length of the new-born. Maternal BMI at 2nd and 3rd trimester also showed positive association with head circumference of the new-born. The maternal BMI at 1st, 2nd and 3rd trimester didn't show positive association with chest circumference of the new-born.

Conclusion: Positive association was seen between maternal BMI at all trimester and weight of the new-born. Interventions targeted during pregnancy to improve the nutritional status of the mother helps to improve the birth weight of the new-born.

Keywords: Maternal BMI, Birth weight of New-born, Anthropometry

CONTENTS

LIST OF TABLES

LIST OF GRAPHS

INTRODUCTION

"The mother-child relationship is paradoxical and, in a sense, tragic. It requires the most intense love on the mother's side, yet this very love must help the child grow away from the mother, and to become fully independent"

---Erich Fromm

Birth weight of an infant is the single most important determinant of its chances of survival, healthy growth and development. There are two main groups of low birth weight babies, in countries where the population of low birth weight infants is less, major cause is short gestation period and in countries where the proportion is high; the majority of cases can be attributed to foetal growth restriction.[1]

Specific biological and psychological needs must be met to ensure the survival and healthy development of the child and future adult. First week of life is the most crucial period in the life of an infant, it is most important as majority of all infant deaths occur within the first month of life because, the new-born has to adapt itself rapidly and successfully to an alien external environment. The risk of death is the greatest during the first 24-48 hours after birth, problem is more in rural areas where expert obstetric care is scarce, and the home environmental conditions in which the baby is born is usually unsatisfactory. [2]

In developing countries, LBW with accompanying high mortality and morbidity continues to be a major public health problem. There are two main causes of LBW: being born small for gestational age (SGA) or being born prematurely. In

developing countries, the majorities of LBW infants are SGA but are not born prematurely. [3] Nevertheless, 6.7% of LBW infants are born preterm in developing countries. [4]

As per World Health Organization (WHO), low birth weight (LBW) is defined as birth weight less than 2500 g.[5] The definition of LBW does not take into account the gestational period. Maternal nutrition during pregnancy has been regarded as an important determinant for foetal growth (which can be assessed by maternal BMI). [4] Infant size, such as birth weight and length, was reported to affect infant mortality and also childhood morbidity.[6]

Low birth weight is an index of our status of public health, maternal health and nutrition. It is a major factor determining child survival, future physical and mental development and also associated with chronic diseases later in life.[7] It is common in developing countries where the deficiency of nutrients could affect foetal growth.[6]

The relationship between maternal nutritional status and the birth weight of the new born and its association with perinatal morbidity and mortality is a well-known fact.[8] The LBW baby's intra uterine growth is affected and hence they are born with malnutrition; hence are at an increased risk of developing perinatal asphyxia, hypoglycaemia, polycythemia-hyperviscosity, hypothermia, etc., and are more prone to impaired neurodevelopment, diabetes mellitus and hypertension in adult life.[4]

To improve the survival of LBW babies and for timely and optimum care, LBW babies should be delivered at places where such care is possible. For this

purpose, reasonable antenatal prediction of LBW is essential. Many risk factors contributing to LBW have been recognized, among which maternal nutritional status plays an important role in deciding birth weight of the new-born as well as other anthropometric measurements of the new-born. Assessment of maternal nutritional status can be done by measuring height, pre-pregnancy weight, body mass index, and weight gain during each trimester, total weight gain during pregnancy, and haemoglobin level. Maternal weight, BMI and pregnancy weight gain have all been shown to be significant predictors of birth weight. Numerous research projects have studied maternal anthropometric indicators as predictors of birth weight. But some studies have shown that maternal height did not have any correlation with weight of the new-born. Another study showed that maternal anthropometry did not predict an increased risk for the birth of a preterm infant. [4][9]

Low birth weight (LBW) remains an unresolved important national concern in India. Twenty-nine percent of infant mortality rate is associated with LBW in India. Twenty-three percent of the new-born in India have LBW. The prevalence is slightly higher in rural areas (24.1%) than in urban areas (21%).[10]

International agreement low birth weight is defined as a birth weight of less than 2.5kg, the measurement being taken preferably within the first hour of life, before significant postnatal weight loss has occurred, the importance of low birth weight is one of the most serious challenges in maternal and child health in both developed and developing countries. Its public health significance may be ascribed to numerous factors, its high incidence, its association with mental retardation and a high risk of perinatal and infant morbidity and mortality, human

wastage and suffering, very high cost of special care and intensive care units and its association with socio-economic underdevelopment.[11]

There is interrelation between the body physique of the mother, her nutritional status, haemoglobin levels, socioeconomic class and her exposure to passive smoking during pregnancy and intrauterine growth and birth size of her neonate. Significant positive correlations between maternal anthropometric parameters and neonatal birth dimensions were observed.[12]

In particular, maternal nutrition during pregnancy has been regarded as an important determinant of foetal growth. Infant size, such as birth weight and length, was reported to affect not only infant mortality, but also childhood morbidity. Severe under nutrition could lead to permanent changes in structure and metabolism in the foetus. It is uncommon in developed countries but this is not the case in developing countries where the imbalance or relative deficiency of nutrients could affect foetal growth.[6]

The optimal weight gain for the mother has periodically been questioned and revised and yet there is no general agreement on the recommended weight gain for pregnant women. The most widely adopted recommendations concerning weight gain in pregnancy are from the Institute of Medicine (IOM) published in 1990 and 2009. The guidelines recommend weight gain ranges during pregnancy on the basis of four pre-pregnancy BMI groups (underweight, normal weight, overweight and obese), with smaller gains recommended for heavier women. Evidence was insufficient to construct specific guidelines for women with class 2 (BMI 35.0–39.9) or class 3 (BMI≥40.0) obesity. No large population-based studies have previously

investigated the association between maternal pre-pregnant BMI and offspring birth weight. [10]

Growth parameters at birth depend on intrauterine growth, which is affected by many factors such as intrauterine environment, physical and mental wellbeing of the mother, maternal nutrition and genetic factors. The weight, length and head circumference of babies are measured at birth in view of their clinical significance.[13]

Policy-makers and health care providers need evidence about the state of maternal and child health, especially of neonates, in order to plan counselling and behavioural interventions for pregnant women.[12]

Though there are many studies done to find relation between maternal anthropometry and the anthropometry of the new born or maternal nutritional status and anthropometry of the new born, but the diet pattern, customs, health care availability differ in different geographical area hence the present study is undertaken to find the relation between maternal nutritional status indicators and the anthropometry of the new-born. As maternal nutritional intake and weight gain during pregnancy are the two factors which are modifiable, and literature shows that pre pregnancy BMI and pre delivery BMI are associated with birth weight of the new-born.[14] The present study results will help the programme managers to predict the birth of the LBW baby and refer such deliveries to facilities equipped with new born care facilities or take up some interventions to prevent the birth of LBW babies.

OBJECTIVE

1. To know the association of maternal body mass index on anthropometry of new-born

REVIEW OF LITERATURE

Mother and child constitute a priority group and they comprise approximately 71.4% of the population of the developing countries. In India women of the child bearing age constitute 22.2% and children less than 15 years of age about 35.5% of the total population. Mother and child not only constitute a large group but they are also a “vulnerable” or special-risk group. The risk is connected with child bearing in the case of women and growth, development and survival in the case of infants and children. Sickness and death among mothers and children are largely preventable. By improving the health of the mother and children we contribute to the health of the general population. Problems affecting the health of mother and child are multi factorial and vary in different geographical areas depending on the cultural and environmental factors. [15]

Low birth weight is defined as birth weight less than 2500g. The new-borns are also classified based on the gestational age and birth weight as small for date and intra uterine growth restriction. Based on mean weight and standard deviation also new-borns are classified as heavy for date when the birth weight is above 2SD, appropriate for gestational age when the birth weight is between 1SD and 2SD, intrauterine growth restriction when the birth weight is between -1SD and -2SD.

In developed countries the incidence of low birth weight babies varies from 8-10%, with 30-40% of these infants born after full term. In developing countries like India the mean birth weight is lower, the incidence of low birth weight according to WHO varies between 17-38%.

Causes of low birth weight can be broadly divided into three groups

1. Maternal
2. Fetal or infant
3. Placental

Maternal causes

1. Age
2. Height
3. Socioeconomic level and education
4. Under nutrition
5. Chronic infection and diseases
6. Previous birth of a low birth weight baby
7. Antepartum hemorrhage
8. Physical and emotional stress

But maternal nutritional factors like body mass index, weight gain etc. may also play an important role in determining the anthropometry of the new-born.

The hormonal system of the woman is modified during pregnancy in the direction of increasing nitrogen retention, deposition and subsequent mobilization of maternal fat stores and adequate provision of glucose and amino acids to the fetus. These changes maintain the availability of nutrients to the fetus relatively independent of alterations in the maternal diet at certain level. Beyond this level the effectiveness of the mechanism that maintained nutritional homeostasis in the fetus would decrease. The pre-pregnancy nutritional status of the mother has greater influence as compared to effect of improved nutrition during pregnancy on the birth weight of the new-born.

Thus the relationship between weight gain during pregnancy and birth weight will not be appreciated as the pre-pregnant weight increases.

The causal relationship between maternal nutrition and birth weight is appreciated, if the nutritional intervention involved the target population of malnourished pregnant women. Mother's height is related to birth weight, in western countries mother height less than 150 cm is considered as critical. The expected birth weight to the maternal height and weight is shown in the following table:[15]

Maternal height	Maternal weight	Expected mean weight at term	Approx.SD
Height >155cm	Weight >55Kg	3.2 Kg	±475
Height 145-154cm	Weight 45-49 Kg	2.7 Kg	±425
Height <145cm	Weight <45 Kg	2.3 Kg	±400

A study was conducted in North West Nigeri**a**, from September-December 2011 among 200 pregnant women with singleton pregnancy admitted for delivery. This study showed that mean maternal age was 28.2 ± 7 years, only 5% of new-born weighed less than 2.5 Kg and 7% weighed equal to or more than 4Kg, maternal weight showed a strong positive correlation with birth weight ($r = 0.48$) and this was statistically significant with $p < 0.001$. Maternal height showed a positive correlation with birth weight ($r = 0.2$) and this was also statistically significant with $p<0.001$. In this study 62.5% of pregnant women had BMI between 25 and 34.99 and 5% had

BMI between 35 and 49.99 and mean maternal BMI was 27.9 ± 4.33. Because of small sample size, non-random sampling method and the study was done only for three months this study results cannot be extrapolated.[6]

A case control study was conducted in one of the tertiary hospitals in Malaysia, from January to June 2012 among 360 infants, showed the prevalence of LBW as 11.08%**.** Mean maternal age was 29.6 ± 4.63 years compared to control mean maternal age (30.2 ± 3.96 years) which showed a statistically significance with $p<0.001$. Mean birth weight was 2.10 ± 0.40 Kg in cases, 3.16 ± 0.39Kg in control group. This study showed that the maternal weight had statistically significant difference with birth weight by comparing matched cases and controls with $p < 0.001$. Maternal height showed significant association with birth weight ($p<0.001$). Maternal BMI also showed positive association with the birth weight and this was statistically significant with $p = 0.002$. This study recommended pre-pregnancy screening of target women for assessment of nutritional status, early antenatal booking and proper identification of high-risk mothers to reduce incidence of LBW infants.[16]

Study conducted in Okhaldhunga community hospital in rural Nepal form December 2011 to October 2012 among 515 singleton term births to investigate the relation between maternal nutritional status and birth weight. This study showed the prevalence of LBW as 8% and that maternal height was positively correlated with birth weight ($p<0.015$), maternal BMI did not show association with birth weight. This being a retrospective study based on the records; hence more information about BMI at different trimester would have thrown more light on the relation between maternal BMI and birth weight of the new-born. [3]

Study conducted in Peradeniya, Sri Lanka from January 2006 to December 2008 among 2056 pregnant women using the records to know the relationship between the birth weights of a full-term baby with certain maternal anthropometric measurement and to determine the sensitivity, specificity and risk ratio of these measures in predicting LBW showed that the maternal weight had positive association with birth weight with $p<0.0001$, this study also showed that the maternal BMI also had positive association with birth weight of new-born with $p < 0.0001$. This study showed that the maternal height had association with birth weight ($p < 0.05$). [4]

A study conducted in general Hospital, Northern Ethiopia, from July 1st 2014 to 30th June 2016 to assess the prevalence and associated factors of low birth weight. The study showed the prevalence of low birth weight as 9.9%. The study showed that the mean age of the mothers was 24.93± 4.72. In this study they have considered pregnancy type, maternal age, history of abortion, hemoglobin status, iron folic acid and HIV status but they didn't look for other important factors like Hypertension, diabetes and thyroid disorders of the mother.[17]

Study conducted at rural area, Southern Malawi from March 1993 – July 1995 among 4104 mothers to determine the anthropometric risk factors for pregnancy outcome, weight gain and effect of weight gain on pregnancy outcomes. The study showed that maternal height < 140cm showed statistical significance to LBW, this study also showed that maternal weight had statistical significance with birth weight with ($p=0.001$), maternal BMI was associated positively with birth weight which was statistically significant with $P=0.002$. This study concluded recommending improved maternal nutritional status for better weight of the new-born. [18]

Study conducted at El-Galaa hospital, Egypt from January to June 2008 among 594 mothers to investigate the influence of maternal factors like nutritional status, hemoglobin levels, socioeconomic class and exposure to passive smoking during pregnancy on birth size. The study showed that the maternal weight, as well as height had a significant positive correlation with birth weight, length and BMI separately for boys ($r=0.138$, $p=0.020$) for girls ($r=0.178$, $p<0.001$) and for the sexes combined ($r=0.160$, $p<0.001$). The study concluded that the maternal anthropometric parameters, hemoglobin level, exposure to passive smoking, nutritional intake and socio-economic status affected the dimensions of neonate in Egypt.[12]

Study conducted at Oslo, Norway from December 2009 to April 2010 among 100 mothers to know the relationship between maternal dietary intake and nutritional status during pregnancy with anthropometric measurements of the new-born at birth, the study showed that the maternal weight and maternal BMI had positive association with birth weight of new-born with $p<0.008$. This study concluded by recommending improvement of the maternal dietary intake and nutritional status during pregnancy has impact on the fetal body composition.[19]

Study conducted at Sri Lanka from February to May 2017 among 688 women to assess the relationship of maternal pre-pregnancy weight, height, body mass index, gestational weight gain and neonatal birth weight using cohort in term neonates, the study showed that maternal weight, height, BMI and gestational weight gain showed positive association with birth weight of the new-born with $p<0.001$. In this study they concluded that the neonatal birth weight is mainly dependent on the maternal pre-pregnancy weight, maternal height, maternal BMI and gestational weight gain of the mother. [20]

Study conducted at Thailand, from January – June 2013 among 2012 pregnant women to determine the association between various maternal factors and a low birth weight neonate in Phrapokklao Hospital. The study showed that the pre-pregnancy weight and weight gain during pregnancy had positive association with birth weight of new-born with p value <0.001. This study also showed that the low pre-pregnancy BMI did not show significant association with birth weight of new-born with p value 0.215. As this study is done only for 6 months the result from this study cannot be extrapolated. This study showed that the maternal BMI, inadequate weight gain and primi parous women are at increased risk for having a LBW babies. [21]

Study conducted in Indonesia, from August 2012 and January 2013 among 104 eligible pregnant woman to compare maternal weight gain in all trimester and total weight gain during pregnancy and to evaluate the relationship between total maternal weight gain and infant birth weight showed that the maternal weight gain was positively correlated to the birth weight of the new-born with p value 0.03. This study concluded that based on Institute of medicine (IOM) guidelines, maternal weight gain should be recommended, optimal maternal age is also sufficient for better gain of baby's birth weight and hence adequate maternal weight gain resulted in low morbidity and mortality [22]

Study conducted in Japan**,** from April 2010 – September 2011 among 70 pairs of mothers and infants to clarify the effect of the physique at the beginning of pregnancy of expectant mothers on the birth physique and sex of infants showed that the maternal BMI was positively associated with the birth weight of the new-born with p<0.001. This study also showed that the maternal BMI was positively associated with head circumference of the new-born with p 0.035, and maternal BMI

was positively associated with chest circumference of the new-born with p 0.028 in boys in this study. The study concluded that physique of the expected mother has effect on size of male children than female children.[23]

Study conducted in Nigeria, among 384 subjects to know the linear equations that can be used for birth weight estimation in neonates from maternal variables of Hausa ethnic group in Kano, showed that maternal weight had positive association with birth weight of the new-born with r = 0.487, this study also showed that maternal height was significantly associated with the length of the new-born with r=0.219, this study also showed that the maternal BMI was positively correlated with birth weight of the new-born with r = 0.509. [24]

Study conducted in North-west Nigeria, from November 2011 – October 2012 among 1556 pregnant women to assesses the association between the maternal BMI at the first visit to the BW of their babies among women attending antenatal care clinic. This study showed significant association of maternal first trimester BMI and birth weight of new-born with P < 0.001. [25]

Study conducted in Seattle, from December 1996 to October 2004 among 3000 pregnant women to know whether the infant birth weight was influenced by modifiable maternal pre-pregnancy behaviors and characteristics showed that pre-pregnancy BMI and maternal weight gain didn't show significant association to the birth weight of the new-born with p - 0.645. [26]

Study conducted in New York from 1989 to 2003 among 513,501 women to find the association between maternal weight as a measure of over nutrition during pregnancy, and birth weight using state based birth registry data that provide an

opportunity to compare outcomes from several pregnancies of the same mother, in this study maternal weight gain showed positive association with birth weight with p value (<0.0001). [27]

Study conducted in Haryana, among 185 participants to know the influence of maternal anthropometric characteristics on birth weight showed that the maternal height was positively associated with birth weight of new-born with p - 0.030. But this study didn't show any association of maternal BMI with birth weight of the new-born (p - 0.259). [28]

A hospital based Observational study conducted in Maharashtra, from 1st December 2012 to 30th November in 2014 among 574 singleton pregnant women to evaluate the influence of pre-pregnancy BMI on fetal growth parameters showed that the pre-pregnancy Body mass index showed positive association to the new-born length with p value 0.010, this study also showed that the maternal BMI had positive association with chest circumference of the new-born with $p < 0.001$, the study also showed that maternal BMI had positive association with head circumference of the new-born with p value 0.001, this study also showed that the maternal height had positive correlation with the new-born length, chest circumference and but negatively correlated with head circumference and birth weight of the new-born. [29]

Study was conducted in District hospital Perambalur, Tamil Nadu from June to November 2013 among 300 pregnant mothers to know the prevalence and to identify the risk factors affecting LBW. This study showed the prevalence of LBW as 11.67%. Among 8.33% of mothers in the age group of < 20years birth of LBW was observed. In this study 71.43% of mothers residing in rural area gave birth to LBW babies. Study also showed that proportion of LBW among mothers with height

<145cm was 18.92%. The study recommended to strengthen the existing maternal services at the basic-level of community and suggest to focus on health education on nutrition.[30]

An observational cross-sectional study was conducted from January 2008 to June 2009 in a tertiary care center at Pondicherry, India to determine the effect of maternal anthropometry and metabolic parameters on neonatal anthropometry. Maternal anthropometry and metabolic parameters like fasting serum insulin, lipid profile, and random blood glucose were estimated in 50 pregnant women at term. Detailed anthropometry of the neonates was performed. The study reported that low for gestational age (LGA) babies had higher maternal body mass index (BMI), fasting serum insulin, and cord blood insulin levels and lower maternal high density lipoprotein (HDL) compared to appropriate for gestational age (AGA) group, the difference was statistically significant with P<0.001. Among the maternal parameters, BMI, gestational age, fasting serum insulin, and random blood sugar (RBS) had significant positive correlation, while high HDL levels had negative correlation with birth weight (P < 0.05). Maternal BMI was reported as the significant predictor of neonatal birth weight on multiple regression analysis (ß = 0.340, P = 0.01). The study also concluded that BMI of glucose-tolerant mother is more important than metabolic parameters in determining the birth weight of term babies. [31]

Study conducted at Kolkata, India in 18th March to 21st July 2004 among 200 mothers to test to what degree maternal anthropometry measurements are useful and efficient in predicting birth outcome and quantitative association of anthropometric indicators. This study showed that mother's weight was positively associated with birth weight of the new born with ($p < 0.005$), maternal weight < 45 kg in low income

group was associated with more than 2 fold risk of delivering low birth weight neonates. The study also showed that maternal height was statistically significant with birth weight with ($p < 0.03$), maternal BMI was also positively associated with birth weight of the new born, the difference was statistically significant with $p < 0.048$. The study highlighted those risk factors for LBW as low socio economic status, short stature and maternal malnutrition which can cause intrauterine growth restriction. [32]

Study conducted at Dehradun, from March 2003 to February 2004 among 172 new-born to determine the epidemiological factors influencing birth weight. This study showed the incidence of LBW as 23.8%. This study showed that maternal age was statistically significant with birth weight ($p <.05$). This study also showed that maternal height was not statistically associated with birth weight. The mean birth weight of all new-borns was 2.67 ± 0.42 kg. The study also showed that gestational weight gain was positively associated with birth weight of babies which was statistically significant with $p < 0.01$. Thus the study concluded that there is a need to strengthen the existing maternal services at the level of community.[33]

Study conducted at a teaching hospital in rural area of western Maharashtra, India form March – August 2010 among 200 cases i.e. mothers who gave birth to LBW babies with birth weight less than 2.5 kg and 200 controls, i.e. mothers who gave birth to singleton babies with birth weight more than 2.5 kg to know maternal risk factors associated with weight of the neonates born after term. This study showed that pre-pregnancy weight < 45 Kg showed positive association with LBW with OR=4.41, this study also showed that maternal height < 145cms was positively associated with LBW of new-born with OR = 2.34.[34]

Study Conducted in Manipur, India from November 2010-February 2011 among 219 mothers to know the correlations between maternal anthropometry at the third trimester and birth weight of the infant. This study showed that the mean birth weight of the new-born was 3.19 kg, and showed positive correlations of maternal weight with birth weight with (r = 0.25), maternal height showed positive correlation with birth weight with (r =0.20), maternal body mass index also showed positive correlation with birth weight (r = 0.19). The study concluded that peripheral health workers could be trained to detect mothers who are at risk of giving birth to big or low birth weight babies based on maternal BMI and height and refer them to higher health centers. [35]

A Study was conducted in Delhi**,** among 909 pregnant women to know the prevalence and determinants of LBW. The study showed the prevalence of LBW as 39.1 %. The study showed that among 57.1 % of mothers who were less than 19 years the prevalence of LBW was 72.6%, in mothers weighing less than 40 kg prevalence of LBW was 54.3%. This study emphasized the importance of maternal nutrition and education of women about conceiving after the age of 20 years so as to prevent LBW. [36]

A study was conducted in rural area of Karnataka, from June 2008 – December 2009 among 1138 pregnant women, to know the prevalence of LBW and also factors responsible for it. This study showed that prevalence of low birth weight as 22.9% with mean birth weight of new-born being 2.6 ± 0.4 Kg. The study showed that maternal BMI <18.5 was associated with LBW which was statistical significant with p<0.001. Average weight gain among 25.5% of women was ≤ 4Kg, 1.8% of women gained >10Kg. The study also showed that maternal height of ≤ 140cm was

associated with LBW which showed statistical significance with $p < 0.001$. In this study, maternal weight at last trimester ≤ 45Kg was associated with LBW which was statistically significance with $p < 0.001$. Percentage of low birth weight babies was 50% among pregnant women aged ≥ 35 years; more the maternal age more was the prevalence of LBW, this difference was statistically significant with $p < 0.004$. This study recommended that overall improvement in the health of the women was needed and newer approaches are needed for reducing the prevalence of LBW problem in India. [37]

A hospital based cross sectional study was conducted in Belagavi in August 2014 among 216 mothers to know the association between BMI of mothers and anthropometry of new-born among all the delivered women in tertiary care hospital showed that the maternal weight significantly associated with the birth weight of the new-born with $p < 0.001$, this study also showed positive association with the birth weight of the new-born with p - 0.004, this study didn't show association between maternal height and birth weight of the new-born. The study concluded that improvement of nutritional status of the mother has effect on the improvement of anthropometry of new-born. [38]

MATERIALS AND METHODS

The present cross sectional study was conducted at a tertiary care center, among 700 pregnant women who were admitted for delivery and the babies born to them.

Source of data: Present study was conducted among full term pregnant women admitted in Obstetrics and gynecology department and labor room, at Dr. Prabhakar Kore Charitable Hospital, Belagavi.

Study design: A hospital based cross-sectional study

Study period:

One year – 1st January 2017 to 31st December 2017

Sample size: The Sample size was calculated by using the formula

$$n = 4pq / d^2$$

Where, p = taking the prevalence of LBW babies among women with low BMI as 50%

Q = 100-p

=100 - 50 = 50

d (allowable error) = 4

$$n = \frac{4 \times 50 \times 50}{4 \times 4} = 625 + 23 = 688 = 700$$

Sample size was rounded up to 700.

Sampling method:

Total number of deliveries per year at the Hospital is about 6000

After excluding women with medical complications and women who gave birth to babies with congenital anomalies, about 3000 women with no risk deliver at the Hospital; hence systematic sampling method was used to select pregnant women in the study.

Sampling interval = total number deliveries at KLE Hospital = 3000 = 4.28

Sample size 700

Therefore, every 4^{th} pregnant woman who fitted into inclusion criteria was included in the study.

Inclusion criteria:

- Registered pregnant women who delivered at Dr. Prabhakar Kore Charitable Hospital, Belagavi and gave birth to single live baby.

Exclusion criteria:

- Babies born with congenital anomalies were excluded in the study
- Pregnant women suffering from medical conditions like Diabetes mellitus, Hypertension, Cardiac problems, etc. were excluded.

Ethics committee approval:

- The present study was approved by J.N. Medical College Institutional Ethics Committee for Human subjects Research

Method of data collection:

Data was collected from the patients who were admitted in the obstetrics and labor wards for delivery after taking informed consent. Information about the socio-demographic and obstetric history were obtained from the patient by interviewing them using pre tested questionnaire. Some of the information about weight at different trimesters, height etc., was recorded from the case records. Body mass index was calculated by the values obtained by using the formula, BMI = weight in Kg/ height in m^2.

Neonatal anthropometric measurements (weight, length, head circumference and chest circumference) were measured and recorded. The neonatal weight was measured within 1hr by using digital weighing scale, length was measured with the help of infantometer. The head circumference and chest circumference were measured by using non flexible measuring tape. Pilot study was conducted among 20 pregnant woman and required corrections were made.

Instruments:

The instruments included in the study were, weighing scale, infantometer and measuring tape. All instruments were standardized and regularly checked for their validity and reliability, during the period of data collection. Pretested pre-structured proforma used to collect the socio-demographic and maternal details.

Data analysis:

All the variables were coded. Data was tabulated and master chart was prepared. Statistical package for Social Sciences (SPSS) version 16.0 software was used for analysis of data. Tables and graphs were prepared using MS Excel 2013 and

software. The data is expressed in means, standard deviation, percentages, to know the association between maternal BMI and anthropometry of the new-born Chi-square test was used with significance level of 0.05. ANOVA analysis was also used between maternal BMI at 1^{st}, 2^{nd} and 3^{rd} trimester, maternal height with fetal anthropometry (birth weight, length, head circumference and chest circumference).

Definition of study variables:

Age: Mothers age as told by the participants (completed years)

Religions: As told by the participants the religion was noted and grouped as "Hindu", "Muslim" and others (included Christian, Jain, Buddha, Sikh etc.)

Educational status:

The participants were asked about their highest level of completed education and were grouped into following categories

1. **Illiterate :** a person who cannot read and write
2. **Primary school :** A person who has studied from first to seventh standard
3. **High school :** A person who has studied eighth to tenth standard
4. **Pre-university :** A person who has studied up to pre-university college second year
5. **Diploma :** A person who has studied up to diploma course
6. **Graduate :** A person who has studied up to graduation and has obtained a degree
7. **Post graduate:** A person who has completed post-graduate and has obtained a post-graduation degree

Type of family:

1. **Nuclear family:** the family consisting of married couple along with their dependent children
2. **Joint family:** it consists of more than one married couple and their children who live in the same household
3. **Three generation family:** it consists of three generation related to each other by direct descent and living together
4. **Broken family:** it is one of where the parents have separated or when death has occurred of one or both the parents

Research instruments:

1. **Weighing machine:** portable weighing machine with calibrated scale of 0.5kg marked from 0 to 130kgs was used.
2. **Measurement of weight:** Study subjects were measured for their weight to nearest 0.1 kg using standard portable weighing machine without wearing foot wear. For new-born, the respective scale was used.
3. **Measuring tape:** calibrated measuring tape marked in centimeters was used.
4. **Measurement of height:** height measurement was taken in erect standing position barefoot with feet together, heels against the wall & looking straight ahead. For new-born, the respective scale was used.
5. **Sphygmomanometer & Stethoscope:** Blood pressure was measured using sphygmomanometer, first by palpation method followed by auscultation method.

6. **Socio-Economic classification**

Information regarding per capita income (in rupees/month) was collected and socio-economic status was classified using Modified B.G. Prasad's classification for the study period (2017)

Socio-Economic Class	**Original classification of per capita income**	**Revised classification for 2016**
Class I	100 and above	6261 and above
Class II	50-99	3099-6260
Class III	30-49	1835-3098
Class IV	15-29	949-1834
Class V	<15	<948

Monthly Per Capita Income = Total monthly income of family

Total members of family

Modification was done with the aid of correction factor (CF), which was obtained as below:

As our study period was from 1st January 2017 to 31st December 2017, the mean consumer price index for the period was considered

Average consumer price index for year 2017 was 274

CF = Value of consumer price index average for the study period (2017) X4.93

100

= 274 X 4.93 = 13.51

100

Calculation of Body Mass Index (BMI in Kg/m^3):

BMI = Weight in Kgs

(Height in metre) ^{2}

Based on WHO BMI cut-off standards for was defined as below

Body Mass Index	**Interpretation**
<18.5	Underweight
18.5-24.9	Normal weight
25-24.9	Overweight
>30	Obese

Abortion - abortion is the expulsion or extraction from its mother of an embryo or fetus weighing 500g or less when it is not capable of independent survival.

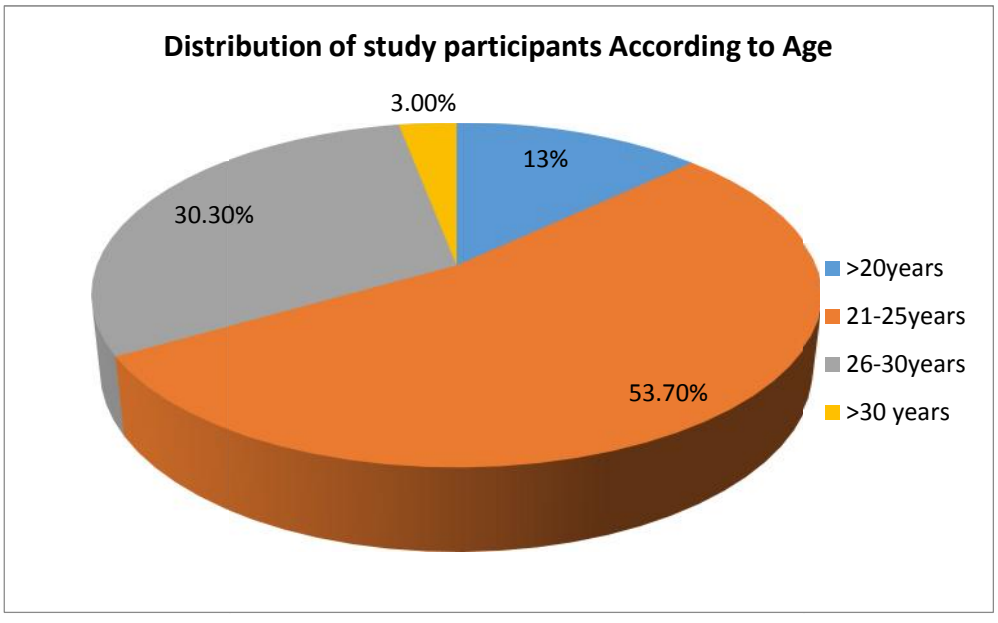
Still birth- still birth is the birth of a new-born after 28th completed week (weighing 1000gm or more) when the baby does not breathe or show any sign of life after delivery.

RESULTS

Table 1: Distribution of study participants according to age

Age (In years)	Number	Percent
≤20	91	13.0
21-25	376	53.7
26-30	212	30.3
>30	21	3.0
Total	**700**	**100**

Graph 1: Showing distribution according to their current age



In our study, 53.7% participants were between age group of 21-25 years, 30.3% between 26-30 years,13% were less than 20 years, above 30 years 3%.

Table 2: Distribution of study participants according to the type of family

Type of Family	Number	Percent
Nuclear	147	21.0
Joint	553	79.0
Total	**700**	**100**

In our study the majority of the study participants belonged to joint family were 79%, and remaining participants were belonged to nuclear family were 21%.

Table 3: Distribution of study participants according to their place of residence

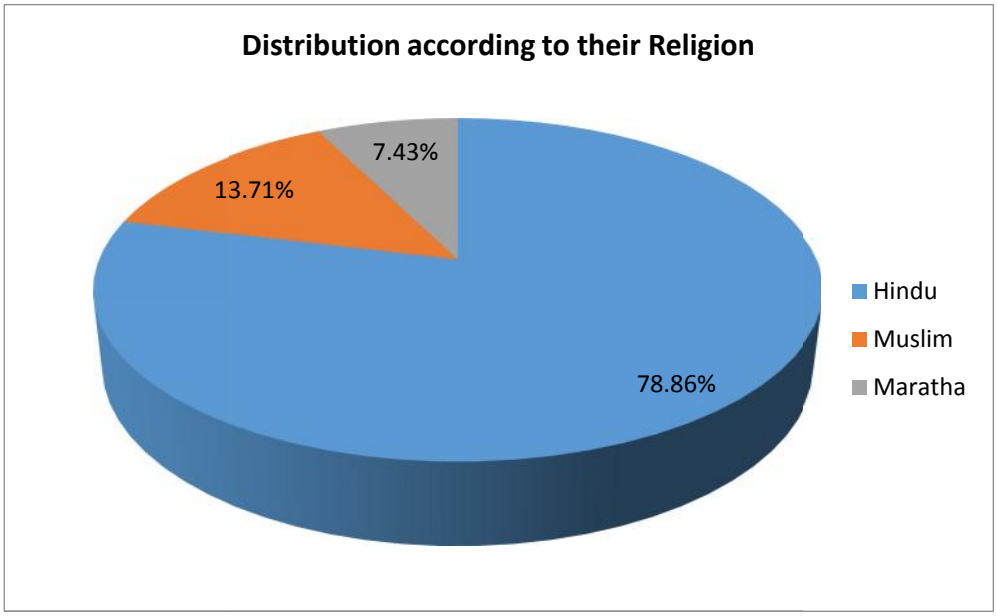
Place of Residence	Number	Percent
Urban	305	43.6
Rural	395	56.4
Total	**700**	**100**

Majority of study participants were residing in rural area i.e. 56.4%, remaining in urban area 43.6%.

Table 4: Distribution of study participants according to their religion

Religion	Number	Percent
Hindu	552	78.86
Muslim	96	13.71
Other	52	7.43
Total	**700**	**100**

Graph 2: Distribution of study participants according to their religion

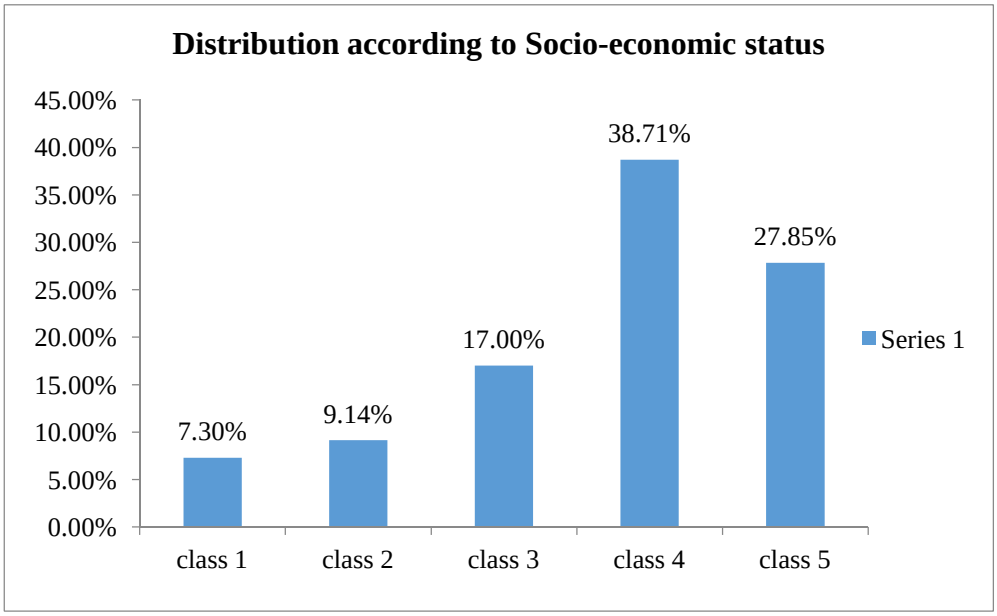


In our study, 78.86% were Hindu by religion, 13.71% were Muslims and 7.43% belonged to other religion.

Table 5:Distribution of study participants according to Socio-economic status by modified B.G.Prasad classification

Socio-economic Status	Number	Percent
Class I	51	7.30
Class II	64	9.14
Class III	119	17
Class IV	271	38.71
Class V	195	27.85
Total	**700**	**100**

Graph 3: Distribution according to socio-economic status

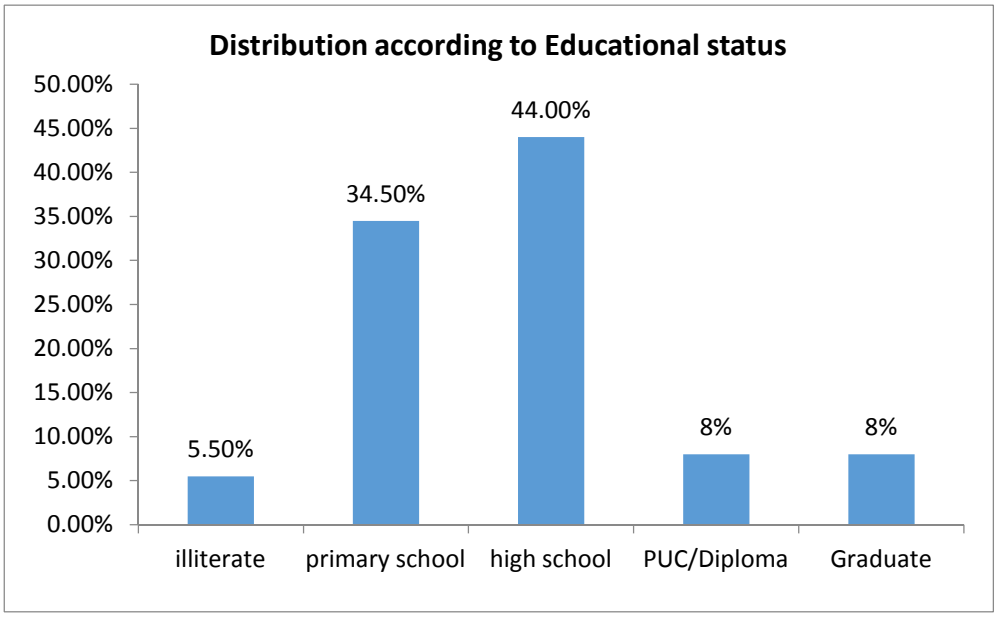


In the present study, majority of study participants i.e 39.57% belonged to class IV socio-economic status, followed by 26.71% belonged to class V, 17.30% class III, 8.71% class II,7.71% class I

Table 6: Distribution of study participants according to educational status

Education level	Number	Percent
Illiterate	39	5.5
Primary school	241	34.5
High school	308	44.0
PUC/ Diploma	56	8.0
Graduate	56	8.0
Total	**700**	**100**

Graph 4: Distribution of study participants according to educational status

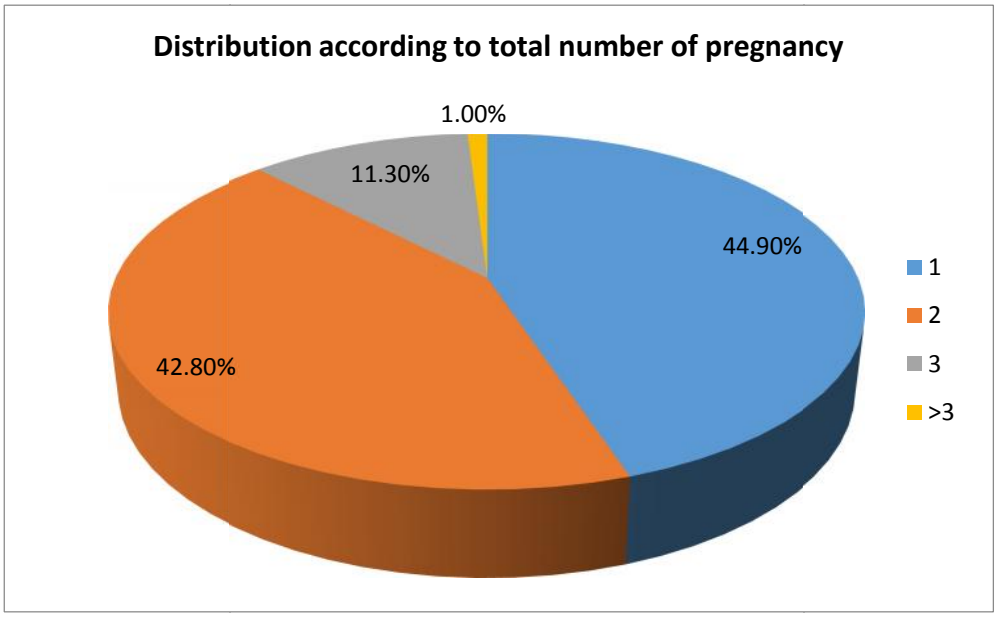


In this study 5.5% did not have any formal education 34.5% studied up to primary school level, 44% up to high school, 8% up to pre-university college,8% upto graduation.

Table7: Distribution of study participants according to total number of pregnancy

Total Pregnancies	Number	Percent
1	314	44.9
2	300	42.8
3	79	11.3
>3	7	1
Total	**700**	**100**

Graph 5: Distribution of study participants according to total number of pregnancy

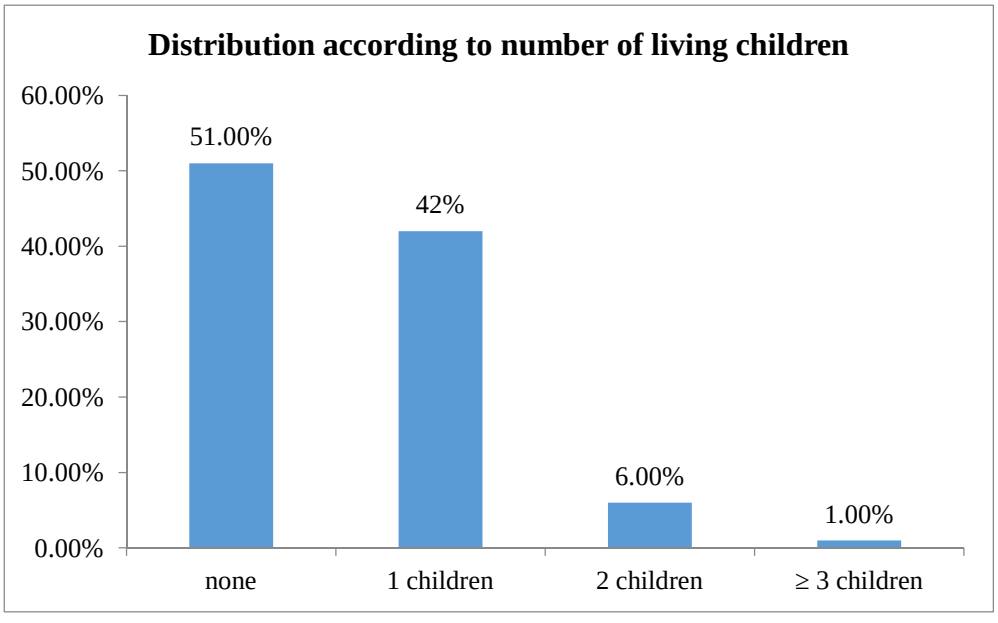


In our study 44.9% of participants were pregnant for the first time, 42.8% experienced pregnancy for 2 times and 12.3% ≥ 3 times.

Table 8: Distribution of study participants according to total number of living children

Total number of Living children	Number	Percent
None	358	51%
1	294	42%
2	42	6%
≥3	6	1%
Total	**700**	**100**

Graph 6: Distribution of study participants According to number of living children



In our study,51% mothers who do not had children, 42% of participants had one living children and 6% mothers who had two living children.

Table 9: Distribution of study participants according to history of Abortion

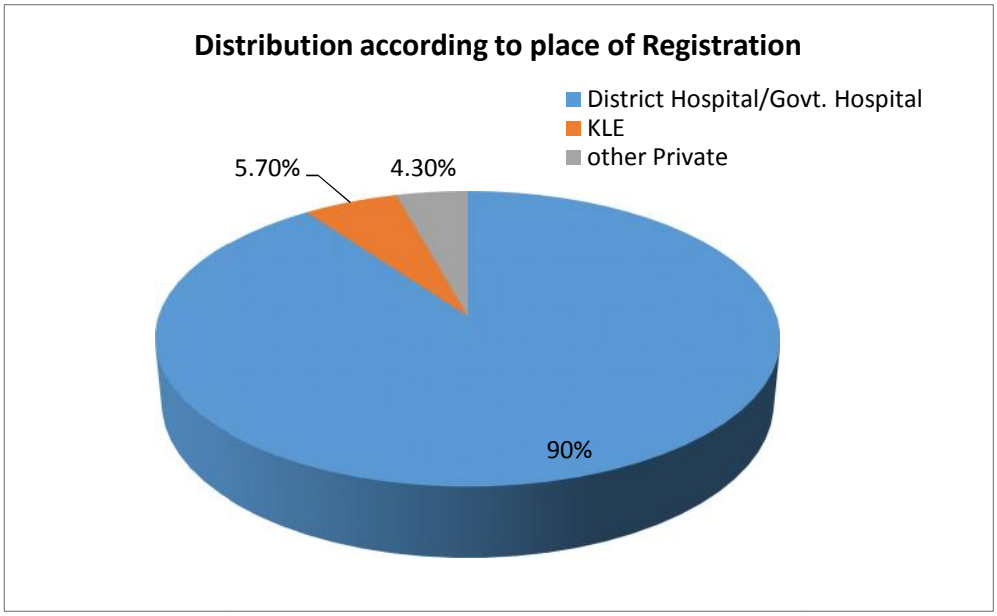
BOH/ Abortion	Number	Percent
Yes	85	12.1
No	615	87.9
Total	**700**	**100**

Our study showed that mothers who had history of previous abortion were 12.1%.

Table 10: Distribution of study participants according to Place of Registration

Place of registration	Number	Percent
District Hospital/ Government facility	630	90
KLE	40	5.7
Private	30	4.3
Total	**700**	**100**

Graph 7: Distribution of study participants according to place of registration



In our study, the participants who had registered at district hospital or government hospital were 630(90%), those who registered at KLE 40(5.7%), other private hospital 30(4.3%)

Table 11: Distribution of study participants according to number of ANC visits

Number of visits	Number	Percentage
≤4	52	7.43
5-13	474	67.71
>13	174	24.86

In our study the majority of participants who completed 5-13 antenatal visits were 67.71%, followed by those who completed more than 13 visits were 24.85% and least were those who attended less than 4 visits were 7.48%.

Graph 8: According to total number of ANC visit

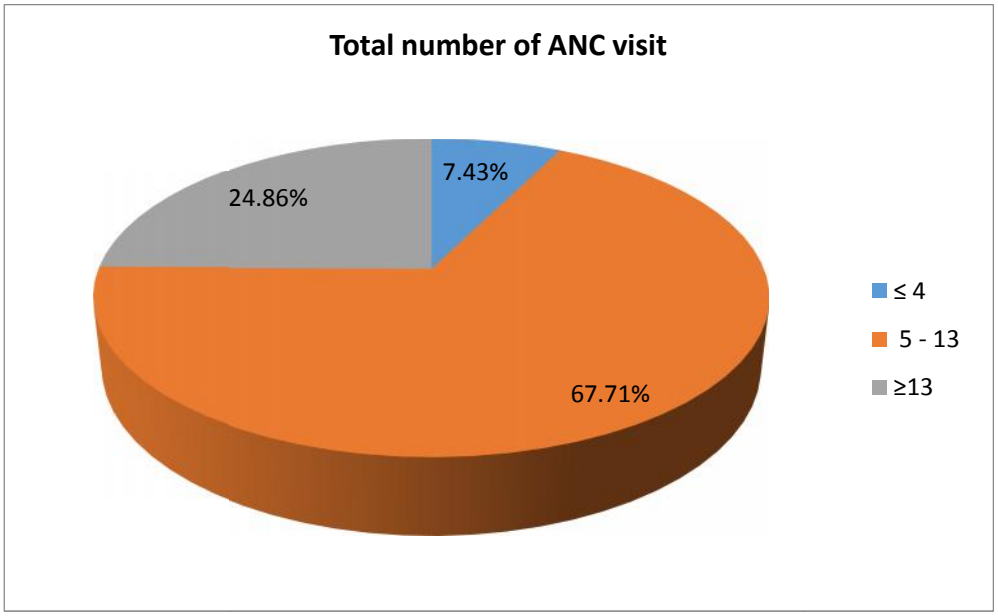
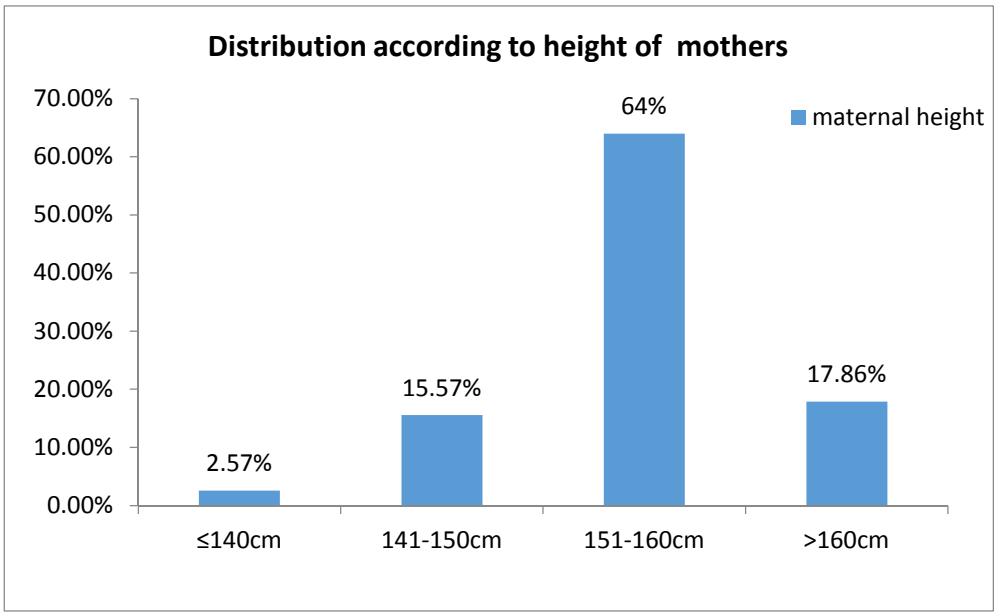


Table 12: Distribution of study participants according to Maternal Height

Maternal Height	Number	Percent
≤140cm	18	2.57
141-150cm	109	15.57
151-160cm	448	64.00
>160 cm	125	17.86
Total	**700**	**100**

Graph 9: Distribution of study participant according to maternal height

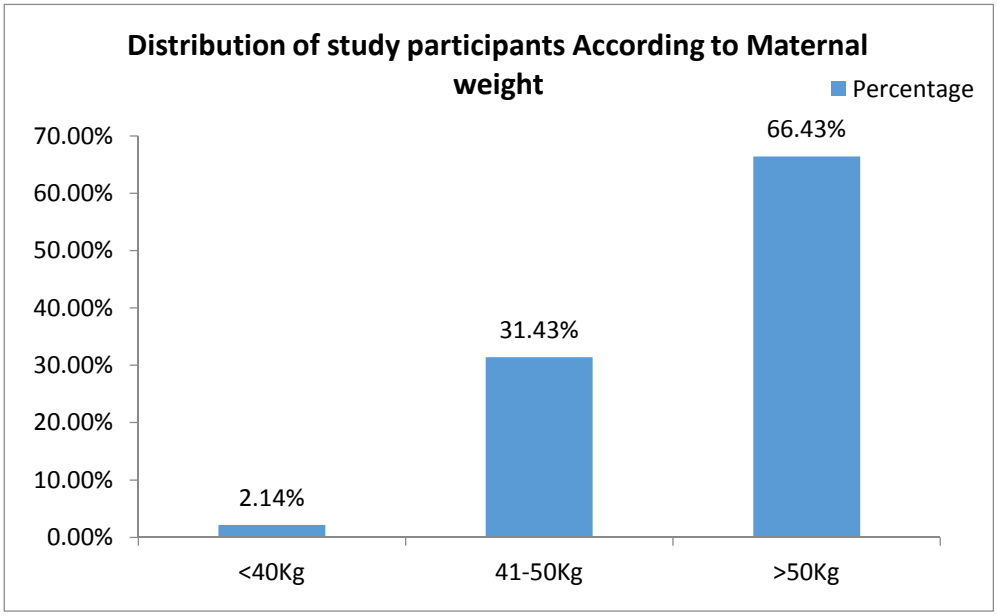


Study participants withmothers height ≤ 140cm were 2.57%, mothers with height 141-150cm were 15.57%, mothers with height 151-160cm were 64% and mothers with height of 145-149.9cm were 17.86%. Mean height of the study participants was 155.47 ± 7.08.

Table 13: Distribution of pregnant women according to their weight at term

Maternal weight	Number	Percentage
<40Kg	15	2.14%
41-50Kg	220	31.43%
>50Kg	465	66.43%
Total	**700**	**100**

Graph 10: Distribution of study participants according to maternal weight



In our study majority of study participants weight was >50Kg was (66.43%), followed by mothers who had weight between 41-50Kg were 31.43% and only 2.14% had weight <40Kg.

Table 14: Mean weight of mothers during all trimester

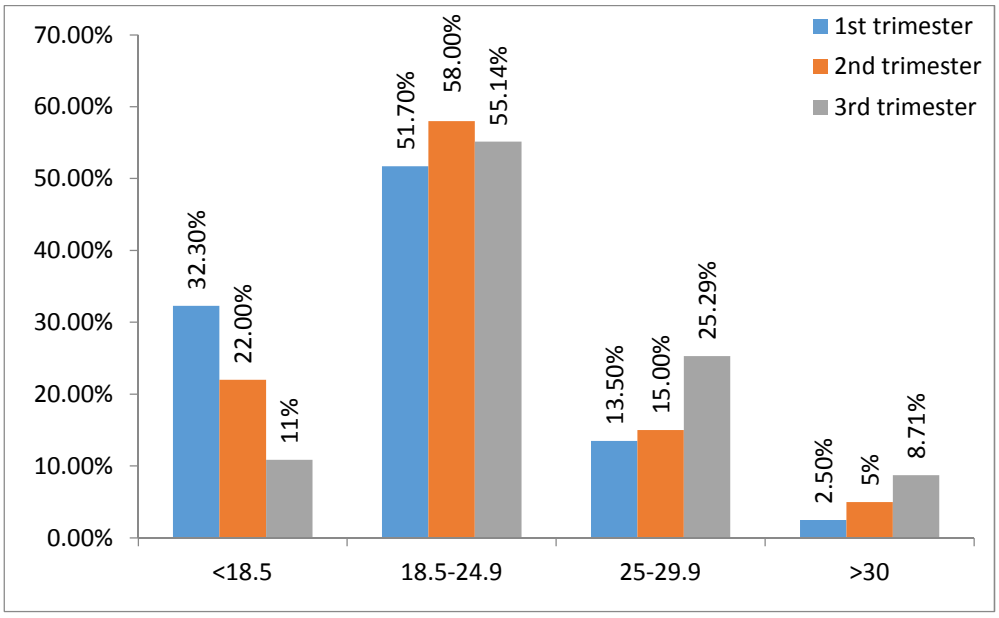
Maternal weight	Mean	Standard deviation
1st trimester	49.86	9.75
2nd trimester	52.85	9.70
3rd trimester	51.93	9.86

In this study showed that the mean maternal weight at 1st trimester was 49.86±9.75, mean maternal weight at 2nd trimester was 52.85±9.70, and the mean maternal weight at third trimester was 51.93±9.86

Table 15: Trimester wise BMI of pregnant women

BMI	1st trimester	2nd trimester	3rd trimester
<18.5	226(32.3%)	147(22%)	76
18.5-24.9	362(51.7%)	407(58 %)	386
25-29.9	94(13.5%)	110(15%)	177
>30	18(2.5%)	36(5%)	61
Total	700(100%)	700(100%)	700(100%)

Graph 11: Distribution of study participants according to BMI during all the three trimester



In this present study participants with BMI <18.5 were 32.3% in 1st trimester, 22% in 2nd trimester and 10.86% in 3rd trimester. Normal BMI was observed in 51.7, 58% & 55.14% of participants in 1st, 2nd and 3rd trimester respectively. Participants who had BMI >30 were 2.5% in 1st trimester, 5% in 2nd trimester and 8.71% in 3rd trimester.

Table 16: Distribution of study participants according to total weight gain of mothers

Mothers total weight gain	Number	Percentage
≤ 5	345	49.29%
6-11	307	43.85%
≥11	48	6.86%
Total	700	100

In our study the study participants who had weight gain less than 5 kg were 49.29%, followed by mothers who gained weight 6-11 Kg were 43.85% and those who gain weight of more than 11 Kg were 6.86%. The mean weight gain of the mothers was 6.18 ± 3.24 kg.

Graph 12: Distribution of study participants according to total weight gain of mothers

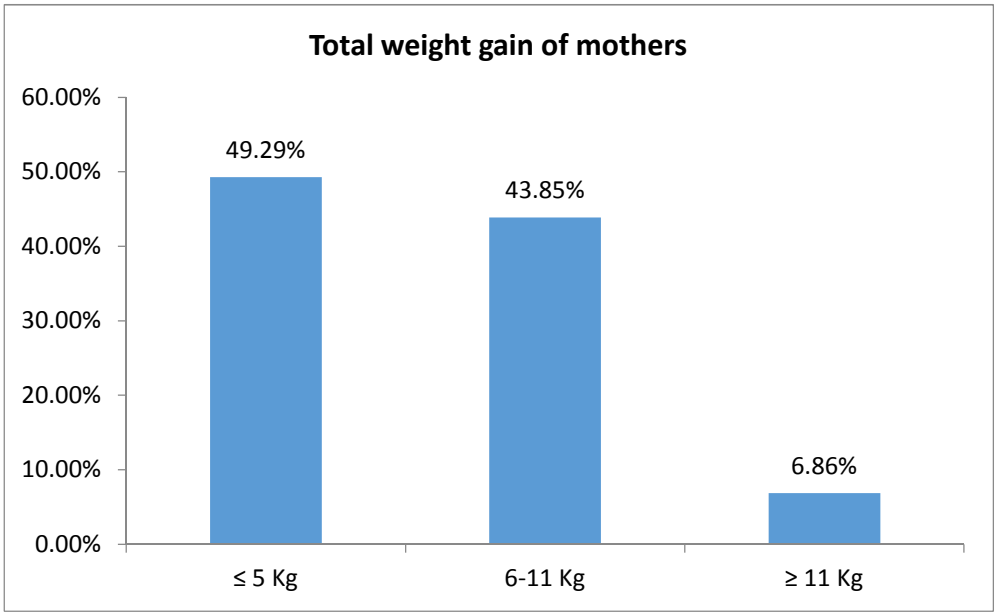
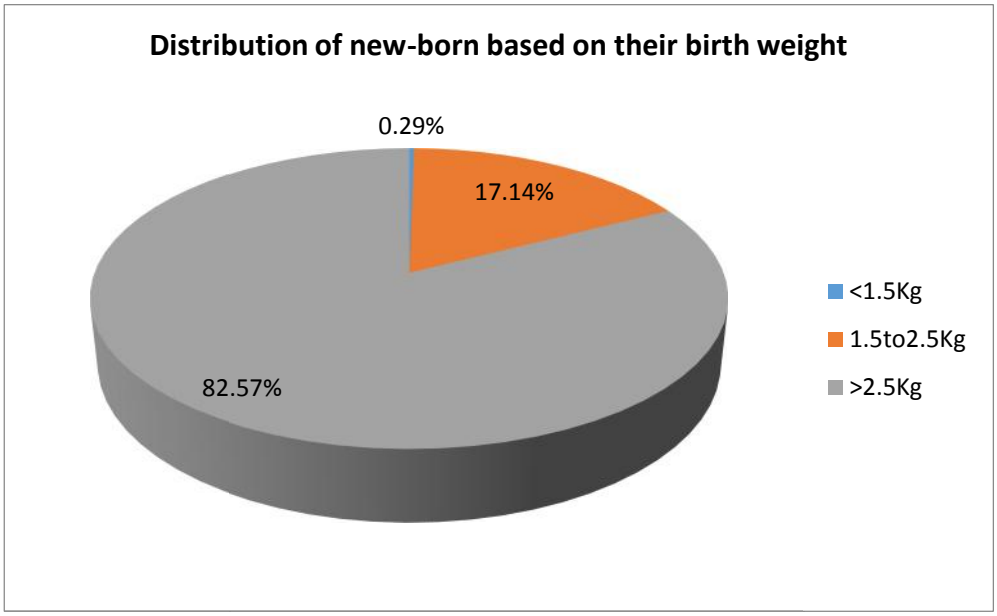


Table 17: Distribution of new-born as per their birth weight

Birth weight of New-born	Number	Percent
<1.5kg	2	0.29%
1.5 to 2.49kg	120	17.14%
≥2.5kg	578	82.57%
Total	**700**	**100**

Graph 13: Distribution of new-born based on their birth weight



In our study 82.71% babies had normal birth weight,17.14% low birth weight and only 0.4% very low birth weight.

Table 18: Mean - birth weight, length, head circumference and chest circumference of the new- born

Characteristics	Mean and standard deviation
Birth weight	2.82± 0.4
Length	50.57±17.6
Head circumference	34.71±1.22
chest circumference	31.92±2.05

Our study showed that the mean birth weight of new-born was 2.82±0.4Kg, while the mean length of the new-born is 50.57±17.6 cm, the mean head circumference of the new-born was 34.71±1.22 cm and the mean chest circumference of the new-born was 31.92±2.05 cm.

Table 19: Association of maternal age and birth weight of new-born

AGE in years	Low birth weight		Total
	No	Yes	
<20	70(76%)	21(24%)	91
21 to 30	490(83%)	98 (17%)	588
>30	18(85.71%)	3(14.3%)	21
Total	**578(82.57%)**	**122(17.43%)**	**700(100%)**
$\chi 2 - 2.399$ df = 2 p = 0.301			

In our study, mothers in the age group of less than 20 years who gave birth to low birth weight babies were 24%, 17% of the mothers in the age group of 21-30 years gave birth to low birth weight babies and 14.3% of the mothers aged more than 30 years gave birth to low birth weight babies.

Table 20: Association of type of family and birth weight of new-born

Type of family	Low birth weight		Total
	No	Yes	
Nuclear	124(17.71%)	23(3.29%)	147
Joint	454(64.86%)	99(14.14%)	553
Total	**578(82.57%)**	**122(17.43%)**	**700(100%)**
χ2-0.4107 df = 2 p = 0.5215			

This study showed that 79% mothers who belonged to joint family has low birth weight baby, 14.14% of mothers who lived in nuclear family had LBW baby. This was not statistically significant with p-0.301

Table 21: Association of type of residence with birth weight of new-born

Residence	Low birth weight		Total
	No	**Yes**	
Urban	255 (36.4%)	50 (7.1%)	305
Rural	323 (46.1%)	72 (10.3%)	395
Total	**578 (82.6%)**	**122 (17.4%)**	**700 (100%)**
χ2- 0.402 df = 1 p=0.526			

Prevalence of LBW was 16.4% and 18.3% among mothers residing in urban and rural area respectively. This difference was not significant statistically with p-0.526.

Table 22: Association of religion and birth weight of new-born

Religion	Low birth weight		Total
	No	Yes	
Hindu	459 (83.1%)	93 (16.9%)	552
Muslim	79 (82.2%)	17 (17.8%)	96
Other	40 (76.9%)	12(23.1%)	52
Total	**578 (82.6%)**	**122 (17.4%)**	**700 (100%)**
χ2- 1.287 df = 2 p=0.525			

*others - Jain, Sikh, Christian

Though the prevalence of LBW was more i.e. 23% among mothers belonging to religion other than Hindu and Muslim but the difference was not statistically significant with p=0.525

Table 23: Association of socio-economic status and birth weight of new-born

Socio-economic Status	Low birth weight		Total
	No	Yes	
Class I	48 (88.0%)	6 (12.0%)	54
Class II	45 (73.7%)	16 (24.3%)	61
Class III	99 (81.8%)	22 (18.2%)	121
Class IV	236 (85.0%)	41 (15.0%)	277
Class V	150 (80.2%)	37 (19.7%)	187
Total	**578 (82.6%)**	**122 (17.4%)**	**700 (100%)**
$\chi 2$ - 6.879 df = 4 p = 0.142			

Prevalence of LBW 24.3% seen in those who belonged to class II, 19.7% in class V and least in class I. Socio-economic status showed no statistical significant with birth weight of new-born.

Table 24: Association of maternal educational status and birth weight of new-born

Education of the mother	**Low birth weight**		**Total**
	No	**Yes**	
Illiterate	32(4.57%)	7(1%)	39
Primary	206(29.43%)	42(6%)	24
Secondary	248(35.43%)	60(8.57%)	308
PUC	49(7%)	7(1%)	56
Degree	43(6.1%)	6(0.9%)	49
Total	578(82.5%)	122(17.5%)	700(100%)
χ2 - 2.811	**df = 4**		**p = 0.589**

In our study, LBW 16.47% mothers literacy status who gave birth to low birth weight babies. This didn't show statistical significant with birth weight of new-born.

Table 25: Association of Total number of pregnancies and birth weight of new-born

Total number of Pregnancies	Low birth weight		Total
	No	**Yes**	
1	256(81.53%)	58(18.47%)	314
2	249(83%)	51(17%)	300
>2	73(84.88%)	13(15.12%)	86
Total	**578(82.57%)**	**122(17.43%)**	**700(100%)**
χ2-0.595 df = 2 p = 0.742			

Chi-square= Ourstudy didn't showed statistical significant with number of pregnancies and low birth weight with p value 0.742 though the prevalence of LBW was high among para 1 i.e 18.47%

Table 26: Association of total number of living children and birth weight of new-born

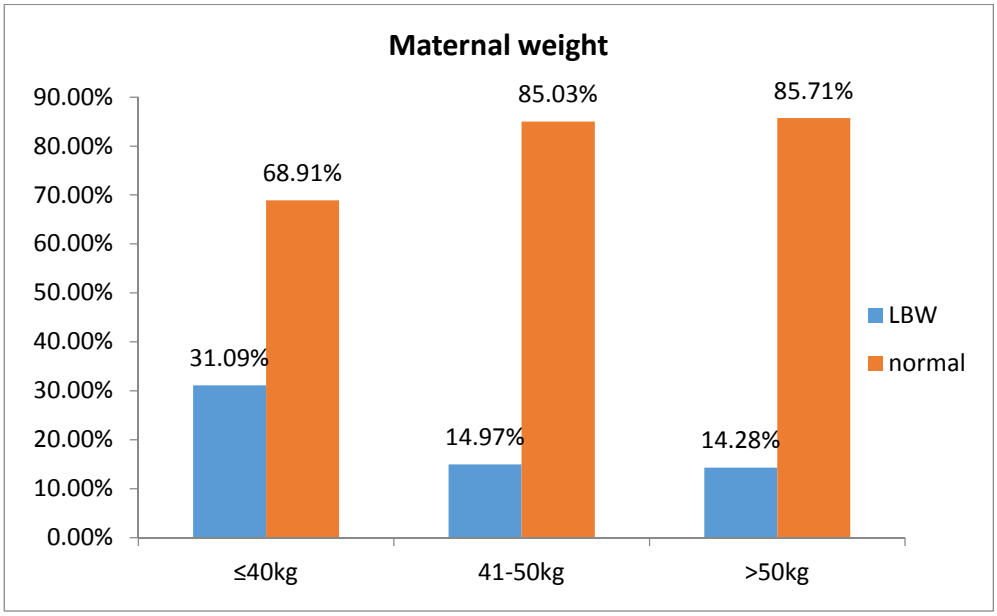
Number of Living Children	Low birth weight		Total
	No	Yes	
None	289(80.73%)	69(19.27%)	358
2-3	247(84.01%)	47(15.99%)	294
More than 3	42(87.5%)	6(12.5%)	48
Total	**578(82.57%)**	**122(17.43%)**	**700(100%)**
$\chi 2$ - 2.082 df = 2 p = 0.4588			

Our study showed that 19.27% primis gave birth to low birth weight babies were 19.27%, followed by 15.99% of those mothers who had 2-3 children gave birth to low birth weight, 12.5%, mothers who had more than 3 children gave birth to low birth weight. Overall in this study the total number of living children with birth weight didn't showed statistically significant.

Table 27: Association of maternal weight at first trimester and birth weight of new-born

Maternal weight	LBW		Total
	No	Yes	
≤40 Kg	82(68.91%)	37(31.09%)	119
41-50 Kg	250(85.03%)	44(14.97%)	294
≥50 Kg	246(85.71%)	41(14.28%)	287
Total	578(82.57%)	122(17.43%)	700(100%)
χ2-18.467	**df-2**	**p-0.000089**	

Graph 14: Association of maternal weight at first trimester and birth weight of new-born

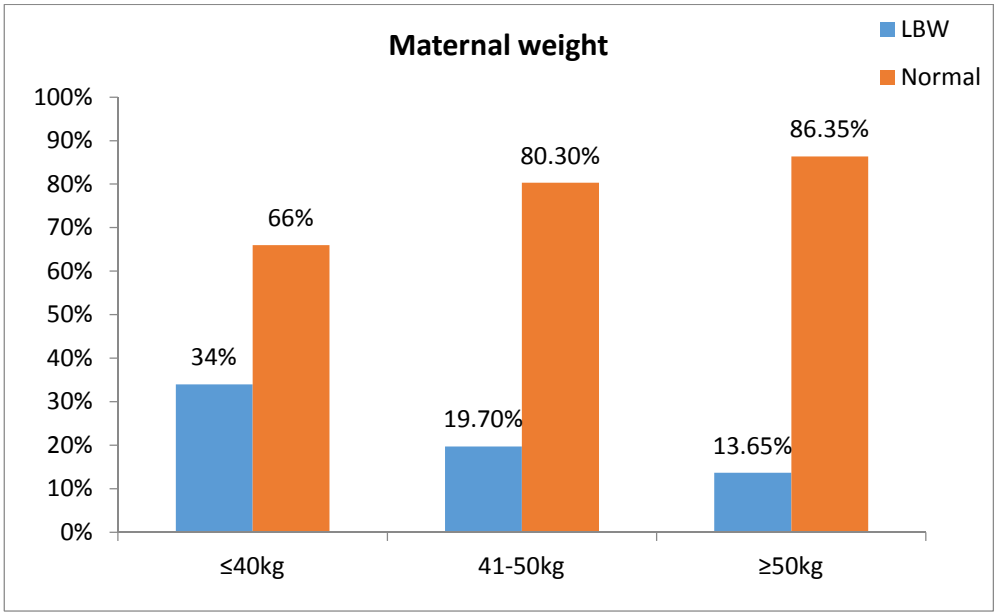


Our study showed that 31.09% mothers weighing less than 40 Kg gave birth to low birth weight babies, followed by 14.97% of mothers weighing 41-50 Kg gave birth to low birth weight babies were and mothers weighing more than 50 Kg who gave birth to low birth were 14.28%. Overall the maternal weight at first trimester showed positive association with birth weight of new-born (p-0.000089)

Table 28: Association of maternal weight at second trimester and birth weight of new-born

Maternal weight	LBW		Total
	No	Yes	
≤40 Kg	33(66.0%)	17(34.0%)	50
41-50 Kg	216(80.3%)	53(19.7%)	269
≥50 Kg	329(86.35%)	52(13.65%)	381
Total	278(82.57%)	122(17.43%)	700(100%)
χ2-14.29	**df-2**	**p-0.000788**	

Graph 15: Association of maternal weight at second trimester and birth weight of the new-born

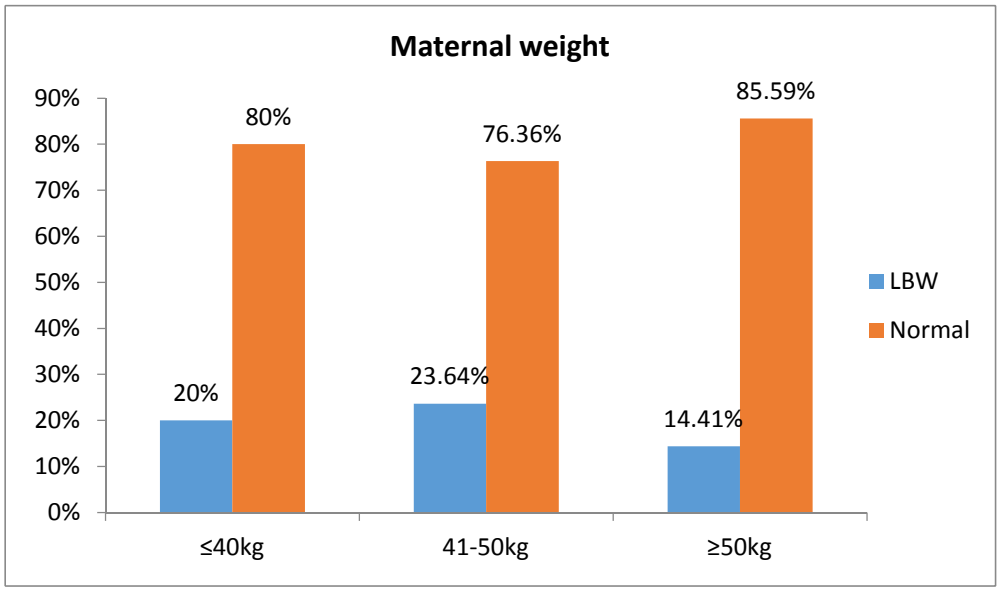


Our study showed that mothers weighing less than 40Kg who gave birth to low birth weight were 34%, followed by mothers weighing 41-50 Kg who gave birth to 19% of low birth weight and mothers weighing more than 50 Kg who gave birth to low birth weight were 13.65%.overall the maternal weight at second trimester showed positive association with birth weight of new-born (p-0.000788)

Table 29: Association of maternal weight at third trimester and birth weight of new-born

Maternal weight	LBW		Total
	No	YES	
≤40 Kg	12(80%)	3(20%)	15
41-50 Kg	168(76.36%)	52(23.64%)	220
≥50 Kg	398(85.59%)	67(14.41%)	465
Total	**578(82.57%)**	**122(17.43%)**	**700(100%)**
χ2-8.907	**df-2**		**p-0.011**

Graph 16: Association of maternal weight at third trimester and birth weight of new-born

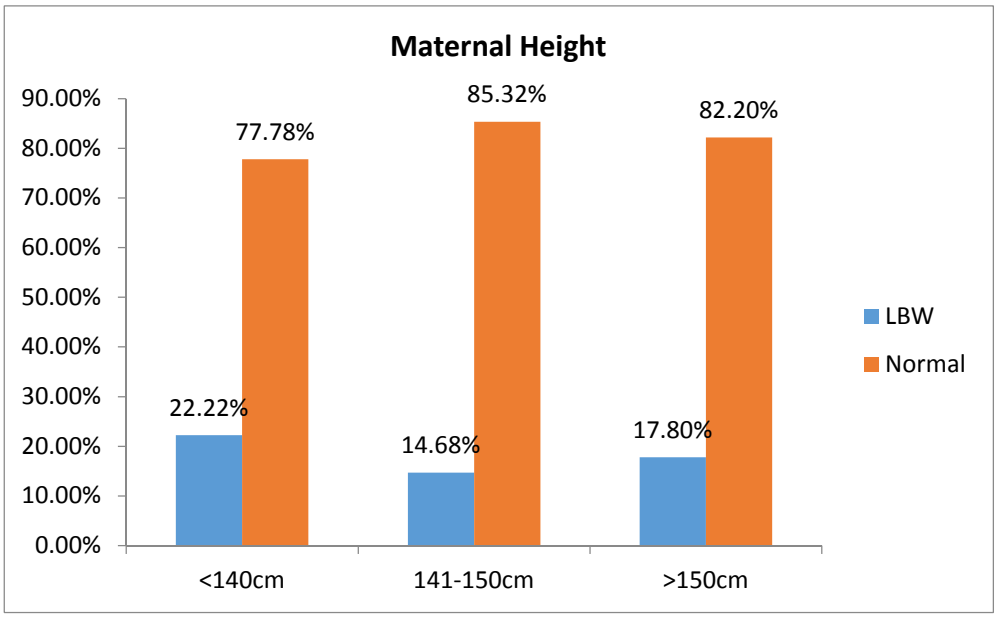


Our study showed mothers weighing less than 40 Kg who gave birth to low birth weight were 20%, followed by mothers weighing 41-50 Kg who gave birth to low birth weight were 23.64% and mothers weighing more than 50 Kg who gave birth to low birth weight were 14.41%. The overall maternal weight at third trimester showed positive association with low birth weight (p-0.011)

Table 30: Association of maternal height and birth weight of new-born

Maternal height	LBW		Percentage
	No	Yes	
<140cm	14(77.78%)	4(22.22%)	18
141-150cm	93(85.32%)	16(14.68%)	109
>150cm	471(82.20%)	102(17.80%)	573
Total	**578(82.57%)**	**122(17.43%)**	**700(100%)**
χ2- 0.915	**df-2**		**p - 0.915**

Graph 17: Association of maternal height and birth weight of new-born

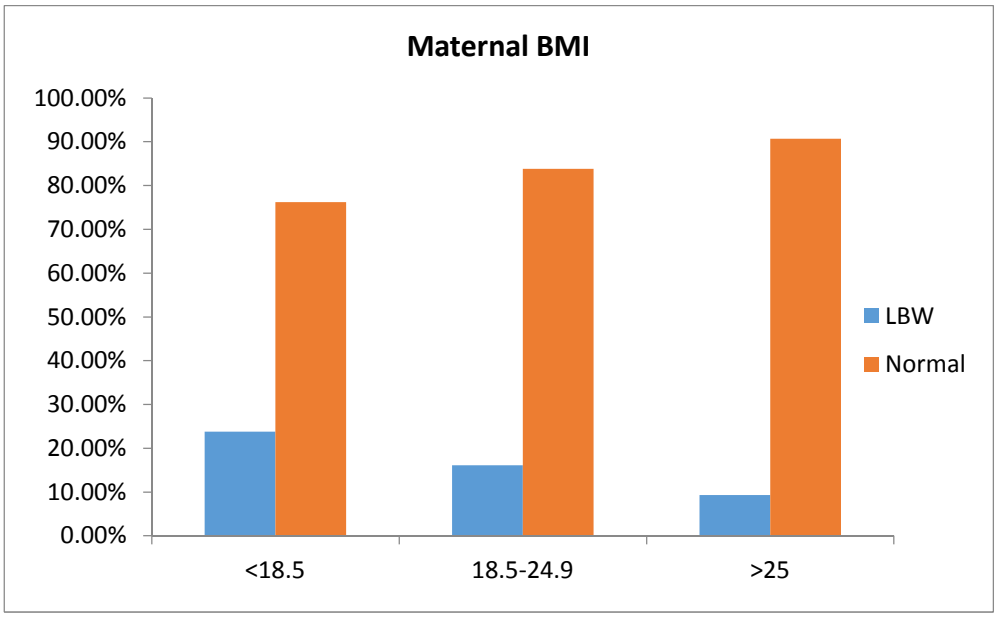


This study showed that 22.22% of mothers with height of <140cm gave birth to low birth weight babies, 14.68% of mothers who had height between 141-150cm gave birth to low birth weight babies and 17.80% mothers who had height of >150 cm gave birth to low birth weight babies. The study showed that maternal height didn't have any association with birth weight with p=0.915.

Table 31: Association of Maternal BMI at 1st Trimester and birth weight of new-born

BMI 1st Trimester	Low birth weight		Total
	No	Yes	
Underweight(<18.5)	170(76.23%)	53(23.77%)	223
Normal (18.5- 24.9)	301(83.84%)	58(16.14%)	359
Overweight/ Obese(>25)	107(90.67%)	11(9.33%)	118
Total	**578(82.57%)**	**122(17.43%)**	**700(100%)**
$\chi 2$ - 12.01 df = 2 p = 0.0024			

Graph 18: Association of maternal BMI at first trimester and birth weight of new-born

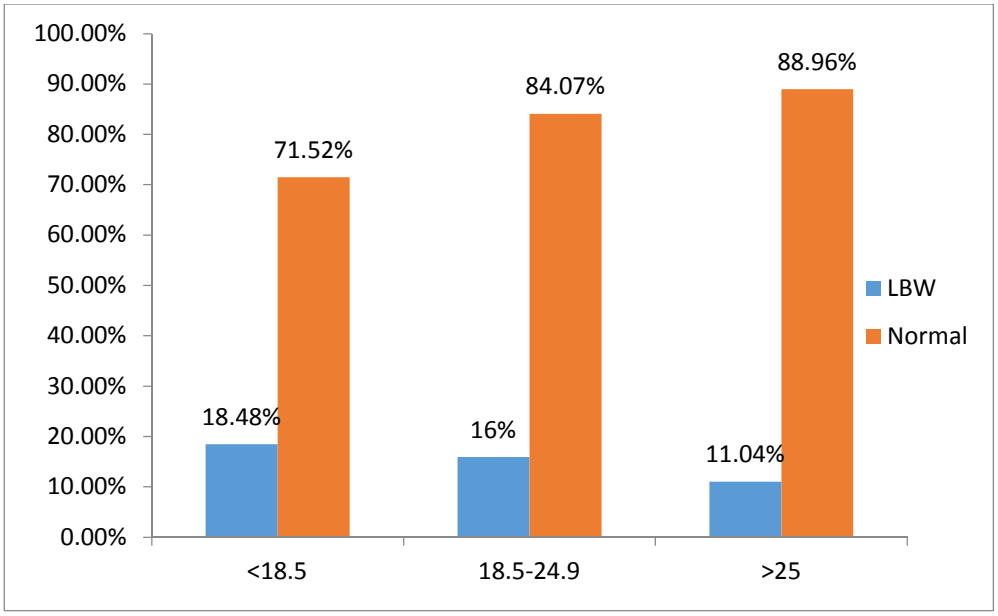


Study showed that maternal BMI was positively associated with birth weight of the new-born as the prevalence of LBW was high among those with BMI <18.5 i.e 23.77% among those with normal BMI it was 16.14% and those over weight and obese 9.33%. This difference was significant with p = 0.0024

Table 32: Association of Maternal BMI at 2nd Trimester and birth weight of new-born

BMI 2nd Trimester	Low birth weight		Total
	No	Yes	
Underweight	103(71.52%)	41(18.48%)	144
Normal	338(84.07%)	64(15.93%)	402
Overweight/ Obese	137(88.96%)	17(11.04%)	154
Total	**578(82.57%)**	**122(17.43%)**	**700(100%)**
χ2 - 17.20	**df = 2**	**p = 0.00018**	

Graph 19: Association of maternal BMI at second trimester with birth weight of the new-born

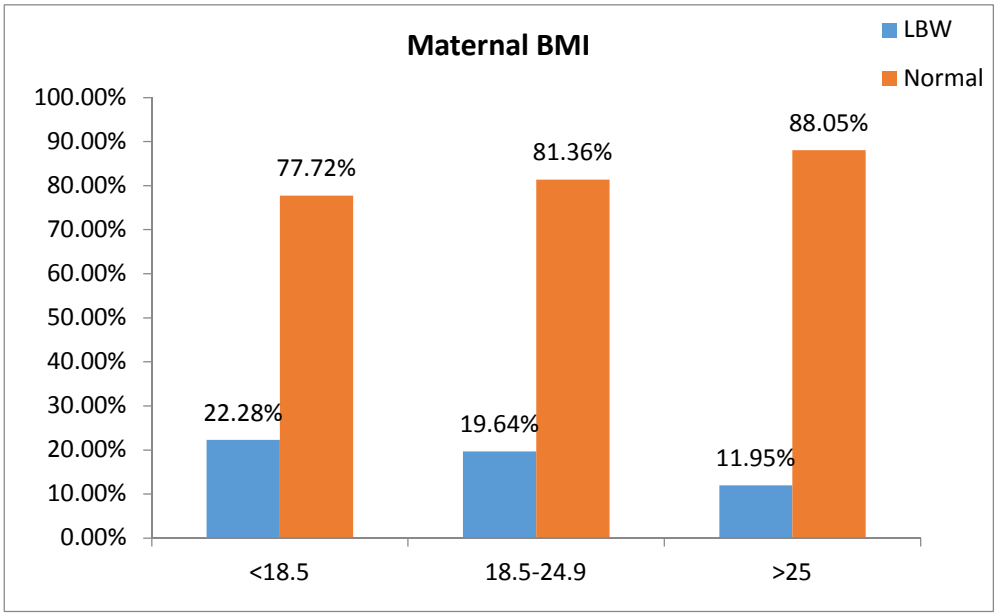


Study showed that maternal BMI during 2nd trimester was positively associated with birth weight of the new-born as the maternal BMI increased the prevalence of LBW decreased from 18.46 among underweight to 15.93% among normal weight BMI to 11.04% among overweight/obese. This difference was statistically significant with P value of 0.00018

Table 33: Association of Maternal BMI at 3rd trimester and birth weight of new-born

BMI 3rd Trimester	Low birth weight		Total
	No	Yes	
Underweight	56(77.72%)	21(22.28%)	77
Normal	323(81.36%)	74(19.64%)	397
Overweight/ Obese	199(88.05%)	27(11.95%)	226
Total	**578(82.57%)**	**122(17.43%)**	**700(100%)**
χ2 -10.30	**df = 2**	**p = 0.0057**	

Graph 20: Association of maternal BMI at third trimester with birth weight of the new-born

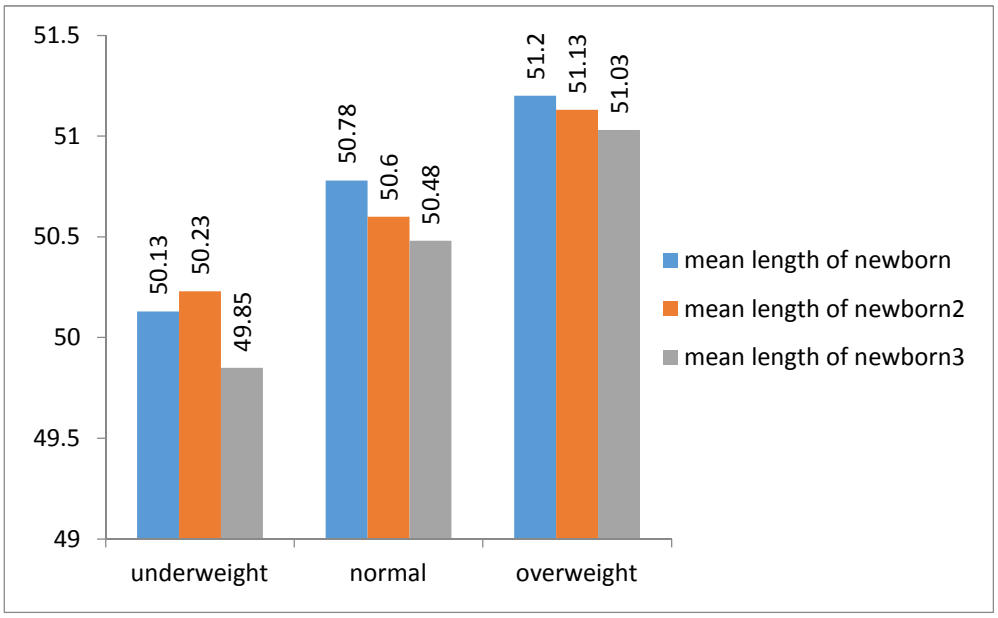


Study showed that maternal BMI at 3rd trimester was positively associated with birth weight of the new-born as the maternal BMI increased the prevalence of LBW decreased from 22.28% among underweight to 19.64% among normal BMI to 11.95% among overweight/obese, difference was statistically significant with P value of 0.0057

Table 34: Association of maternal BMI at different trimester with mean length of the new-born

Maternal BMI	1st trimester`	2nd trimester	3rd trimester
	Mean length of the new born	Mean length of the new-born	Mean length of new-born
Underweight	50.13±2.61	50.23±2.54	49.85±1.77
Normal	50.78±2.42	50.6±2.49	50.48±2.54
Overweight	51.20±2.56	51.13±2.57	51.03±2.57
P value	0.00026	0.0166	0.286

Graph 21: Association of maternal BMI of all the three trimester with birth weight of the new-born



Our study showed that the maternal BMI of first trimester was associated with length of new-born. This first trimester difference was statistically significant and 2nd trimester 0.00026 & 0.0166 respectively. Third trimester BMI was not associated with length of new-born.

Table 35: **Association of maternal BMI at different trimester with mean head circumference of new-born**

Maternal BMI	1st trimester	2nd trimester	3rd trimester
	Mean Head Circumference	Mean Head Circumference	Mean Head Circumference
Underweight	34.59±1.17	34.47± 1.28	34.42±1.28
Normal	34.80±1.24	34.79±1.20	34.70±1.16
Overweight	34.90±1.20	34.92±1.23	34.95±1.27
P value	0.464	0.0035	0.0022

Our study showed that maternal BMI at 2nd and 3rd trimester was positively associated with head circumference of new-born with p value 0.0035 and 0.0022 respectively. 1st trimester BMI did not show any association with head circumference.

Table 36: Association of maternal BMI at different trimester with mean chest circumference of New-born

Maternal BMI	1st trimester	2nd trimester	3rd trimester
	1st trimester Chest circumference	2nd trimester Chest circumference	Mean Chest circumference
Underweight	31.866±1.98	31.54±1.99	31.49±1.85
Normal	31.98±2.03	32.07±1.99	31.90±1.99
Overweight	32.18±2.198	32.11±2.22	32.25±2.18
P value	0.398	0.159	0.123

In our study the mean maternal BMI at all the three trimester did not show any association with chest circumference of the new-born.

Table 37: Association of maternal height with birth weight, length, head circumference and chest circumference of new-born

Maternal height	**<145cm**	**145-149cm**	**150-154.9 cm**	**155-159.9cm**	**>160cm**	**F**	**P**
No of mothers	65	45	137	227	226		
Parameters of new-born							
Birth weight	2.7±042	2.76±0.64	2.76±0.56	2.82±0.54	2.82±0.577	0.458	0.766
Head circumference	34.92 ±1.3	34.49±1.1	34.66±1.3	34.73±1.13	34.8±1.2	1.335	0.255
Chest circumference	32±1.96	31.64±2.47	32.04±1.93	31.9±2.04	32.05±2.084	0.490	0.743
Length	50.83±2.37	49.91±2.57	50.85±2.4	50.66±2.53	50.61±2.58	1.265	0.200

In our study showed that the maternal height was not associated with birth weight, length, chest circumference and head circumference of the new-born.

DISCUSSION

The present study was an observational study conducted at a tertiary care centre among 700 mothers who delivered in this hospital. In our study prevalence of LBW was 17.43%. Maternal BMI at all the trimester was positively associated with the birth weight of the new-born. Maternal BMI at 1st and 2nd trimester was associated with length of new-born. 2nd and 3rd trimester maternal BMI was positively associated with head circumference of the new-born. However maternal BMI didn't show association with chest circumference of new-born.

Socio-demographic profile

Table 1 & 2 Distribution of study participants based on age and religion

Our study showed that mean age of the study participants (mothers) was 24.28± 3.34 years. This observation was similar to the studies conducted by Pedro Ribeiro et al in Brazil which showed that the mean maternal age was 25.6±7years in cases and 25.4±6.5years in controls and by Onesmus et al in Kenya which showed that the mean maternal age was 25.6±6.2years.[39][40]

Our study showed that the majority of study participants (78.86%) belonged to Hindu religion, followed by Muslim religion (13.71%) and the least i.e 7.43% belonged to other religion. In a studies conducted by Rakesh Nayak et al in North Karnataka showed that the majority of the study participants (94.6%) were Hindus, 5.4% were Muslims and least 0.1% Christian[41] In a similar study conducted by BT Rao et.al in Haryana showed that majority of the study participants belonged to Hindu

religion (90%) and among them 47% belonged to backward caste and 24% belonged to schedule caste. [41][42]

Table 3 & 4 Distribution of study participants based on type of Family and educational status of mothers

In this present study 79% of participants were from joint family. In a study conducted by Nirmali et.al in North-Eastern City showed that 68.67% of study participants belonged to Joint family. [43]

In our study majority of mothers i.e. 44% completed secondary education, followed by mothers who completed their primary education were 34%, and those who completed PUC/Diploma and Graduation were 8% and remaining 5.5% had no formal education. Similarly a study conducted by Nirmali Gogoi in North-eastern City, showed that the percentage of mothers who were literate were 51.67% and mothers who were illiterate were 48.33%. A study conducted by Onesmus in Kenya showed that 48.1% had completed secondary education, those who completed primary education were 45.7%, 4.8% had completed tertiary education, and only 1.5% didn't have any education.[43][40]

Table 5 & 6 Distribution of study participants based on place of residence and socio-economic status

In our present study, 56.4% participant's place of residence was rural area. In a study conducted by Nirmali Gogoi in North-Eastern city, India showed that 81% of mothers were residing in rural areas. Another study conducted by Rahul Hanumant et.al in Tamilnadu showed that the majority of study participants were residing in

rural area 71.43%. This contrast in observation was seen, as our study was done in tertiary care hospital.[43][30]

Majority of the participants, i.e 39.5% & 26.71% belonged to class IV and V of B.G.Prasad's socio-economic class respectively and 17.30% & 7.71% belonged to class II & class I respectively. A study conducted by Kotabal Rajashree et.al in Shimoga, showed that the majority of the mothers belonged to socioeconomic class IV i.e 46.57% and 33.59% belonged to class V.[44]

Table 7 and 8 distribution of study participants based on total number of pregnancy and total number of living children

In the present study, majority of the mothers were primigravida (44.9%), 42.8% were gravida 2 and 12.3% of mothers were gravida 3 and above.

In our study 51% mothers who had one living children, 42% of mothers had two living child, 6% mothers had three living children and 1% of mothers had more than 3 living children. In a study conducted in Northern Ethiopia by Yisak Gebregzabiherher et al showed that 42.7% of the study participants were primipara, 43.2% had 2-4 living children and 14.2% had 5 or more living children.[17]

Table 9 Distribution of study participants according to history of abortion

In our study 12.1% of mothers had history of abortion. In a study conducted in Northern Ethiopia by Yisak Gebregzabiherher et al showed that the 34% of mothers had bad obstetric history, which also included abortion.[17]

Table 10 Distribution of study participants according to place of registration

In our study 90% mothers were registered at the government facility, district hospital, sub centre, primary health centre), 5.7% mothers had registered at KLE hospital and 4.3% mothers had registered at other private hospitals.

Table 11: Distribution of study participants according to ANC visits

Our study showed that 67.71% mothers had between 5-13 antenatal visits, 24.85% mothers had completed 13 antenatal visits and 7.48% mothers had less than 4 antenatal visits

Table 12 & 13: Distribution of study participants according to maternal height and maternal weight

In our study, mean maternal height was 155.25 ± 7.08 cm. A study conducted by Farzeen Khan et.al in Pakistan showed that the mean maternal height were 155.82 ± 8.71 inch nd another study conducted by Urvi M.Gala in Maharashtra showed that mean maternal height was 153.13 ± 10.39cm. The observation was in contrast to the study conducted by Oya Yucel et.al in Turkey which reported that the mean maternal height was 161.8 ± 5.6 cm. Better mean maternal height in turkey study could be due to genetic/environmental effect. [45][46][47]

In our study, mean maternal weight at 3rd trimester was 52.95 ± 9.86 kg. A study conducted by Shakya KL et.al in Nepal showed that the mean maternal weight was 48.9 ± 6.8 kg. In other studies conducted by Oya Yucel et.al in Germany showed that mean maternal weight was 60.4 ± 11.6Kg. In a study conducted by Onesmus et.al in Kenya showed that the mean weight of the mothers was 62.8 ± 8Kg. As Nepal is

developing country hence the mean maternal weight was less compared to our study & Kenya study[48][47][40]

Table 14: Mean weight of mothers during all trimester

In our study, mean weight of the mothers at 1st, 2nd & 3rd trimester were 49.85±9.75 kg, 52.85±9.70 kg and 51.93±9.86 kg respectively. A study conducted in rural area of western Maharashtra by Deshpande Jayant et al reported that the pre-pregnancy mean weight among cases and control were 48.58 ± 7.91 kg and 52.35 ± 6.3 kg. Another study conducted in Northern Ethiopia by Yisak Gebregezabiherher et al showed that mean maternal weight between 37- 42 week of gestational age was 50 ± 2.5 kg. This observation was on par with our study. [34][17]

Table 15 & 16: Trimester wise BMI of pregnant women & total weight gain during pregnancy

Our study showed that in first trimester 32.3% of participants were having BMI <18.5 which reduced to 22% and 10.86% during 2nd & 3rd trimester. Participants who were having BMI above 30 in 1st trimester were 2.5% which increased to 5% and 8.71% in 2nd and 3rd trimester.

In our study about 50% of mothers gained ≤ 5Kg weight during pregnancy, 44% gained between 6 – 11 kg, 7% gained ≥ 11 kg and the mean weight gain was 6.18 ± 3.24 kg. Similar study conducted by Abdulai Abubakari et.al in Germany showed that the mean maternal weight gain during entire period of the pregnancy was 7.35 ± 4.28 kg. Another study conducted by Oya Yucel in Germany showed that the mean maternal weight gain was 13.8 ± 6.1. The difference could be due to dietary

pattern as consumption of non-vegetarian diet in Germany could have influenced more weight gain during pregnancy.[49][47]

Table 17: Distribution of the new-born according to their birth weight

In our study, prevalence of low birth weight was 17.43% among which prevalence of very low birth weight was 0.29%. This observation was similar to the studies conducted by Kashay Znebe et.al in Ethiopia which reported that the prevalence rate was 17.4%, another study conducted by Shashikantha SK et al Haryana showed that prevalence of low birth weight was 18%.[50][51]

Table 18: Mean- birth weight, length, head circumference and chest circumference of the new-born

Our study showed that the mean birth weight of the new-born was 2.82 ± 3.2 kg. In a study conducted by BT Rao et al showed that mean birth weight of the new-born was 2.78 ± 4.2 kg. The mean length of new-born was 50.57 ± 17.6 cm, mean head circumference of new-born was 34.71±1.22 cm and mean chest circumference of new-born was 31.92 ± 2.05 cm.[42]

ASSOCIATION OF MATERNAL SOCIODEMOGRAPHIC FACTORS WITH BIRTH WEIGHT OF NEW BORN

Table 19: Association of Maternal Age with birth weight of new-born

In our study, out of 91 subjects in the age group of less than 20 years, 24% gave birth to LBW babies, out of 588 subjects in the age group of 21-30 years 17% gave birth to LBW babies and among 21 subjects in the age group of more than 30 years 14.3% gave birth to LBW. Though the prevalence of LBW was high among

mothers aged <20 years but statistically the difference was not significant. A study by BT Rao et al also showed that the maternal age didn't show association with birth weight of the new-born.[42]

Table 20 & 21: Association of the type of family, area of residence of the mother with birth weight of new born.

In our study, LBW was seen more among those who lived in a joint family (14.14%) and among those who live in rural area (10.3%) when compared with those living in nuclear family (3.29%) and in urban area (7.1%) respectively. Although there is a difference when compared with mothers who gave birth with normal birth weight no statistical significance was observed.

Table 22: Association of religion and birth weight of new-born

Prevalence of LBW was found more among mothers belonging to religion other than Hindu and Muslims i.e 23.1%. Religion didn't show any statistical significant with birth weight of new-born. The reason could be less representation from Muslim and other community.

Table 23: Association of socio-economic status and birth weight of new-born

Prevalence of LBW was 24.3% in those who belonged to class 2, and least seen in those who belonged to class I 1.e 12%. Socio-economic status didn't show any statistical significant with birth weight of new-born. The reason could be initiatives taken by the Government to improve maternal nutritional status eg: Matru poorna yojana, folic acid prophylaxis along with better services through ASHA workers.

Table 24: Association of maternal educational status and birth weight of new-born

Our study showed that prevalence of LBW among literate mothers was 16.47%. Maternal education didn't show any statistical significant with birth weight of new-born A study conducted by Priti J Patale et al in Maharashtra showed that the lesser maternal education level was associated with increased risk for LBW. The reason for no association could be proportion of illiterate mothers were less when compared with literate mothers in our study.[52]

Table 25: Association of total number of pregnancies and birth weight of new-born

In our study 18.47% primi para mothers gave birth to low birth weight babies as compared to 17 % and 15% among para 2 &3 and para >3. But this difference was not statistically significant with p = 0.74. This observation is on par with the study conducted in Kolkata by Samiran Bisai which reported that parity was not significantly associated with birth weight.[32]

Table26: Association of total number of living children and birth weight of new-born.

Our study showed that 19.27% of primis gave birth to LBW babies, followed 15.99% & 12.5% among mother who had 2-3 children and more than 3 children respectively. But the difference was not statistically significant.

Association of Maternal anthropometry with birth weight, length, head circumference and chest circumference of new-born.

Table 27, 28 & 29: Association between maternal weight and birth weight of the new-born

In our study, prevalence of LBW was 31.09%, 34%, 20% among mothers with less than 40 kg at 1st, 2nd and 3rd trimester respectively. Among mothers with 41-50 kg prevalence of LBW was 14.9%, 19.7% and 23.64% at 1st, 2nd and 3rd trimester respectively. And among mothers with more than 50 kg prevalence of LBW was 14.28%, 13.65% and 14.41% at 1st, 2nd and 3rd trimester respectively. When compared with mothers who gave normal birth weight babies and who gave birth to LBW babies, maternal weight at all three trimesters showed statistically significant association with birth weight of the new-born. This observation was on par with the studies conducted by Emmanuel et al, Subarna Mitra et al, Jananthan et al which showed that the maternal weight showed positive association with birth weight of the new-born. [6][31][4]

Table 30: Association of maternal height and birth weight of new-born

In our study, 22.22% mothers with height less than 140 cm gave birth to low birth weight babies. 14.68% of mothers who had height between 141 and 150 cm gave birth to LBW babies and 17.08% of mothers gave birth to LBW babies. However, maternal height didn't show any statistical significance with birth weight. Similar observation was seen in a study conducted by Samiran Bisai et al showed no significant association between maternal height and birth weight. However, in contrast a study by Emmanuel et al showed that maternal height had statistically

significant association with birth weight of the new-born. In a study conducted by [32][6]

Table 31, 32 & 33: Association of maternal BMI with birth weight of new-born

In present study, the prevalence of LBW among mothers with BMI less than 18.5 was 23.77%, 18.48% & 22.28% at 1st, 2nd and 3rd trimester respectively. Among mothers with normal BMI (18.5-24.9) prevalence of LBW was 16.14%, 15.93% and 19.64% at 1st, 2nd and 3rd trimester respectively and among mothers with BMI more than 25 the prevalence of LBW was 9.33%, 11.04% & 11.95% at 1st, 2nd & 3rd trimester respectively. When compared with mothers who gave birth to normal weight babies and who gave birth to LBW babies, maternal BMI at all three trimesters showed statistically significant association with birth weight of the new-born. Our study showed that as BMI increased birth weight also increased. This observation was on par with studies conducted by Samiran Bisai et al, Janarthan et al, Subarna Mitra et al and Peter Balazs et al which showed that the maternal BMI showed positive association with birth weight of the new-born. A study conducted by Ihunnaya showed that maternal BMI didn't show positive association with birth weight of the new-born with p-0.645.[32][4][31][53] [26]

Table 34: Association of Maternal BMI with length of new-born

In our study, the maternal BMI at 1st & 2nd trimester was positively associated with length of new-born were mean length among mothers with BMI less than 18.5 at 1st & 2nd trimester was 50.13 ± 2.61 and 50.23 ± 2.54, among mothers with normal BMI (18.5-24.9) the mean length was 50.78 ±2.42 & 50.6 ± 2.49 and among mothers with BMI more than 25 the mean length of the new-born was 51.20 ± 2.56 & 51.13 ±

2.57. However, the third trimester BMI was not statistically significant with length of the new-born. Study conducted by Surekha et al showed that Body mass index showed positive association to the new-born length with p value 0.010[29]

Table 35: Association of maternal BMI with head circumference of new-born

In our study, the maternal BMI at 2nd & 3rd trimester was positively associated with head circumference of new-born were mean head circumference among mothers with BMI less than 18.5 at 2nd & 3rd trimester was 34.47 ± 1.28 & 34.42 ± 1.28, among mothers with normal BMI (18.5-24.9) the mean head circumference was 34.79 ± 1.20 & 34.70 ± 1.16 and among mothers with BMI more than 25 the mean head circumference of new-born was 34.92 ± 1.23 & 34.95 ± 1.27. However the first trimester BMI was not statistically significant with head circumference of new-born. a study conducted by Surekha et al showed that that the maternal BMI showed positive association with head circumference of the new-born with p value 0.001[29]

Table 36: Association of maternal BMI with chest circumference of new-born

In our study, among mothers with BMI less than 18.5 the mean chest circumference of the new-born was 31.86 ± 1.98, 31.54 ± 1.99 & 31.49 ± 1.85, among mothers with normal BMI (18.5-24.9) the mean chest circumference was 31.98 ± 2.03, 32.07 ± 1.99 & 31.90 ± 1.99 and among mothers with BMI more than 25 with mean chest circumference of new-born was 32.18 ± 2.198, 32.11 ± 2.22 & 32.25 ± 2.18 at 1st, 2nd & 3rd trimester respectively. The maternal BMI of all the three trimester had no effect on the mean chest circumference of the new-born. However, the maternal BMI of all the three trimester was not statistically significant with chest circumference of the new-born p>0.005. Study conducted by Surekha et al showed

that the the maternal BMI showed positive association with chest circumference of the new-born with $p < 0.001$[29]

Table 37: Association of maternal height with birth weight, length, head circumference and chest circumference of new-born

In our study, association of maternal height with mean birth weight, length, head circumference and chest circumference showed no statistical significance. A study conducted by Nagmoti SA et al reported similar observation that the maternal height had no statistically significant association with birth weight, length, chest circumference and head circumference of new-born.[38]

CONCLUSION

In the present study we found positive association between maternal BMI and maternal weight with the anthropometry of new-born. But maternal height was not associated with anthropometry of new-born. Our study also showed positive association of 1^{st}& 2^{nd} trimester BMI with length of new-born, 2^{nd}& 3^{rd} trimester BMI showed significant association with head circumference of the new-born. All the three trimesters didn't showed any significance with chest circumference of the new-born.

LIMITATION

1. It was hospital based study cannot extrapolate results to the community
2. Many of the variables were collected from the record, hence may have some flaws
3. A longitudinal study would have thrown more light on the study

RECOMMENDATION

- Nutrition of the pregnant women is very important to determine the favourable anthropometric indices of the new-born
    - Achieving the goal of normal BMI for all the pregnant women right from first trimester
    - Training ASHA workers &Anganwadi workers –
        - Carrying out nutritional status assessment of Pregnant women
        - Improving the diet of the pregnant women based on BMI
    - Creating awareness about balanced diet –
        - Adolescent girls
        - Newly married women
        - Pregnant women

SUMMARY

The present study was an observational study conducted at a tertiary care centre to know the association of maternal body mass index on anthropometry of new-born. The study included 700 participants who delivered in KLE Dr Prabhakar Kore Charitable hospital. The duration of study was one year from 1st January 2017 to 31st December 2017.A pre-designed and pre-tested questionnaire was used to collect the data from the participants.

In the present study, the mean age of the study participants was 24.28 ± 3.34 years. Most of the mothers belonged to the Hindu religion (78.86%) and were from joint family (79%). The literacy status of the participants was 44%.Majority of them were from rural area i.e. 56.4% about40% and 27% belonged to class IV and class V of B.G. Prasad Socio-economic class. Majority of the participants were primigravida (44.9%), 12.1 % of the participants had bad obstetric history(abortion). Most of the participants had registered at district hospital or government health facility(90%) and majority of participants had completed 5-13 antenatal visits (67.71%).

The mean height of the study participants was 155.47 ± 7.08. With 64% of the mothers were between the height 151 and 160cm. The prevalence of short stature (<140 cm) among the study participants was 2.57%. The mean maternal weight at 1st trimester was 49.86±9.75, mean maternal weight at 2nd trimester was 52.85±9.70, and the mean maternal weight at third trimester was 51.93 ± 9.86.

The prevalence of underweight (BMI <18.5) were 32.3% in 1st trimester, 22% in 2nd trimester and 10.86% in 3rd trimester. The prevalence of obesity (BMI >30) were 2.5% in 1st trimester, 5% in 2nd trimester and 8.71% in 3rd trimester respectively.

The mean weight gain of the mothers was 6.18 ± 3.24 kg and most of the participants had weight gain less than 5 kg (49.29%).

The overall prevalence of LBW was 17.43%, out of which 0.4% was very LBW. The mean birth weight of new-born was 2.82±0.4Kg, while the mean length of the new-born is 50.57±17.6 cm, the mean head circumference of the new-born was 34.71±1.22 cm and the mean chest circumference of the new-born was 31.92±2.05 cm.

Maternal BMI at all the trimester was positively associated with the birth weight of the new-born. Maternal BMI at 1^{st} and 2^{nd} trimester was positively associated with length of new-born. 2^{nd} and 3^{rd} trimester maternal BMI was positively associated with head circumference of the new-born. However maternal BMI didn't show association with chest circumference of new-born.werecommend that nutrition of the pregnant women is very important to determine the favourable anthropometric indices of the new-born we should aim at achieving the goal of normal BMI for all the pregnant women right from first trimester. Training ASHA workers &Anganwadi workers in carrying out nutritional status assessment of Pregnant women and based on the finding counselling to improve the diet of the pregnant women.

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ANNEXURE – I– ETHICAL CLEARANCE LETTER

K.L.E.UNIVERSITY'S
JAWAHARLAL NEHRU MEDICAL COLLEGE,
NEHRU NAGAR, BELAGAVI-590010 (KARNATAKA-INDIA)
(Accredited 'A' Grade by NAAC)

Website: http//www.jnmc.edu
E-Mail : dome@jnmc.edu

Phone: (+ 91-(0)831 Office : 2471350
Principal: 2471701
Fax No. +91 (0)831 – 2470759

Ref: MDC/DOME/ 12 **Date: 17/10/2016**

To

Sub: Institutional Ethical Clearance for the study.

With reference to the above, we wish to inform you that your proposed research project titled **"EFFECT OF MATERNAL BODY MASS INDEX ON ANTHROPOMETRY OF NEWBORN – A HOSPITAL BASED STUDY",** is ethical and justifiable. The proposed research project has been cleared by the JNMC Institutional Ethics Committee on Human Subjects Research.

(Dr. Arathi Darshan)
Member Secretary
JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N.Medical College, Belagavi.

(Dr. Ganga Pilli)
Chairman,
JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N.Medical College, Belagavi.

10

ANNEXURE II – CONSENT FORM

INFORMED CONSENT

IMPACT OF MATERNAL BODY MASS INDEX ON ANTHROPPOMETRY OF NEWBORN- A HOSPITAL BASED STUDY

INVESTIGATORS- ._____

Introduction: Low birth weight (LBW) remains an unresolved important national concern in India. Twenty-nine percent of infant mortality rateis associated with LBW in India. Birth weight is closely associated with the health and survival of the newborn. The relationship between maternal malnutrition and consequent low birth weight babies and the perinatal morbidity and mortality is now an accepted fact. There is interrelation between the body physique of the mother, her nutritional status, hemoglobin levels and the anthropometry of the newborn

Objective / Purpose of the study:

You are being invited to participate in the study to assess the maternal body mass index on anthropometry of new-born. The study will be carried out in KLE Prabhakar Kore Charitable Hospital Belagavi.

Procedures:

In this study you will have to answer a few prepared questions about your socio-demography and obstetric history is obtained by pre-designed and pre-tested questionnaire. Maternal weight is weighed by weighing machine, maternal height is measured by scale hanging on wall .neonatal weight is measured by weighing scale,

neonatal height is measured by infantometer. Neonatal head circumference,chest circumference and mid-arm circumference is measured by measuring tape

Incentives:

You will not be eligible for any kind of monetary benefits or free services by virtue of your participation in the study.

Cost of participation:

You will not have any costs attached to your participation.

Legal rights:

By signing this consent form you are not waiving any of your legal rights.

Privacy and Confidentiality:

The results of the study may be published for scientific purposes. However your identity will not be revealed. All information collected will be coded so that no one other than investigator will know your identity.

Withdrawal from the study:

Participation in this study is voluntary .If you don't wish to participate in this study you will not lose benefits to which you are entitled. You can withdraw from the study anytime if you wish to do so.

Authorization to publish the results:

The researcher may use the information gathered from this study for presentation in scientific journals. However your identity will not be revealed.

Questions:

If you have any questions about rights as a research participant you can contact Dr Ganga Pilli, Chairman, JNMC Institutional Ethical Committee on Human Subjects Research on 0831-2471350.

CONSENT STATEMENT

"I have been explained all the contents of this consent form in my local language and have understood and clarified all my queries about the study to the best of my knowledge .Furthermore, I have been informed that Ihave the complete right to withdraw this consent at any point during the study. I understand that the information given by me will be confidential and will be used for research purpose only, further I am aware that the result of this research will be presented/published without disclosing any personal identification of the participants.

I hereby give my voluntary consent for participation in the study. I do sign the informed consent form in front of an eyewitness whom I recognise."

Name and Signature/left thumb impression of the participant:

Name and Signature/left thumb impression of the witness:

Name and Signature of the interviewer:

Date:

Place:

ANNEXURE-III

PROFORMA

Questionnaire

Impact of maternal BMI on anthropometry of new-born-a hospital based study.

- **Socio-demographic profile**-

Name :_____Age : _____years

Type of family:_____Address : _____

Religion : _____Caste :_____

Income:

Total income of the family:_____

Total number of family members :_____

per capita income:_____

Education:_____

Illiterate

Primary school

High school

College:

- Ante-natal history-
  a. Number of pregnancies
  b. Number of living children
  c. Any history of still birth, abortion
  d. A gap between children

     1 → 2

     2 → 3

     3 →4

- Time of registration:_____
- Place of registration:_____
- Total number of visits:_____
- TT injections 1st dose_____ 2nd dose _____ booster dose_____
- H/o of folic acid supplements taken
- H/o iron & calcium supplements taken
- Any complications during pregnancy_____
- H/o any other side effects

Mother

	1st trimester	2nd trimester	3rd trimester	Postnatal
1.Height				
2.weight				
3.BMI				
4.haemoglobin				
5.weight gain	Not applicable			Not applicable

In New-born

Parameters	
1.length	
2.weight within 1hr	
3. head circumference	
Chest circumference	
Mid arm circumference	

ANNEXURES IV - MASTER CHART

slno.	Age	type of family	Address	Religion	annual income	total number of family members	per capita income	socioeconomic status	Education	number of pregnancies	number of living children	h/o stillbirth, abortion	place of registration	total number of visits	maternal height	3rd monthWt(Kg)	7th monthWt(Kg)	9th monthWt(Kg)	1st trimester BMI	2nd trimester BMI	3rd trimester BMI	total weight gain(kg)	newborn length	newborn BW	newborn HC	newborn CC
1	25	1	1	1	2000	5	400	5	1	2	0	0	DISTRICT HOSPITAL	2	167.64	46	50	52	16	18	19	6	46	2.2	33	28
2	29	1	2	2	2000	4	500	5	2	2	0	0	DISTRICT HOSPITAL	3	160	49	53	58	19	21	23	9	42	2.8	35	30
3	21	1	1	1	4000	4	1000	4	2	1	0	0	DISTRICT HOSPITAL	2	162.5	42.5	44	49	16	17	19	6	44	3.2	35	28
4	20	2	1	1	10000	6	1667	4	3	1	0	0	DISTRICT HOSPITAL	2	158	56	59	65	22	24	26	9	47	2.5	33	26
5	27	2	1	1	10000	8	1250	4	3	1	0	0	DISTRICT HOSPITAL	2	152	68	70	74	29	30	32	6	43	2.8	36	28
6	26	2	2	3	7000	8	875	5	2	1	0	0	DISTRICT HOSPITAL	2	148	51	55	57	23	25	26	6	43	2.7	34	26
7	24	1	1	1	20000	4	5000	2	3	2	0	0	KLE	2	136	46	46.8	53	25	25	29	7	44	3	35	26
8	27	2	1	2	10000	12	833	5	2	3	0	1	DISTRICT HOSPITAL	2	158	47	52	56	19	21	22	9	41	2.3	34	28
9	19	2	2	2	5000	6	833	5	2	1	0	0	DISTRICT HOSPITAL	2	162	53	62	64	20	24	24	11	46	2.8	36	28
10	23	2	1	2	5000	10	500	5	2	1	0	0	DISTRICT HOSPITAL	1	155	53	60	68	22	25	28	15	49	2.8	37	36
11	25	2	2	1	6000	6	1000	4	2	2	0	0	DISTRICT HOSPITAL	2	154	40	51	58	17	22	24	18	43	2.8	36	32
12	23	2	1	1	2000	4	500	5	2	2	0	0	DISTRICT HOSPITAL	1	158	45	48	53	18	19	21	8	51	3.4	37	36
13	27	1	1	3	15000	4	3750	2	3	2	1	0	DISTRICT HOSPITAL	2	157.5	43	45	49	17	18	20	6	40	2.4	33	26
14	30	2	1	1	5000	7	714	5	2	1	0	0	DISTRICT HOSPITAL	2	150	57	59	64	25	26	28	7	47	3.2	37	35
15	19	2	2	1	10000	8	1250	4	3	1	0	0	DISTRICT HOSPITAL	3	155	52	54	60	22	22	25	8	49	3.3	37	36
16	23	1	2	1	10000	4	2500	3	2	2	0	0	DISTRICT HOSPITAL	2	160	59	62	65	23	24	25	6	45	2.7	35	34
17	26	2	1	1	10000	7	1429	4	3	1	0	0	DISTRICT HOSPITAL	1	157.5	54	58	62	22	23	25	8	45	2.5	35	34
18	24	2	1	1	8000	6	1333	4	3	1	0	0	DISTRICT HOSPITAL	2	155	52	54	56	22	22	23	4	48	2.5	33	28
19	23	1	2	1	3000	4	750	5	3	2	0	0	DISTRICT HOSPITAL	2	162.5	55	60	60	21	23	23	5	43	3.5	35	33
20	30	1	1	1	9000	5	1800	4	2	3	2	0	DISTRICT HOSPITAL	1	155	44	45	46	18	19	19	2	40	2.4033	33	32
21	21	1	1	1	6000	6	1000	4	3	2	0	0	DISTRICT HOSPITAL	2	152.3	41	46	48	18	20	21	7	46	2.6	35	32
22	21	2	2	1	10000	8	1250	4	3	2	0	0	DISTRICT HOSPITAL	2	157.6	38	45	47	15	18	19	9	46	2.3	34	31
23	22	2	2	3	20000	9	2222	3	2	1	0	0	DISTRICT HOSPITAL	2	152.3	42	50	55	18	22	24	13	47	3.6	35	32
24	22	2	2	1	2000	5	400	5	2	1	0	0	DISTRICT HOSPITAL	2	160	44	45.7	49.7	17	18	19	6	44	2.4	35	31
25	22	2	2	1	5000	9	556	5	2	2	1	0	DISTRICT HOSPITAL	2	158	42	50	52	19	20	21	10	49	2.5	35	33
26	21	2	2	1	1500	4	375	5	2	2	0	0	DISTRICT HOSPITAL	2	145	54	59	60	26	28	29	6	50	2.8	36	35
27	24	2	1	1	2000	11	182	5	2	2	0	0	DISTRICT HOSPITAL	2	165.1	40	42	47	15	15	17	7	48	3.6	35	32
28	20	2	2	1	25000	9	2778	3	3	1	0	0	DISTRICT HOSPITAL	2	167.1	67	68	70	25	26	24	3	55	3.2	35	34
29	24	2	1	1	5000	4	1250	4	3	1	0	0	DISTRICT HOSPITAL	2	165.1	55	55	61	20	20	22	6	45	2.9	35	33
30	19	2	1	1	10000	6	1667	4	1	1	0	0	DISTRICT HOSPITAL	2	162.5	37	40	42	14	15	16	5	45	2.3	33	29
31	20	2	2	1	5000	9	556	5	2	1	0	0	DISTRICT HOSPITAL	2	160	47	48	52	18	19	20	5	52	2.2	33	31
32	20	2	1	1	10000	6	1667	4	3	1	0	0	DISTRICT HOSPITAL	2	157.5	47	50	58	20	19	19	11	47	3.1	35	32
33	24	2	1	1	10000	9	1111	4	3	1	0	0	DISTRICT HOSPITAL	2	134.6	40	46.2	48	22	26	26	8	51	2.2	35	34
34	25	1	2	1	10000	6	1667	4	3	3	2	1	DISTRICT HOSPITAL	2	160	47	48	49	18	19	19	2	51	3.4	35	34

35	20	2	2	1	4000	4	1000	4	3	1	0	0	DISTRICT HOSPITAL	2	157.5	40	43	46	16	17	19	6	45	2.9	35	34
36	32	2	2	1	10000	8	1250	4	2	3	2	1	DISTRICT HOSPITAL	2	155	61	65	66	25	27	27	5	48	3.8	35	31
37	24	2	1	1	4000	9	444	5	3	2	0	1	DISTRICT HOSPITAL	2	165.1	40	50	59	15	18	22	19	48	1.5	33	28
38	25	2	1	1	2000	6	333	5	3	2	0	1	DISTRICT HOSPITAL	2	167.1	58	63	65	21	23	23	7	51	2.9	36	35
39	21	2	2	2	6000	10	600	5	3	2	1	1	DISTRICT HOSPITAL	2	157.5	41	47	52	17	19	21	11	53	3.5	37	36
40	22	2	2	1	3000	9	333	5	1	1	0	0	DISTRICT HOSPITAL	2	160	40	42	47	16	16	18	7	48	2.5	34	31
41	21	2	1	1	5000	8	625	5	3	1	0	0	DISTRICT HOSPITAL	2	159	46	49	55	19	18	22	9	50	3.8	34	30
42	29	1	1	1	8000	3	2667	3	3	2	1	1	DISTRICT HOSPITAL	2	167.1	47	50	56	17	18	20	9	48	2.8	35	28
43	25	2	2	2	4000	12	333	5	2	3	0	0	DISTRICT HOSPITAL	2	160	72	73	74	28	29	29	2	52	3.2	36	34
44	20	1	2	1	7000	2	3500	2	3	1	0	0	DISTRICT HOSPITAL	3	157.5	40	52	59	16	21	24	19	47	2.5	34	33
45	21	2	2	1	2000	10	200	5	3	1	0	0	DISTRICT HOSPITAL	2	160	60	64	68	23	25	27	8	52	3.3	36	34
46	20	1	1	1	3000	2	1500	4	0	1	0	0	DISTRICT HOSPITAL	2	160	51	62	64	20	24	25	13	43	2.4	35	34
47	23	2	2	2	20000	5	4000	2	2	1	0	0	DISTRICT HOSPITAL	2	160	52	60	61	20	23	24	9	47	2.5	33	31
48	24	1	1	2	4000	3	1333	4	2	2	0	0	DISTRICT HOSPITAL	3	139.7	43	46	49	22	24	25	6	43	2.3	34	31
49	21	2	1	1	10000	4	2500	3	3	1	0	0	DISTRICT HOSPITAL	3	155	44	46	53	18	19	22	9	47	2.9	35	33
50	27	2	2	1	2500	5	500	5	2	1	0	0	DISTRICT HOSPITAL	2	167.1	41	44	47	15	17	17	6	47	2.7	35	33
51	23	1	1	3	10000	4	2500	3	3	1	0	0	DISTRICT HOSPITAL	2	162.5	46.9	51	52	18	19	20	5	51	2.5	35	33
52	25	2	2	1	1000	4	250	5	2	2	1	0	DISTRICT HOSPITAL	2	152.3	51	53	55	22	23	24	4	49	2.9	35	34
53	19	2	1	1	3000	11	273	5	1	1	0	0	DISTRICT HOSPITAL	3	152.3	50	56	62	22	24	27	12	48	2.5	35	33
54	21	2	1	1	8000	6	1333	4	2	3	0	0	DISTRICT HOSPITAL	2	152.3	40	45	53	17	19	23	13	46	2.8	37	35
55	25	2	2	1	2000	4	500	5	3	1	0	0	DISTRICT HOSPITAL	2	160	50	51	59	20	20	23	9	51	3.6	37	34
56	26	1	1	1	15000	2	7500	1	3	1	0	0	KLE	3	155	54	56	58	22	23	24	4	50	2.5	35	31
57	22	2	2	1	3000	10	300	5	3	2	0	0	DISTRICT HOSPITAL	2	145	38	42.6	45	18	20	21	7	48	2.9	35	34
58	25	1	1	1	3000	4	750	5	2	2	1	0	DISTRICT HOSPITAL	2	160	40	42	50	16	16	20	10	48	2.8	35	34
59	24	2	1	1	5000	4	1250	4	1	2	0	0	DISTRICT HOSPITAL	3	160	80	83	85	31	32	33	5	48	3.1	34	31
60	23	2	1	1	10000	5	2000	3	3	1	0	0	DISTRICT HOSPITAL	2	152.3	38	41	46	16	18	20	8	51	2.8	35	34
61	33	1	2	2	5000	7	714	5	3	3	0	0	DISTRICT HOSPITAL	2	157.5	56	58	59	23	23	24	3	53	2.8	36	28
62	26	1	2	1	3000	2	1500	4	2	2	1	0	DISTRICT HOSPITAL	3	157.5	49	50	60	20	20	24	11	48	3.1	34	33
63	20	2	2	1	6000	7	857	5	3	1	0	0	DISTRICT HOSPITAL	2	140	34	37	39	17	19	20	5	48	2.5	36	33
64	30	1	2	1	16000	4	4000	2	3	2	0	1	DISTRICT HOSPITAL	3	157.5	60	67	71.3	24	27	29	11.3	46	2.4	35	33
65	24	1	2	1	5000	3	1667	4	2	2	1	0	DISTRICT HOSPITAL	3	157.5	43	46	48	17	19	19	5	49	2.7	36	33
66	23	2	2	1	7000	5	1400	4	3	1	0	0	DISTRICT HOSPITAL	2	162.5	44	48	53	17	18	20	9	46	2.6	35	33
67	21	2	1	1	30000	5	6000	2	3	1	0	0	KLE	3	152.3	43	48	50	19	21	22	7	47	2.5	35	34
68	28	2	1	1	10000	6	1667	4	3	1	0	0	DISTRICT HOSPITAL	2	152	48	53	58	21	23	25	10	49	2.9	35	33
69	21	2	1	2	5000	10	500	5	2	2	0	0	DISTRICT HOSPITAL	2	148	45	48	49	21	21	22	4	47	3.5	35	34
70	19	2	2	1	8000	6	1333	4	3	1	0	0	DISTRICT HOSPITAL	3	165.1	49	54	56	18	20	21	7	47	2.9	37	36
71	29	1	2	1	20000	3	6667	1	3	2	1	0	PRIVATE	2	150	50	53	59	22	24	26	9	46	2.5	32	30
72	22	2	1	1	5500	6	917	5	2	1	0	0	DISTRICT HOSPITAL	2	160	54	57	61	21	22	24	7	47	2.3	35	34
73	19	2	2	1	20000	4	5000	2	3	1	0	0	KLE	2	162.5	65	70	75	25	27	28	10	46	2.9	36	34
74	21	2	2	1	9000	4	2250	3	3	1	0	0	DISTRICT HOSPITAL	3	144.75	38	40	44	18	19	21	6	46	2.8	37	34
75	25	1	2	1	5000	4	1250	4	3	2	1	0	DISTRICT HOSPITAL	2	160	48	52	55	19	20	21	7	52	3.7	36	31
76	23	2	1	1	4000	10	400	5	2	2	1	0	DISTRICT HOSPITAL	2	154	48	52	61	20	22	26	13	50	3.2	37	36
77	26	2	1	1	7000	6	1167	4	3	1	0	0	DISTRICT HOSPITAL	2	152.3	45	51	54	19	22	23	9	48	2.4	34	32
78	28	2	1	1	10000	4	2500	3	2	1	0	0	DISTRICT HOSPITAL	2	157.5	44	46	49	18	19	20	5	46	2.4	33	28
79	25	2	2	1	10000	5	2000	3	2	2	1	0	DISTRICT HOSPITAL	2	150	54	55	59	24	25	26	5	49	3.1	36	34
80	21	2	2	1	5000	4	1250	4	3	1	0	0	DISTRICT HOSPITAL	1	164	48	51	55	18	19	20	7	52	3	36	32

81	27	2	1	1	6000	8	750	5	3	2	1	0	DISTRICT HOSPITAL	3	152.3	67	70	73	29	30	31	6	57	3	35	32
82	30	2	2	2	4000	7	571	5	2	3	1	0	DISTRICT HOSPITAL	2	129.5	67	71	72	40	42	43	5	53	3.1	37	34
83	20	2	2	1	600	6	100	5	3	1	0	0	DISTRICT HOSPITAL	2	154	42	43	45	18	18	19	3	48	2.5	35	33
84	25	2	1	1	2000	15	133	5	2	1	0	0	DISTRICT HOSPITAL	2	144.7	40	41	46	19	20	22	6	47	2.7	34	32
85	22	1	1	1	5000	5	1000	4	3	2	1	0	DISTRICT HOSPITAL	2	160	54.3	58	64	21	23	25	10	53	3.4	37	36
86	21	2	1	1	10000	6	1667	4	3	1	0	0	DISTRICT HOSPITAL	3	157.5	41	42	52	17	17	21	11	50	2.4	33	31
87	24	2	2	1	5000	6	833	5	2	3	1	0	DISTRICT HOSPITAL	2	162	58	62	64	22	24	24	6	49	3.7	36	35
88	23	1	2	1	10000	3	3333	2	2	1	0	0	DISTRICT HOSPITAL	2	162.5	45	49	50	17	19	19	5	47	2.9	36	35
89	20	2	2	1	5000	8	625	5	2	1	0	0	DISTRICT HOSPITAL	2	128	35	36	37	21	22	23	2	49	3.1	35	33
90	27	2	1	2	6000	4	1500	4	2	2	1	0	DISTRICT HOSPITAL	2	152.3	55	56	58	24	24	25	3	49	2.4	33	30
91	20	1	2	1	10000	3	3333	2	2	1	0	0	DISTRICT HOSPITAL	2	160	46	48	51	18	19	20	5	50	2	37	35
92	30	2	2	2	20000	5	4000	2	2	3	1	0	DISTRICT HOSPITAL	3	157.5	48	49	51	19	20	21	3	50	3.2	35	33
93	22	2	1	1	3000	7	429	5	3	2	1	0	DISTRICT HOSPITAL	2	148	50	60	65	23	27	30	15	51	3.1	36	34
94	28	2	2	1	5000	7	714	5	2	2	1	1	DISTRICT HOSPITAL	2	142.25	50	53	57	25	26	28	7	48	2.4	34	31
95	21	2	2	1	4000	4	1000	4	3	1	0	0	DISTRICT HOSPITAL	2	157.5	45	46	49	18	19	20	4	48	2.8	34	32
96	22	2	2	1	3000	6	500	5	3	1	0	0	DISTRICT HOSPITAL	2	147	42	45	50	19	21	23	8	52	2.4	33	31
97	22	2	1	1	8000	5	1600	4	2	2	0	1	DISTRICT HOSPITAL	3	155	42	43	48	17	18	20	6	47	4.2	36	35
98	20	2	2	1	5000	7	714	5	2	1	0	0	DISTRICT HOSPITAL	2	138	44	45	52	23	24	27	8	49	2.8	37	34
99	30	2	1	1	3000	7	429	5	2	2	1	1	DISTRICT HOSPITAL	2	150	45	50	57	20	22	25	12	50	2.9	36	35
100	22	2	1	1	10000	4	2500	3	2	2	1	0	DISTRICT HOSPITAL	2	160	56	63	66	22	25	26	10	48	2.9	36	35
101	25	2	2	1	10000	8	1250	4	3	2	1	1	DISTRICT HOSPITAL	2	146	42	45	48	20	21	23	6	46	2.9	35	34
102	22	2	1	1	5000	8	625	5	3	1	0	0	DISTRICT HOSPITAL	2	160	48	49	57	19	19	22	9	51	2.8	33	28
103	24	2	1	2	15000	8	1875	4	3	2	1	0	DISTRICT HOSPITAL	2	157.5	61	65	72	25	26	29	11	48	2.6	36	34
104	23	2	1	1	5000	4	1250	4	2	2	1	0	DISTRICT HOSPITAL	2	162.5	55	58	59	21	22	22	4	52	2.9	36	35
105	23	2	2	1	7000	12	583	5	2	2	1	0	DISTRICT HOSPITAL	2	154	51	52	54	22	22	23	3	50	2.8	35	34
106	20	2	1	1	7000	5	1400	4	3	1	0	0	DISTRICT HOSPITAL	3	155	64	69	70	27	29	29	6	52	2.8	33	30
107	25	2	1	1	8000	5	1600	4	2	1	0	1	DISTRICT HOSPITAL	2	142.25	41	44	47	20	22	23	6	50	2.6	36	35
108	24	2	1	1	15000	6	2500	3	3	1	0	1	DISTRICT HOSPITAL	3	160	40	42	43	16	16	17	3	50	2.7	35	33
109	26	2	2	1	5000	4	1250	4	2	2	1	0	DISTRICT HOSPITAL	2	152.3	38	40	47	16	17	20	9	48	2.7	32	31
110	20	2	2	1	10000	5	2000	3	1	1	0	0	DISTRICT HOSPITAL	3	160	44	46	53	17	18	21	9	50	3	36	34
111	20	2	1	1	1000	6	167	5	2	2	1	0	DISTRICT HOSPITAL	3	155	44	46	48	18	19	20	4	50	2.7	34	33
112	21	1	1	1	10000	3	3333	2	3	1	0	0	DISTRICT HOSPITAL	2	152	51	56	68	22	24	29	17	51	3.3	35	33
113	31	1	2	1	12000	3	4000	2	3	1	0	0	DISTRICT HOSPITAL	2	170.12	53	55	57	18	19	20	4	48	2.5	34	32
114	19	1	1	1	5000	7	714	5	3	1	0	0	DISTRICT HOSPITAL	3	155	43	48	50	18	20	21	7	54	3.2	35	34
115	22	2	2	1	3000	4	750	5	3	2	1	0	DISTRICT HOSPITAL	2	160	35	37	45	14	14	18	10	49	2.4	34	31
116	22	2	2	1	8000	4	2000	3	2	2	0	1	DISTRICT HOSPITAL	3	155	42	43	48	17	18	20	6	50	2.7	34	32
117	25	2	1	1	7000	12	583	5	2	2	1	0	DISTRICT HOSPITAL	3	157.5	45	51	53	18	21	21	8	48	3.9	35	33
118	25	2	1	1	2000	5	400	5	3	2	1	0	DISTRICT HOSPITAL	2	155	45	56	57	19	23	24	12	54	2.7	35	32
119	25	2	1	1	2000	4	500	5	2	2	1	0	DISTRICT HOSPITAL	2	167.6	53	56	60	19	20	21	7	48	2.6	35	31
120	23	1	1	2	6000	3	2000	3	1	1	0	0	DISTRICT HOSPITAL	3	160	53	55	61	21	21	24	8	53	3.6	36	35
121	18	2	2	2	5000	8	625	5	2	2	1	0	DISTRICT HOSPITAL	2	165.1	65	65	67	24	24	25	2	54	2.7	36	34
122	26	1	2	2	1000	3	333	5	2	1	0	1	DISTRICT HOSPITAL	3	152.3	60	62	64	26	27	28	4	53	2.8	33	32
123	20	2	2	1	8000	5	1600	4	3	1	0	0	DISTRICT HOSPITAL	2	152	53	54	62.2	23	23	27	9	52	3.1	34	33
124	32	1	1	1	4000	3	1333	4	2	3	1	0	DISTRICT HOSPITAL	2	155	61	62	63	25	26	26	2	48	2.7	33	28
125	24	2	1	1	5000	6	833	5	2	2	1	1	DISTRICT HOSPITAL	2	155	57	60	62	24	25	26	5	53	2.9	38	31
126	20	2	1	1	20000	4	5000	2	3	1	0	0	KLE	2	152.3	51	55	59	22	24	25	8	50	2.9	34	32

127	23	1	2	1	8000	3	2667	3	2	2	1	0	DISTRICT HOSPITAL	3	157.5	52	56	58	21	23	23	6	48	2.9	35	34
128	21	2	1	1	7000	3	2333	3	2	1	0	0	DISTRICT HOSPITAL	2	162.5	58	59	60	22	22	23	2	52	2.6	34	33
129	24	2	2	1	10000	7	1429	4	2	1	0	0	DISTRICT HOSPITAL	2	162.5	65	69	73	25	26	28	8	52	3.5	36	34
130	21	2	1	1	20000	4	5000	2	3	1	0	0	KLE	3	157.5	50	53	55	20	21	22	5	48	2.1	33	31
131	24	1	2	1	10000	2	5000	2	3	1	0	0	PRIVATE	3	155	50	56	63	21	23	26	13	51	2.4	37	34
132	22	2	1	1	8000	6	1333	4	2	1	0	0	DISTRICT HOSPITAL	2	159	47	55	56	19	22	22	9	48	2.7	35	32
133	20	2	1	1	3000	8	375	5	2	1	0	0	DISTRICT HOSPITAL	2	135	50	54	58	27	30	32	8	51	2.8	35	34
134	21	1	2	1	2000	4	500	5	2	1	0	0	DISTRICT HOSPITAL	2	155	51	54	62.1	21	22	26	11	53	3	36	34
135	20	2	2	1	3000	6	500	5	2	1	0	0	DISTRICT HOSPITAL	3	160	49	51	54	32	19	20	5	52	2.4	34	33
136	23	2	1	1	8000	6	1333	4	3	3	1	0	DISTRICT HOSPITAL	3	162.3	72	78	84	27	30	32	12	53	3.3	37	34
137	24	2	2	1	9000	11	818	5	2	2	1	0	DISTRICT HOSPITAL	2	142	38	40	41	19	20	20	3	49	2.8	35	31
138	25	2	2	1	15000	12	1250	4	3	1	0	0	DISTRICT HOSPITAL	2	153	45	46	48	19	20	21	3	52	3.2	36	35
139	24	2	1	1	11000	3	3667	2	3	1	0	0	DISTRICT HOSPITAL	3	162.5	65	67	72	25	25	27	7	51	3.5	36	34
140	23	2	1	1	12000	5	2400	3	2	1	0	0	DISTRICT HOSPITAL	2	155	58	66	77	24	27	32	19	52	2.8	36	34
141	22	2	2	1	5000	5	1000	4	2	2	1	0	DISTRICT HOSPITAL	3	152.3	48	49	51	21	21	22	3	50	3.4	37	36
142	27	2	2	1	15000	8	1875	4	3	1	0	1	DISTRICT HOSPITAL	2	157	53	60	61	22	24	25	8	52	2.9	36	35
143	26	1	1	1	24000	5	4800	2	Ded	2	1	0	DISTRICT HOSPITAL	2	157.5	64	66	68	26	27	27	4	48	2.5	35	32
144	26	2	1	1	5000	7	714	5	3	1	0	0	DISTRICT HOSPITAL	3	157.5	53	58	60	21	23	24	7	51	2.4	35	30
145	26	2	2	1	3000	5	600	5	2	2	1	0	DISTRICT HOSPITAL	2	172.75	68	72	76	23	24	25	8	52	3.6	36	34
146	25	2	1	1	2000	7	286	5	2	2	1	0	DISTRICT HOSPITAL	2	160	45	50	51	18	20	20	6	52	3.5	36	34
147	22	2	1	1	11000	9	1222	4	3	2	1	0	DISTRICT HOSPITAL	3	154	32	44	47	16	17	20	15	52	2.4	34	31
148	24	2	2	1	5000	4	1250	4	3	1	0	0	DISTRICT HOSPITAL	2	152.3	38	40	46	16	17	20	8	51	2.2	33	28
149	20	2	2	1	3000	5	600	5	2	1	0	0	DISTRICT HOSPITAL	2	162	45	50	56	17	19	21	11	48	2.5	33	31
150	29	2	1	1	15000	12	1250	4	3	2	1	1	DISTRICT HOSPITAL	2	166	42	45	47	15	16	17	5	48	2.5	33	31
151	25	2	2	1	8000	4	2000	3	2	1	0	0	DISTRICT HOSPITAL	2	154	42	46	48	18	19	20	6	48	2.5	35	33
152	23	2	1	1	10000	5	2000	3	3	2	1	0	DISTRICT HOSPITAL	2	157.5	38	39	42	15	16	17	4	53	2.3	35	31
153	28	2	1	2	8000	7	1143	4	3	2	1	0	DISTRICT HOSPITAL	2	160	66	67	70	26	26	27	4	54	3	36	34
154	22	2	2	1	10000	3	3333	2	3	1	0	0	DISTRICT HOSPITAL	2	152.3	38	41	45	16	18	19	7	54	2.4	34	30
155	20	2	2	1	5000	5	1000	4	3	1	0	0	DISTRICT HOSPITAL	3	104	46	47	49	43	43	45	3	46	2.5	33	32
156	24	2	2	1	3000	5	600	5	5	2	1	0	DISTRICT HOSPITAL	3	157.5	54	55	58	22	22	23	4	50	2.6	34	31
157	24	2	1	2	9000	13	692	5	4	3	0	0	DISTRICT HOSPITAL	3	160	51	53	60	20	21	23	9	53	2.8	34	33
158	30	1	1	1	6000	4	1500	4	2	2	1	0	DISTRICT HOSPITAL	2	152.3	46	47	49	20	20	21	3	53	3.2	35	33
159	29	1	2	1	6000	7	857	5	2	5	4	1	DISTRICT HOSPITAL	2	165.1	55	56	58	20	21	21	3	55	2.9	37	33
160	37	2	1	1	3000	4	750	5	2	2	1	0	DISTRICT HOSPITAL	2	155	48	51	56	20	21	23	8	52	2.8	35	34
161	21	2	2	1	8000	8	1000	4	3	1	0	0	DISTRICT HOSPITAL	2	153	47	48	51	20	21	22	4	49	2.5	34	32
162	23	2	1	1	10000	4	2500	3	3	1	0	0	DISTRICT HOSPITAL	2	162.5	55	57	58	21	22	22	3	51	2.75	35	33
163	23	1	1	1	10000	4	2500	3	3	2	1	0	DISTRICT HOSPITAL	2	156	60	65	68	25	27	28	8	52	3.2	35	34
164	29	2	2	1	5000	4	1250	4	3	1	0	0	DISTRICT HOSPITAL	2	151	44	50	52	19	22	23	8	49	2.8	37	33
165	27	2	2	1	10000	4	2500	3	3	1	0	0	DISTRICT HOSPITAL	2	165.12	59	62	67	22	23	25	8	53	2.5	35	34
166	25	2	2	1	10000	5	2000	3	1	2	1	0	DISTRICT HOSPITAL	3	144	51	54	57	25	26	27	6	50	2.9	35	34
167	23	2	2	1	10000	5	2000	3	3	1	1	0	DISTRICT HOSPITAL	2	160	56	58	60	22	23	23	4	54	2.8	35	33
168	25	2	2	1	8000	3	2667	3	4	1	0	0	DISTRICT HOSPITAL	3	142.25	48	50	52	24	25	26	4	50	2.9	36	33
169	20	2	2	1	2000	4	500	5	4	1	0	0	DISTRICT HOSPITAL	2	150	55	58	59	24	26	26	4	48	2.45	33	31
170	24	2	2	1	5000	4	1250	4	3	1	0	0	DISTRICT HOSPITAL	2	157.5	41	46	48	17	19	19	7	46	2.5	34	33
171	25	2	1	1	1000	5	200	5	3	2	1	0	DISTRICT HOSPITAL	2	145	45	49	50	21	23	24	5	47	2.5	33	32
172	25	2	2	1	10000	4	2500	3	4	2	1	0	DISTRICT HOSPITAL	2	170.12	51	53	56	18	18	19	5	51	2.6	34	33

173	24	2	1	2	8000	7	1143	4	3	2	1	0	DISTRICT HOSPITAL	3	155	46	50	52	19	21	22	6	51	3.2	34	33
174	21	1	1	1	8000	3	2667	3	4	1	0	0	DISTRICT HOSPITAL	1	152	51	56	68	22	24	29	17	54	3.3	35	31
175	20	2	1	1	4000	8	500	5	2	1	0	0	DISTRICT HOSPITAL	2	155	46	49	52	19	20	22	6	50	3	35	33
176	24	2	2	1	10000	4	2500	3	3	3	1	0	DISTRICT HOSPITAL	2	157.5	50	51	55	20	21	22	5	51	3.6	36	33
177	29	2	1	1	5000	10	500	5	1	3	0	0	DISTRICT HOSPITAL	2	153	58	59	66	25	25	28	8	55	2.5	36	33
178	28	1	2	1	15000	3	5000	2	5	1	0	0	PRIVATE	2	162.5	56	59	61	21	22	23	5	50	3	35	34
179	23	2	2	1	10000	5	2000	3	4	1	0	0	DISTRICT HOSPITAL	2	149	64	65	70	29	29	32	6	46	2.6	33	29
180	21	2	2	1	30000	6	5000	2	5	1	0	0	PRIVATE	2	157	45.9	50	53	19	20	22	7	56	3.5	38	33
181	22	2	2	1	8000	4	2000	3	2	2	1	0	DISTRICT HOSPITAL	2	149	34	35	42	15	16	19	8	50	3.2	35	33
182	24	2	2	1	5000	7	714	5	2	2	1	0	DISTRICT HOSPITAL	1	155	36	39	42	15	16	17	6	51	2.4	34	31
183	22	2	2	1	10000	6	1667	4	3	2	1	0	DISTRICT HOSPITAL	2	160	53	63	65	21	25	25	12	51	2.7	36	33
184	29	2	2	1	3000	6	500	5	3	2	1	0	DISTRICT HOSPITAL	2	157.5	66	67	69	27	27	28	3	51	2.2	34	30
185	26	1	2	1	20000	5	4000	2	5	2	1	0	DISTRICT HOSPITAL	2	165	48	52	54	18	19	20	6	54	2.1	35	30
186	21	2	2	1	10000	6	1667	4	5	1	0	0	DISTRICT HOSPITAL	2	152.3	48	50	53	21	22	23	5	51	3.1	36	35
187	25	1	1	1	9000	4	2250	3	2	3	0	0	DISTRICT HOSPITAL	2	160	35	44	46	14	17	18	11	46	2.5	34	31
188	24	2	1	1	10000	8	1250	4	4	1	0	0	DISTRICT HOSPITAL	1	142.25	44	46	47	22	23	23	3	51	2.6	35	31
189	23	2	1	1	6000	2	3000	2	3	2	1	0	DISTRICT HOSPITAL	2	144	42	43	48	20	21	23	6	52	2.7	35	31
190	27	2	2	1	3000	2	1500	4	3	2	1	0	DISTRICT HOSPITAL	2	152.3	65	67	70	28	29	30	5	54	2.9	37	33
191	21	2	2	1	5000	6	833	5	3	1	0	0	DISTRICT HOSPITAL	2	160	51	54	55	20	21	21	4	53	2.9	35	34
192	22	2	1	2	5000	5	1000	4	2	2	1	0	DISTRICT HOSPITAL	2	160	42	45	48	16	18	19	6	52	2.48	33	31
193	28	2	2	1	5000	4	1250	4	2	1	0	0	DISTRICT HOSPITAL	2	162.5	61	65.7	68.7	23	25	26	8	50	2.69	35	33
194	23	1	2	1	5000	2	2500	3	4	1	0	0	DISTRICT HOSPITAL	2	160	56	57	60	22	22	23	4	50	2.58	35	33
195	23	2	1	1	8000	7	1143	4	3	2	1	0	DISTRICT HOSPITAL	2	160	57	60	61	22	23	24	4	50	2.8	35	31
196	27	2	1	2	15000	11	1364	4	3	3	0	0	DISTRICT HOSPITAL	2	154	51	53	61	22	22	26	10	52	2.3	33	28
197	19	2	2	1	4000	5	800	5	3	1	0	0	DISTRICT HOSPITAL	1	158	54	58	63	22	23	25	9	54	3.3	35	33
198	25	2	2	1	5000	4	1250	4	3	1	0	0	DISTRICT HOSPITAL	1	142.25	43	44.7	45	21	22	22	2	53	2.2	34	30
199	21	2	1	2	4000	6	667	5	3	1	0	0	DISTRICT HOSPITAL	2	162.5	55	58	59	21	22	22	4	54	2.7	35	34
200	23	2	2	1	2000	11	182	5	3	2	1	0	DISTRICT HOSPITAL	1	157.5	50	59	62	20	24	25	12	50	2.7	34	33
201	19	2	2	1	1000	10	100	5	3	1	0	0	DISTRICT HOSPITAL	2	152.37	36	37	40	16	16	17	4	52	3.7	34	32
202	21	2	2	1	8000	5	1600	4	2	1	0	0	DISTRICT HOSPITAL	1	155	43	46	48	18	19	20	5	51	2.4	35	33
203	22	2	2	1	10000	7	1429	4	3	1	0	0	DISTRICT HOSPITAL	2	161	37	38	45	14	15	17	8	48	1.7	32	28
204	30	2	1	1	3000	3	1000	4	1	1	0	0	DISTRICT HOSPITAL	2	151	49	50	51	21	22	22	2	54	3	33	31
205	21	2	1	1	14000	4	3500	2	4	1	0	0	DISTRICT HOSPITAL	2	157.5	44	48	53	18	19	21	9	51	2.9	34	33
206	22	2	1	1	7000	5	1400	4	3	2	1	0	DISTRICT HOSPITAL	1	160	48	49	50	19	19	20	2	56	3	35	34
207	23	2	2	1	10000	6	1667	4	3	1	0	1	DISTRICT HOSPITAL	2	140	55	56	57	28	29	29	2	54	2.4	34	32
208	27	2	1	1	6000	15	400	5	3	1	0	0	DISTRICT HOSPITAL	2	160	44	47	51	22	24	26	7	53	3.9	35	32
209	22	2	1	1	8000	4	2000	3	3	2	1	0	DISTRICT HOSPITAL	1	148	40	44	47	18	20	21	7	52	2.4	34	33
210	29	2	2	1	5000	6	833	5	4	2	1	0	DISTRICT HOSPITAL	2	156	65	67	69	27	28	28	4	50	3.5	36	33
211	20	2	2	1	13000	5	2600	3	2	1	0	0	DISTRICT HOSPITAL	2	152.37	39	43	45	17	19	19	6	50	2.4	35	31
212	23	2	2	1	3000	7	429	5	3	3	0	0	DISTRICT HOSPITAL	2	154	44	46	48	19	19	20	4	48	2.4	33	30
213	25	2	1	1	20000	5	4000	2	3	2	1	0	DISTRICT HOSPITAL	2	162.5	53	59	69	20	22	26	16	52	3.2	35	34
214	24	2	1	1	8000	4	2000	3	5	1	0	0	DISTRICT HOSPITAL	2	160	45	48	52	18	19	20	7	53	2.6	34	31
215	22	2	2	1	10000	5	2000	3	5	2	1	0	DISTRICT HOSPITAL	2	150	46	53	54	20	24	24	8	50	3.3	36	34
216	38	2	1	1	5000	3	1667	4	1	1	0	0	DISTRICT HOSPITAL	2	155	56	58	59	23	24	25	3	51	2.6	36	34
217	26	2	2	1	15000	7	2143	3	4	2	1	0	DISTRICT HOSPITAL	2	144.75	45	50	52	21	24	25	7	52	2.9	36	34
218	26	2	2	1	8000	8	1000	4	5	2	1	0	DISTRICT HOSPITAL	2	153	61	62	73	26	26	31	12	52	2.9	36	34

219	25	2	2	1	10000	5	2000	3	3	2	1	1	DISTRICT HOSPITAL	2	145	57	58	60	27	28	29	3	48	2.5	34	32
220	28	1	2	1	5000	3	1667	4	1	2	1	0	DISTRICT HOSPITAL	2	148	47	49	55	21	22	25	8	52	3.7	35	31
221	26	2	2	1	5000	6	833	5	3	2	1	0	DISTRICT HOSPITAL	3	155	43	47	50	18	20	21	7	52	2.8	35	34
222	20	2	1	1	3000	6	500	5	3	2	1	0	DISTRICT HOSPITAL	2	157.5	46	49	51	19	20	21	5	54	2.4	35	31
223	21	2	2	1	5000	10	500	5	3	1	0	1	DISTRICT HOSPITAL	2	162.5	53	57	63	20	22	24	10	48	2.4	34	31
224	20	2	1	1	5000	11	455	5	3	1	0	1	DISTRICT HOSPITAL	2	144.75	45	46	50	21	22	24	5	53	2.4	33	28
225	23	2	2	1	2000	4	500	5	2	2	1	0	DISTRICT HOSPITAL	3	157.5	40	44	48	16	18	19	8	52	2.9	35	33
226	23	2	2	1	2000	20	100	5	2	1	0	1	DISTRICT HOSPITAL	2	160	45	46	47	18	18	18	2	52	3.3	34	31
227	25	2	2	3	5000	10	500	5	2	2	1	0	DISTRICT HOSPITAL	2	157.5	40	45	49	16	18	20	9	50	2.4	35	34
228	28	2	1	1	3000	4	750	5	1	3	1	1	DISTRICT HOSPITAL	3	160	39	42	45	15	16	18	6	48	2.9	36	35
229	22	2	1	1	8000	7	1143	4	2	1	0	0	DISTRICT HOSPITAL	2	152.37	45	47	51	19	20	22	6	48	2.4	35	31
230	20	2	2	3	5000	5	1000	4	3	1	0	0	DISTRICT HOSPITAL	2	157.5	79	81	86	32	33	35	7	49	2.7	34	31
231	27	2	2	1	3000	6	500	5	3	3	0	0	DISTRICT HOSPITAL	3	150	66	69	73	29	31	32	7	53	3.1	34	32
232	28	1	2	1	10000	2	5000	2	3	1	0	0	PRIVATE	3	145	47	49	50.8	22	23	24	3.8	48	1.4	33	28
233	23	2	2	1	6000	6	1000	4	2	3	0	0	DISTRICT HOSPITAL	3	152.37	53	55	60	23	24	26	7	53	2.6	35	34
234	19	2	2	1	5000	5	1000	4	3	1	0	0	DISTRICT HOSPITAL	2	167.62	44	49	50	16	17	18	6	48	1.6	31	28
235	29	2	2	1	6000	6	1000	4	3	2	1	0	DISTRICT HOSPITAL	2	150	38	41	44	17	18	20	6	48	2.6	33	28
236	26	1	2	1	10000	3	3333	2	2	2	1	0	DISTRICT HOSPITAL	3	144.75	50	55	61	24	26	29	11	56	2.9	37	36
237	24	2	1	1	15000	4	3750	2	Ded	1	0	0	DISTRICT HOSPITAL	2	165.12	48	49	50	18	18	18	2	47	2.6	33	29
238	21	2	2	3	10000	7	1429	4	3	1	0	0	DISTRICT HOSPITAL	2	157.5	47	51	53	19	21	21	6	51	2.8	35	33
239	22	2	2	1	1000	3	333	5	1	2	1	0	DISTRICT HOSPITAL	2	157.5	52	53	56	21	21	23	4	51	3.3	34	31
240	28	2	2	1	7000	6	1167	4	2	1	0	0	DISTRICT HOSPITAL	3	152.37	40	42	45	17	18	19	5	55	2.8	36	32
241	20	2	2	1	8000	7	1143	4	3	1	0	0	DISTRICT HOSPITAL	2	148	31	38	39	14	17	18	8	50	2.6	35	34
242	23	2	2	1	4000	8	500	5	2	2	1	1	DISTRICT HOSPITAL	3	157	40	49	51	16	20	21	11	46	2.9	35	33
243	22	2	2	1	4000	4	1000	4	3	1	0	0	DISTRICT HOSPITAL	2	155	44.5	46	50	19	19	21	5	52	3.2	35	33
244	20	2	2	1	6000	7	857	5	2	1	0	1	DISTRICT HOSPITAL	2	160	51	52	56	20	20	22	5	46	2.7	33	31
245	21	2	2	1	5000	6	833	5	3	2	1	0	DISTRICT HOSPITAL	2	162.5	44	46	50	17	17	19	6	50	3	36	34
246	27	1	2	2	5000	4	1250	4	3	2	1	0	DISTRICT HOSPITAL	3	160	45	47	49	18	18	19	4	52	2.9	35	32
247	24	2	1	1	8000	7	1143	4	2	2	1	0	DISTRICT HOSPITAL	3	165.12	48	49	51	18	18	19	3	50	3.4	36	32
248	22	2	2	1	5000	6	833	5	3	1	0	1	DISTRICT HOSPITAL	3	158	42	48	59	17	19	24	17	48	3.2	36	31
249	29	2	2	1	10000	9	1111	4	3	2	1	0	DISTRICT HOSPITAL	2	145	53	54	56	25	26	27	3	51	2.4	35	32
250	28	1	1	1	10000	2	5000	2	3	1	0	0	KLE	2	157.5	48	50	52	19	20	21	4	51	2.4	35	28
251	21	2	1	2	6000	4	1500	4	2	2	1	0	DISTRICT HOSPITAL	2	158	58	60	62	23	24	25	4	57	4.1	37	36
252	26	2	1	2	6000	5	1200	4	2	4	4	0	DISTRICT HOSPITAL	3	155	44	47	48	18	20	20	4	53	2.7	33	31
253	25	2	2	2	3000	13	231	5	2	3	0	0	DISTRICT HOSPITAL	2	155	48	50	51	20	21	21	3	54	2.8	34	33
254	24	2	1	1	4000	9	444	5	2	2	1	0	DISTRICT HOSPITAL	3	162.5	49	52	55	19	20	21	6	52	3.1	36	34
255	23	2	1	1	4000	5	800	5	3	2	1	1	DISTRICT HOSPITAL	2	160	75	76	77	29	30	30	2	54	3.4	37	34
256	21	2	2	1	10000	4	2500	3	2	1	0	0	DISTRICT HOSPITAL	2	155	44	45	49	18	19	20	5	50	2.5	35	33
257	20	2	1	1	10000	3	3333	2	2	1	0	1	DISTRICT HOSPITAL	2	158	59	60	62	24	24	25	3	53	3	37	35
258	24	1	1	1	9000	6	1500	44	2	3	1	1	DISTRICT HOSPITAL	2	151	61	63.7	69	25	26	28	8	55	3.7	36	35
259	20	2	1	1	7000	5	1400	4	4	1	0	0	DISTRICT HOSPITAL	2	149	39	40	45	18	18	20	6	53	2.8	33	28
260	25	2	2	1	5000	12	417	5	3	2	1	0	DISTRICT HOSPITAL	2	155	58	60	63	24	25	26	5	53	2.7	33	28
261	21	2	2	1	8000	6	1333	4	4	1	0	0	DISTRICT HOSPITAL	3	165.12	50	55	65	18	20	24	15	51	2.5	35	33
262	27	1	2	1	23000	5	4600	2	5	1	0	0	DISTRICT HOSPITAL	2	157.5	49	56	60	20	23	24	11	46	2.4	32	26
263	22	2	1	1	8000	5	1600	4	5	1	0	0	DISTRICT HOSPITAL	2	149	41	45	49	18	20	22	8	50	2.5	34	31
264	20	2	2	1	5000	6	833	5	3	1	0	0	DISTRICT HOSPITAL	2	153	42	46	50	18	20	21	8	53	2.5	35	34

265	26	2	2	1	4000	12	333	5	5	2	1	0	DISTRICT HOSPITAL	3	145	62	63	65	29	30	31	3	51	2.9	33	24
266	22	2	1	2	5500	22	250	5	3	1	0	0	DISTRICT HOSPITAL	2	152.37	59	60	61	25	26	26	2	55	2.4	34	32
267	20	2	1	1	5000	5	1000	4	5	1	0	0	DISTRICT HOSPITAL	2	155	43	46	52	18	19	22	9	51	3	35	32
268	39	2	2	1	5000	2	2500	3	4	2	1	0	DISTRICT HOSPITAL	2	121.875	52	57	60	35	38	40	8	53	3	36	34
269	22	2	2	1	5000	6	833	5	2	1	0	0	DISTRICT HOSPITAL	1	151	42	46	48	18	20	21	6	50	3	33	28
270	36	1	1	2	10000	4	2500	3	3	2	1	0	DISTRICT HOSPITAL	2	162.5	81	82	84	31	31	32	3	51	3	35	33
271	20	2	2	2	9000	4	2250	3	2	1	0	0	DISTRICT HOSPITAL	2	147	50	53	55	23	25	25	5	48	2.4	33	31
272	20	2	2	2	5000	7	714	5	5	2	0	1	DISTRICT HOSPITAL	2	162.5	50	54	64	19	20	24	14	50	3	33	28
273	29	2	1	1	5000	4	1250	4	5	1	0	0	DISTRICT HOSPITAL	1	147	46	48	51	21	22	24	5	50	2.5	33	28
274	29	2	1	2	15000	10	1500	4	5	1	0	0	DISTRICT HOSPITAL	1	160	59	60	61	23	23	24	2	53	2.8	34	33
275	21	2	2	1	5000	4	1250	4	3	2	1	0	DISTRICT HOSPITAL	1	162.5	38	45	50	14	17	19	12	49	2.4	34	30
276	34	2	2	1	5000	4	1250	4	1	2	1	0	DISTRICT HOSPITAL	2	140	42	43	46	21	22	23	4	53	2.8	35	32
277	34	2	2	1	5000	8	625	5	5	2	1	0	DISTRICT HOSPITAL	2	150	69	75	76	31	33	34	7	50	2.8	35	34
278	26	2	2	1	7000	5	1400	4	1	2	1	0	DISTRICT HOSPITAL	2	160	40	42	43	16	16	17	3	46	2.7	36	34
279	23	2	2	1	5000	5	1000	4	3	1	0	1	DISTRICT HOSPITAL	2	155	46	49	51	19	20	21	5	50	2.7	37	32
280	23	2	1	1	12000	10	1200	4	5	1	0	0	DISTRICT HOSPITAL	2	148	41	48	51	19	22	23	10	48	2.7	33	34
281	23	2	1	1	8000	4	2000	3	3	2	1	0	DISTRICT HOSPITAL	2	149	43	48	54	19	22	24	11	47	2.2	33	31
282	23	2	2	1	5000	6	833	5	4	2	1	0	DISTRICT HOSPITAL	2	152.37	57	59	61	25	25	26	4	53	3	34	32
283	20	2	2	2	8000	10	800	5	2	2	1	0	DISTRICT HOSPITAL	2	157.5	42	44	46	17	18	19	4	51	2.4	35	33
284	21	2	1	1	10000	10	1000	4	3	2	1	0	DISTRICT HOSPITAL	2	152.37	40	41	43	17	18	19	3	50	2.4	35	33
285	23	1	1	1	6000	3	2000	3	4	1	0	0	DISTRICT HOSPITAL	2	142.25	40	41	42	20	20	21	2	52	2.5	35	31
286	28	2	1	2	3000	7	429	5	3	1	0	0	DISTRICT HOSPITAL	2	165	53	58	60	19	21	22	7	52	2.6	35	31
287	26	1	2	1	8000	3	2667	3	3	1	0	0	DISTRICT HOSPITAL	2	152.37	40	42	43	17	18	19	3	50	2.2	34	31
288	30	2	1	1	11000	4	2750	3	2	2	1	0	DISTRICT HOSPITAL	2	154	54	55	56	23	23	24	2	54	3	37	34
289	22	2	2	1	7000	10	700	5	3	2	1	0	DISTRICT HOSPITAL	2	162.5	58	60	62	22	23	23	4	52	2.8	34	31
290	28	2	1	1	3000	5	600	5	4	1	0	0	DISTRICT HOSPITAL	2	162.5	34	38	41	13	14	16	7	51	3.5	36	32
291	28	2	2	1	8000	6	1333	4	3	2	0	1	DISTRICT HOSPITAL	2	165.12	72	78	80	26	29	29	8	52	2.7	36	31
292	22	2	1	1	9000	7	1286	4	3	2	1	0	DISTRICT HOSPITAL	2	160	58	61	63	23	24	25	5	48	2.5	33	29
293	24	1	2	1	6000	3	2000	3	4	1	0	0	DISTRICT HOSPITAL	2	162.5	45	46	47	17	17	8	2	50	2.8	35	34
294	20	2	1	1	5000	10	500	5	3	2	1	0	DISTRICT HOSPITAL	2	142.25	39	40	42	19	20	21	3	52	2.4	35	32
295	22	2	2	1	5000	4	1250	4	3	1	0	0	DISTRICT HOSPITAL	1	165	51	54	55	19	20	21	4	53	2.3	35	31
296	21	2	1	1	5000	6	833	5	3	1	0	0	DISTRICT HOSPITAL	2	157.5	48	54	56	19	22	23	8	52	2.6	35	31
297	20	2	1	1	2000	5	400	5	3	1	0	0	DISTRICT HOSPITAL	2	162.5	45	46	47	17	17	18	2	48	2.4	33	29
298	19	2	1	1	9000	8	1125	4	2	2	1	0	DISTRICT HOSPITAL	2	160	58	59	60	23	23	23	2	57	2.7	34	31
299	28	2	2	1	4000	8	500	5	3	1	0	0	DISTRICT HOSPITAL	2	150	40	43	45	18	19	20	5	53	2.8	36	34
300	24	2	1	1	3000	8	375	5	3	1	0	0	DISTRICT HOSPITAL	2	162.5	48	55	56	18	21	21	8	52	3	35	34
301	23	2	2	2	15000	4	3750	2	4	2	1	0	DISTRICT HOSPITAL	2	152.37	39	45	48	17	19	21	9	50	2.3	34	30
302	22	1	2	1	7000	2	3500	2	4	1	0	0	DISTRICT HOSPITAL	1	162.5	48	49	53	18	19	20	5	48	2.5	34	31
303	19	2	2	1	8000	3	2667	3	3	1	0	0	DISTRICT HOSPITAL	2	155	35	38	40	15	16	17	5	53	2.9	35	32
304	23	2	2	1	9000	4	2250	3	2	2	1	0	DISTRICT HOSPITAL	2	162.5	48	49	50	18	19	19	2	50	2.3	33	29
305	26	2	1	1	10000	11	909	4	3	3	0	0	DISTRICT HOSPITAL	2	164	58	60	62	22	22	23	4	54	3.5	37	34
306	20	2	1	1	4000	4	1000	4	3	2	1	0	DISTRICT HOSPITAL	2	158	70	72	76	28	29	30	6	53	2.8	34	31
307	28	1	2	1	7000	3	2333	3	3	1	0	0	DISTRICT HOSPITAL	2	155	37	38	41	15	16	17	4	50	2.4	35	34
308	25	2	1	1	3000	10	300	5	4	1	0	0	DISTRICT HOSPITAL	1	160	58	62	66	23	24	26	8	51	2.4	36	32
309	27	2	1	1	8000	6	1333	4	3	2	1	0	DISTRICT HOSPITAL	2	160	40	42	44	16	16	17	4	52	3.5	35	33
310	20	2	1	1	25000	6	4167	2	3	1	0	0	DISTRICT HOSPITAL	2	160	54	59	61	21	23	24	7	52	3	35	32

311	33	1	2	1	4000	4	1000	4	1	2	1	0	DISTRICT HOSPITAL	2	155	58	60	66	24	25	27	8	52	2.6	35	33
312	23	2	2	1	35000	5	7000	1	5	2	1	0	PRIVATE	2	158	56	58	63	22	23	25	7	50	3	32	31
313	22	2	2	1	3000	4	750	5	5	1	0	0	DISTRICT HOSPITAL	2	144.75	36	38	41	17	18	20	5	52	3.1	36	33
314	21	2	1	2	10000	6	1667	4	5	1	0	0	DISTRICT HOSPITAL	2	162.5	50	51	54	19	19	20	4	53	3.2	37	35
315	22	2	1	1	5000	5	1000	4	5	2	1	0	DISTRICT HOSPITAL	1	160	39	41	45	15	16	18	6	48	2.5	34	33
316	24	2	1	2	10000	5	2000	3	2	1	0	0	DISTRICT HOSPITAL	1	160	48	53	62	19	21	27	14	48	2.5	32	31
317	25	2	1	1	7500	11	682	5	1	1	0	0	DISTRICT HOSPITAL	2	145	50.9	51.4	55.9	24	24	27	5	54	2.4	36	32
318	24	2	1	1	18000	8	2250	3	5	1	0	0	DISTRICT HOSPITAL	2	160	54	55	57	21	21	22	3	52	2.6	36	31
319	23	2	2	1	10000	8	1250	4	4	2	1	0	DISTRICT HOSPITAL	2	153	53	54	56	23	23	24	3	51	3.2	35	31
320	20	2	1	1	6000	4	1500	4	3	1	0	1	DISTRICT HOSPITAL	2	145	45	51	53	21	24	25	8	52	2.9	35	34
321	23	2	2	1	10000	3	3333	2	3	3	0	0	DISTRICT HOSPITAL	2	151	44	46	52	19	20	23	8	50	2.3	31	28
322	25	2	1	1	9000	9	1000	4	5	2	1	0	DISTRICT HOSPITAL	2	160	48	55	56	19	21	22	8	54	2.8	34	33
323	20	2	2	1	5000	6	833	5	4	1	0	0	DISTRICT HOSPITAL	2	160	50	52	53	20	20	21	3	51	3.1	35	33
324	25	2	1	1	8000	4	2000	3	4	1	0	1	DISTRICT HOSPITAL	2	160	45	46	54	18	18	21	9	50	2.8	33	28
325	32	1	1	1	12000	4	3000	2	5	2	1	0	DISTRICT HOSPITAL	2	157.5	68	69	70	27	28	28	2	52	2.5	35	33
326	20	2	2	1	5000	6	833	5	2	1	0	0	DISTRICT HOSPITAL	2	148	50	52	55	23	24	25	5	55	3.1	37	35
327	21	2	2	1	1000	6	167	5	4	2	0	1	DISTRICT HOSPITAL	2	146	38	43	50	18	20	23	12	53	3	35	31
328	34	1	1	1	5000	5	1000	4	3	2	1	0	DISTRICT HOSPITAL	2	160	63	68	70	25	27	27	7	50	3	36	33
329	26	2	2	1	9000	5	1800	4	1	2	1	0	DISTRICT HOSPITAL	2	152.37	49	51	53	21	22	23	4	51	3.5	36	34
330	26	2	1	1	7000	8	875	5	3	2	1	0	DISTRICT HOSPITAL	2	149.37	75	76	80	33	34	36	5	50	3.2	35	34
331	24	2	2	1	15000	4	3750	2	3	1	0	0	DISTRICT HOSPITAL	2	150	51	55	57	23	24	25	6	53	3.5	37	34
332	26	2	2	1	4000	10	400	5	3	2	1	0	DISTRICT HOSPITAL	2	157.5	65	66	67	26	27	27	2	54	2.9	35	34
333	25	2	1	1	4000	5	800	5	4	2	0	1	DISTRICT HOSPITAL	2	158	69	70	74	28	28	30	5	54	3	35	34
334	24	2	2	1	10000	7	1429	4	4	2	1	0	DISTRICT HOSPITAL	2	155	46	48	49	19	20	20	3	51	2.9	35	33
335	24	2	1	1	10000	7	1429	4	4	2	1	0	DISTRICT HOSPITAL	2	154	38	41	43	16	17	18	5	51	2.4	33	30
336	23	2	2	1	8000	9	889	4	5	1	0	0	DISTRICT HOSPITAL	2	152.37	37	38	40	16	16	17	3	50	2.4	32	31
337	26	1	2	1	5000	7	714	5	3	2	1	1	DISTRICT HOSPITAL	2	152.37	38	41	43	16	18	19	5	54	3.4	34	33
338	23	2	1	1	5000	9	556	5	3	1	0	0	DISTRICT HOSPITAL	2	156	39	44	48	16	18	20	9	54	3.2	35	33
339	27	2	1	1	10000	6	1667	4	5	2	1	0	DISTRICT HOSPITAL	2	134.62	49	55	60	27	30	33	11	53	2.5	32	30
340	24	2	1	1	7000	7	1000	4	5	2	1	0	DISTRICT HOSPITAL	1	149.87	36	37	40	16	16	18	4	51	2.4	34	30
341	30	2	1	1	6000	5	1200	4	5	2	1	1	DISTRICT HOSPITAL	3	155	52	53	57	21.64412071	22.0603538	23.72528616	5	53	2.6	35	33
342	24	2	2	1	2000	8	250	5	4	2	1	0	DISTRICT HOSPITAL	2	144	45	47	51	21.70138889	22.66589506	24.59490741	6	54	3.9	36	32
343	21	2	1	2	10000	5	2000	3	4	1	0	0	DISTRICT HOSPITAL	2	152.37	42	47	49	18.09049104	20.24412093	21.10557288	7	50	2.9	35	33
344	23	2	1	1	9000	10	900	4	4	1	0	0	DISTRICT HOSPITAL	2	157.5	41	45	47	16.52809272	18.14058957	18.94683799	6	51	2.4	33	28
345	26	2	1	1	10000	5	2000	3	3	2	1	1	DISTRICT HOSPITAL	2	160	56	59	64	21.875	23.046875	25	8	53	3.3	35	33
346	26	2	2	1	10000	7	1429	4	1	3	0	1	DISTRICT HOSPITAL	2	160	45	46	48	17.578125	17.96875	18.75	3	50	2.9	34	33
347	28	2	1	2	9000	8	1125	4	5	1	0	0	DISTRICT HOSPITAL	2	167.62	61	62	63	21.71091677	22.06683343	22.4227501	2	53	2.8	35	32
348	23	2	1	1	2000	6	333	5	3	1	0	0	DISTRICT HOSPITAL	2	162.5	62	65	68	23.47928994	24.61538462	25.75147929	6	51	3.3	35	33
349	23	2	1	1	30000	5	6000	1	4	1	0	1	KLE	2	160	57	63	65	22.265625	24.609375	25.390625	8	53	2.5	35	32
350	26	1	2	1	1500	3	500	5	3	3	1	0	DISTRICT HOSPITAL	2	144.75	34	35	36	16.22713212	16.70440071	17.18166931	2	48	2.4	33	31
351	27	2	2	1	5000	6	833	5	3	3	1	0	DISTRICT HOSPITAL	2	152.3	40	45	47	17.24488032	19.40049036	20.26273437	7	56	3.1	35	33
352	23	2	2	1	15000	6	2500	3	4	3	0	0	DISTRICT HOSPITAL	1	157.5	40	42	44	16.12496851	16.93121693	17.73746536	4	54	2.7	34	31
353	21	1	1	1	10000	6	1667	4	3	2	1	1	DISTRICT HOSPITAL	2	155	48	55	56	19.97918835	22.89281998	23.30905307	8	51	2.6	34	32
354	20	2	1	1	7000	7	1000	4	3	1	0	0	DISTRICT HOSPITAL	2	145	56	60	66	26.63495838	28.53745541	31.39120095	10	51	3	34	33
355	26	1	2	1	10000	11	909	4	3	2	1	0	DISTRICT HOSPITAL	2	160	48	49	50	18.75	19.140625	19.53125	2	51	2.5	34	35
356	23	2	2	1	10000	8	1250	4	3	2	1	0	DISTRICT HOSPITAL	2	158	41	45	55	16.42365006	18.02595738	22.03172568	14	51	3	36	31

357	27	2	2	1	4000	6	667	5	3	2	1	0	DISTRICT HOSPITAL	2	152.3	40	41	44	17.24488032	17.67600233	18.96936835	4	51	2.8	35	33
358	24	2	2	1	5000	6	833	5	3	2	1	0	DISTRICT HOSPITAL	2	167.1	45	48	49	16.1160874	17.19049323	17.5486285	4	52	2.5	35	33
359	22	2	2	1	20000	9	2222	3	5	1	0	0	DISTRICT HOSPITAL	2	157.5	55	56	58	22.1718317	22.57495591	23.38120433	3	53	2.9	35	31
360	25	2	2	1	3000	5	600	5	3	2	1	0	DISTRICT HOSPITAL	2	162	74	78	82	28.1969212	29.7210791	31.24523701	8	48	3.1	36	33
361	22	2	2	1	2000	5	400	5	3	2	1	0	DISTRICT HOSPITAL	2	155	48	49	52	19.97918835	20.39542144	21.64412071	4	46	2.1	35	32
362	23	2	2	1	15000	12	1250	4	4	1	0	0	DISTRICT HOSPITAL	2	158	55	57	58	22.03172568	22.83287935	23.23345618	3	52	2.9	35	33
363	26	2	2	1	8000	10	800	5	3	2	1	1	DISTRICT HOSPITAL	2	139.7	53	57	59	27.15707911	29.20666998	30.23146542	6	51	3.1	36	33
364	26	2	2	1	10000	5	2000	3	5	1	0	0	DISTRICT HOSPITAL	2	157.5	40	43	45	16.12496851	17.33434114	18.14058957	5	48	2.5	34	31
365	29	1	1	1	10000	3	3333	2	2	2	1	0	DISTRICT HOSPITAL	2	142.25	45	47	50	22.23862664	23.22701005	24.70958516	5	48	3	33	28
366	24	1	2	2	8000	5	1600	4	2	3	2	0	DISTRICT HOSPITAL	2	150	50	51	52	22.22222222	22.66666667	23.11111111	2	50	2.6	33	31
367	26	2	2	1	9000	15	600	5	2	3	0	1	DISTRICT HOSPITAL	2	158	40	43	45	16.02307323	17.22480372	18.02595738	5	50	2.4	35	31
368	21	2	2	1	9000	6	1500	4	3	1	0	0	DISTRICT HOSPITAL	2	154	32	38	50	13.49300051	16.0229381	21.08281329	18	51	2.4	33	30
369	24	2	1	1	8000	6	1333	4	3	2	1	0	DISTRICT HOSPITAL	2	144.75	44	45	47	20.99981804	21.47708663	22.43162382	3	48	2.6	34	31
370	31	1	1	1	50000	4	12500	1	1	3	1	1	KLE	2	157.5	47	51	55	18.94683799	20.55933485	22.1718317	8	52	2.9	35	31
371	23	2	1	2	1000	5	200	5	2	1	0	1	DISTRICT HOSPITAL	2	152.3	59	62	64	25.43619847	26.72956449	27.59180851	5	48	3	32	28
372	20	2	1	2	10000	4	2500	3	4	1	0	0	DISTRICT HOSPITAL	2	165.1	55	58	60	20.17755515	21.27814907	22.01187834	5	52	2.5	34	32
373	28	2	2	1	8000	4	2000	3	1	2	1	0	DISTRICT HOSPITAL	1	144.75	46	48	49	21.95435523	22.90889241	23.386161	3	51	2.9	36	31
374	28	2	1	1	6000	5	1200	4	5	1	0	1	DISTRICT HOSPITAL	1	144.75	45	47	51	21.47708663	22.43162382	24.34069818	6	51	2.9	32	31
375	23	2	1	1	5000	6	833	5	4	1	0	0	DISTRICT HOSPITAL	2	152.3	39	41	42	16.81375831	17.67600233	18.10712433	3	48	2.4	32	30
376	24	1	2	1	7000	5	1400	4	4	2	1	0	DISTRICT HOSPITAL	2	152.3	51	52	56	21.98722241	22.41834441	24.14283245	5	51	2.8	34	32
377	22	2	1	1	8000	6	1333	4	4	1	0	1	DISTRICT HOSPITAL	2	167.1	55	59	65	19.69744016	21.12998126	23.27879291	10	53	3	35	31
378	28	2	1	1	10000	6	1667	4	5	1	0	1	DISTRICT HOSPITAL	2	144.75	55	58	64	26.24977255	27.68157833	30.54518988	9	54	2.7	34	32
379	22	2	1	1	10000	6	1667	4	3	1	0	0	DISTRICT HOSPITAL	2	146	46	48	51	21.58003378	22.51829612	23.92568962	5	50	3	33	28
380	19	2	1	1	5000	11	455	5	2	1	0	0	DISTRICT HOSPITAL	2	144	44	45	46	21.2191358	21.70138889	22.18364198	2	50	2.6	35	31
381	32	2	1	1	3000	10	300	5	3	1	0	0	DISTRICT HOSPITAL	2	157.5	63	65	84	25.3968254	26.20307382	33.86243386	21	51	2.9	33	31
382	21	2	2	1	15000	4	3750	2	4	1	0	0	DISTRICT HOSPITAL	3	157.5	43	47	50	17.33434114	18.94683799	20.15621063	7	51	3.4	35	34
383	22	2	2	1	12000	6	2000	3	3	1	0	0	DISTRICT HOSPITAL	3	163	54	57	63	20.32443826	21.45357371	23.71184463	9	50	2.9	35	31
384	19	2	2	1	2000	4	500	5	3	1	0	0	DISTRICT HOSPITAL	2	163	53	54	56	19.94805977	20.32443826	21.07719523	3	48	2.3	33	29
385	26	2	1	1	5000	2	2500	3	5	1	0	0	DISTRICT HOSPITAL	2	162.5	50	52	59	18.93491124	19.69230769	22.34319527	9	53	4.1	37	35
386	20	2	2	1	10000	15	667	5	3	1	0	0	DISTRICT HOSPITAL	2	167.62	53	56	57	18.86358342	19.93133342	20.28725009	4	50	2.9	35	31
387	22	2	2	1	6000	6	1000	4	5	1	0	0	DISTRICT HOSPITAL	2	158	43	45	49	17.22480372	18.02595738	19.6282647	6	48	2.8	34	31
388	25	1	2	1	7000	5	1400	4	3	2	1	0	DISTRICT HOSPITAL	2	165.12	49	51	55	17.97201284	18.70556438	20.17266747	6	51	2.9	35	31
389	25	2	1	2	20000	8	2500	3	5	2	1	0	DISTRICT HOSPITAL	2	158	69	72	83	27.63980131	28.84153181	33.24787694	14	52	3.1	35	33
390	28	2	2	1	8000	7	1143	4	3	3	2	0	DISTRICT HOSPITAL	3	153	41	43	45	17.51463112	18.36900337	19.22337562	4	50	2.7	35	31
391	30	1	2	2	10000	6	1667	4	4	4	3	0	DISTRICT HOSPITAL	2	147	41	42	45	18.97357582	19.43634597	20.82465639	4	52	3.3	37	35
392	24	2	2	1	8000	6	1333	4	4	2	1	0	DISTRICT HOSPITAL	2	160	41	42	45	16.015625	16.40625	17.578125	4	50	2.8	36	33
393	27	2	1	1	5000	4	1250	4	2	3	2	0	DISTRICT HOSPITAL	2	147	39	41	44	18.04803554	18.97357582	20.36188625	5	51	2.8	34	31
394	30	2	2	3	5000	5	1000	4	3	3	2	0	DISTRICT HOSPITAL	2	160	38	40	44	14.84375	15.625	17.1875	6	52	2.7	37	34
395	27	2	1	1	7000	5	1400	4	2	2	1	0	DISTRICT HOSPITAL	3	155	53	55	60	22.0603538	22.89281998	24.97398543	7	51	3.4	35	33
396	22	2	2	1	6000	4	1500	4	3	1	0	1	DISTRICT HOSPITAL	2	160	48	50	56	18.75	19.53125	21.875	8	52	2.8	34	29
397	19	1	1	1	10000	3	3333	2	3	1	0	0	DISTRICT HOSPITAL	2	127	42	48	50	26.04005208	29.76005952	31.000062	8	50	2.6	35	33
398	19	2	2	1	5000	4	1250	4	3	1	0	0	DISTRICT HOSPITAL	2	153	33	37	42	14.09714212	17.94181725	17.94181725	9	52	2.5	35	32
399	27	2	2	1	8000	6	1333	4	3	3	2	0	DISTRICT HOSPITAL	2	149	43	46	49	19.36849691	20.7197874	22.07107788	6	51	3.6	35	33
400	27	1	1	1	15000	3	5000	2	4	2	1	0	KLE	2	157.5	62	63	65	24.99370118	25.3968254	26.20307382	3	54	3.7	35	31
401	23	2	1	1	5000	8	625	5	3	1	0	0	DISTRICT HOSPITAL	2	160	37	41	43	14.453125	16.015625	16.796875	6	51	2	33	28
402	20	2	1	1	5000	4	1250	4	3	1	0	0	DISTRICT HOSPITAL	2	148	44	45	56	20.08765522	20.54419284	25.56610665	12	51	2.9	35	33

403	30	2	2	1	4000	6	667	5	4	2	1	0	DISTRICT HOSPITAL	2	160	51	55	57	19.921875	21.484375	22.265625	6	50	2.8	35	32
404	23	2	2	1	20000	9	2222	3	5	1	0	1	DISTRICT HOSPITAL	3	157.5	59	61	63	23.78432855	24.59057697	25.3968254	4	52	3.1	35	31
405	20	2	1	3	10000	9	1111	4	3	1	0	0	DISTRICT HOSPITAL	3	157.5	58	61	63	23.38120433	24.59057697	25.3968254	5	48	2.4	32	31
406	28	1	2	1	20000	5	4000	2	4	3	2	0	DISTRICT HOSPITAL	2	146	60	65	67	28.14787014	30.49352599	31.43178833	7	50	3	35	31
407	19	2	2	1	10000	6	1667	4	4	1	0	0	DISTRICT HOSPITAL	2	138	41	46	47	21.52909053	24.15458937	24.67968914	6	52	2.1	33	31
408	28	2	2	3	5000	16	313	5	2	2	0	1	DISTRICT HOSPITAL	2	152	43	44	45	18.61149584	19.04432133	19.47714681	2	51	3.2	36	31
409	29	2	2	1	25000	8	3125	2	5	1	0	0	DISTRICT HOSPITAL	2	172.75	51	54	56	17.08968524	18.09496085	18.76514458	5	46	2.4	33	31
410	21	2	1	1	15000	21	714	5	3	1	0	0	DISTRICT HOSPITAL	2	165.1	43	51	54	15.77517948	18.71009659	19.81069051	11	48	2.9	36	35
411	23	2	1	2	8000	5	1600	4	5	1	0	0	DISTRICT HOSPITAL	3	157.5	48	49	50	19.34996221	19.75308642	20.15621063	2	53	3.1	36	35
412	22	2	1	3	8000	5	1600	4	3	1	0	0	DISTRICT HOSPITAL	3	155	55	56	58	22.89281998	23.30905307	24.14151925	3	52	2.8	33	32
413	23	2	1	2	8000	11	727	5	4	3	2	0	DISTRICT HOSPITAL	3	165.1	57	59	63	20.91128443	21.6450137	23.11247226	6	51	2.6	33	32
414	28	2	2	1	10000	5	2000	3	3	2	1	0	DISTRICT HOSPITAL	2	155	50	55	67	20.81165453	22.89281998	27.88761707	17	48	2.5	33	28
415	23	2	2	3	5000	5	1000	4	4	2	1	0	DISTRICT HOSPITAL	3	160	46	55	59	17.96875	21.484375	23.046875	13	50	2.9	36	34
416	26	2	1	1	10000	4	2500	3	4	2	1	0	DISTRICT HOSPITAL	3	141	53	54	55	26.65861878	27.16161159	27.6646044	2	53	2.6	34	33
417	23	2	1	1	18000	11	1636	4	5	2	1	0	DISTRICT HOSPITAL	3	152	44	50	54	19.04432133	21.64127424	23.37257618	10	51	3	34	32
418	22	2	2	1	3000	7	429	5	2	1	0	0	DISTRICT HOSPITAL	3	155	50	52	55	20.81165453	21.64412071	22.89281998	5	54	2.8	35	34
419	26	2	1	3	8000	7	1143	4	3	2	1	0	DISTRICT HOSPITAL	3	155	43	45	46	17.89802289	18.73048907	19.14672216	3	51	2.5	33	27
420	25	2	1	3	5000	9	556	5	3	2	1	0	DISTRICT HOSPITAL	2	155	52	54	59	21.64412071	22.47658689	24.55775234	7	52	2.6	35	31
421	28	2	1	1	6000	5	1200	4	2	2	1	0	DISTRICT HOSPITAL	3	144.75	39	44	46	18.61347508	20.99981804	21.95435523	7	52	2.7	33	30
422	23	2	2	1	10000	4	2500	3	3	1	0	0	DISTRICT HOSPITAL	2	144.75	52	54	55	24.81796678	25.77250396	26.24977255	3	48	2.5	34	31
423	28	2	1	1	2000	15	133	5	3	1	0	0	DISTRICT HOSPITAL	2	156	54	56	58	22.18934911	23.01117686	23.8330046	4	50	2.9	34	31
424	21	2	1	3	7500	4	1875	4	4	2	0	1	DISTRICT HOSPITAL	3	150	64	66	71	28.44444444	29.33333333	31.55555556	7	51	3.2	35	34
425	19	2	1	2	5000	6	833	5	4	1	0	0	DISTRICT HOSPITAL	2	147	45	47	49	20.82465639	21.75019668	22.67573696	4	48	2.8	34	30
426	26	2	1	3	5000	3	1667	4	3	1	0	0	DISTRICT HOSPITAL	2	155	47	49	51	19.56295525	20.39542144	21.22788762	4	48	3.5	33	32
427	23	2	1	1	10000	4	2500	3	3	3	2	0	DISTRICT HOSPITAL	2	154	38	39	41	16.0229381	16.44459437	17.2879069	3	53	2.5	35	31
428	29	2	2	2	10000	5	2000	3	3	3	2	0	DISTRICT HOSPITAL	3	162.5	53	55	57	20.07100592	20.82840237	21.58579882	4	48	2.9	34	32
429	21	2	2	1	5000	5	1000	4	3	2	1	0	DISTRICT HOSPITAL	3	155	52	54	57	21.64412071	22.47658689	23.72528616	5	50	3.5	37	35
430	26	2	1	3	24000	5	4800	2	4	2	1	0	DISTRICT HOSPITAL	2	155	39	40	45	16.23309053	16.64932362	18.73048907	6	51	2.9	35	31
431	22	2	2	3	5000	5	1000	4	3	2	1	0	DISTRICT HOSPITAL	2	155	58	60	62	24.14151925	24.97398543	25.80645161	4	51	3.1	35	32
432	21	2	2	1	6000	3	2000	3	3	2	1	0	DISTRICT HOSPITAL	2	146	42	49	53	19.7035091	22.98742728	24.86395196	11	50	2.8	37	32
433	20	1	2	1	6000	2	3000	2	3	1	0	0	DISTRICT HOSPITAL	3	157	39	47	52	15.82214289	19.06771066	21.09619051	13	44	2.4	34	31
434	26	2	1	1	15000	11	1364	4	5	2	1	0	DISTRICT HOSPITAL	2	144	50	52	56	24.11265432	25.07716049	27.00617284	6	50	3.3	35	31
435	25	2	2	1	10000	6	1667	4	4	2	1	0	DISTRICT HOSPITAL	2	142.25	54	59	65	26.68635197	29.15731049	32.1224607	11	52	3.2	35	31
436	22	2	1	1	20000	8	2500	3	5	2	1	0	DISTRICT HOSPITAL	2	150	38	40	46	16.88888889	17.77777778	20.44444444	8	48	2.9	35	34
437	24	2	2	3	9000	5	1800	4	5	1	0	0	DISTRICT HOSPITAL	2	152	52	58	61	22.50692521	25.10387812	26.40235457	9	51	2.4	33	32
438	22	2	2	1	4000	4	1000	4	3	3	2	0	DISTRICT HOSPITAL	3	160	71	74	85	27.734375	28.90625	33.203125	14	53	3	36	35
439	19	2	2	1	8000	4	2000	3	2	1	0	0	DISTRICT HOSPITAL	2	161	53	56	60	20.44674202	21.60410478	23.14725512	7	53	3.4	35	33
440	32	1	1	3	9000	2	4500	2	5	3	1	1	DISTRICT HOSPITAL	3	151	47	48	50	20.613131	21.05170826	21.92886277	3	53	2.9	37	30
441	23	2	2	3	10000	4	2500	3	3	2	1	0	DISTRICT HOSPITAL	2	155	52	56	57	21.64412071	23.30905307	23.72528616	5	51	3.1	36	32
442	22	2	1	1	6000	10	600	5	4	2	1	0	DISTRICT HOSPITAL	3	152	58	63	64	25.10387812	27.26800554	27.70083102	6	52	3.2	35	31
443	27	2	1	1	30000	12	2500	3	5	2	1	0	DISTRICT HOSPITAL	3	158	61	62	66	24.43518667	24.8357635	26.43807082	5	50	3.2	35	33
444	23	2	2	3	4000	7	571	5	3	2	1	0	DISTRICT HOSPITAL	1	155	42	45	47	17.4817898	18.73048907	19.56295525	5	50	2.9	33	28
445	25	2	1	1	5000	5	1000	4	3	3	2	0	DISTRICT HOSPITAL	2	157.5	61	62	63	24.59057697	24.99370118	25.3968254	2	48	2.6	35	33
446	25	2	2	1	6000	9	667	5	4	2	1	0	DISTRICT HOSPITAL	3	157.5	47	50	53	18.94683799	20.15621063	21.36558327	6	51	2.6	34	31
447	22	2	2	1	15000	6	2500	3	3	2	1	0	DISTRICT HOSPITAL	3	160	57	58	60	22.265625	22.65625	23.4375	3	52	3.1	36	34
448	35	2	2	3	10000	5	2000	3	3	3	2	0	DISTRICT HOSPITAL	1	155	55	57	58	22.89281998	23.72528616	24.14151925	3	51	3.4	37	34

449	26	2	2	3	2000	5	400	5	3	2	1	0	DISTRICT HOSPITAL	1	160	40	46	52	15.625	17.96875	20.3125	12	53	2.8	35	34
450	21	2	2	1	8000	6	1333	4	3	1	0	0	DISTRICT HOSPITAL	2	153	67	76	77	28.62147037	32.4661455	32.89333162	10	54	3.1	37	34
451	20	2	2	1	5000	7	714	3	3	1	0	0	DISTRICT HOSPITAL	2	151	43	45	48	18.85882198	19.73597649	21.05170826	5	48	2.9	34	33
452	30	1	2	3	30000	4	7500	1	5	2	1	1	PRIVATE	2	160	54	55	57	21.09375	21.484375	22.265625	3	50	2.5	33	31
453	28	1	1	1	10000	3	3333	2	5	2	1	0	DISTRICT HOSPITAL	3	149.87	48	52	58	21.37035924	23.15122251	25.82251741	10	50	2.7	36	33
454	20	2	2	1	5000	6	833	5	2	1	0	0	DISTRICT HOSPITAL	2	159	47	50	51	18.59103675	19.77769867	20.17325264	4	50	2.9	35	34
455	30	2	1	1	4000	10	400	5	3	2	1	0	DISTRICT HOSPITAL	1	157.5	66	70	71	26.60619803	28.21869489	28.6218191	5	52	3.2	34	32
456	26	2	1	1	6000	7	857	5	3	3	2	0	DISTRICT HOSPITAL	2	151	57	58	59	24.99890356	25.43748081	25.87605807	2	56	3.2	34	33
457	23	2	2	1	10000	8	1250	4	3	2	1	0	DISTRICT HOSPITAL	2	142	39	40	44	19.34140052	19.83733386	21.82106725	5	50	2.5	35	32
458	25	2	2	1	10000	5	2000	3	4	3	2	0	DISTRICT HOSPITAL	2	150	42	46	49	18.66666667	20.44444444	21.77777778	7	50	3.3	34	30
459	28	2	2	3	3000	5	600	5	3	3	2	0	DISTRICT HOSPITAL	2	157.5	42	48	52	16.93121693	19.34996221	20.96245906	10	48	2.4	34	32
460	27	2	1	1	10000	7	1429	4	5	2	1	0	DISTRICT HOSPITAL	2	149.875	54	56	58	24.04005006	24.93042228	25.8207945	4	50	2.8	34	33
461	22	2	2	1	7000	9	778	5	2	3	2	0	DISTRICT HOSPITAL	2	144.75	50	52	56	23.86342959	24.81796678	26.72704114	6	55	3.1	37	35
462	24	2	2	2	10000	7	1429	4	3	1	0	0	DISTRICT HOSPITAL	1	160	67	71	74	26.171875	27.734375	28.90625	7	51	2.5	36	31
463	23	1	1	3	10000	5	2000	3	3	1	0	0	DISTRICT HOSPITAL	2	157.5	47	48	49	18.94683799	19.34996221	19.75308642	2	50	2.6	33	31
464	25	1	2	1	6000	2	3000	2	3	2	1	1	DISTRICT HOSPITAL	3	156	46	52	58	18.90203813	21.36752137	23.8330046	12	52	2.8	35	33
465	27	2	1	3	9000	9	1000	4	2	4	2	0	DISTRICT HOSPITAL	2	162	50	52	54	19.05197378	19.81405274	20.57613169	4	50	2.7	35	31
466	24	2	2	3	5000	5	1000	4	2	1	0	0	DISTRICT HOSPITAL	3	157	65	67	68	26.37023814	27.18163009	27.58732606	3	50	3.4	34	31
467	25	2	2	1	9000	4	2250	3	2	3	2	1	DISTRICT HOSPITAL	3	162	60	63	66	22.86236854	24.00548697	25.1486054	6	50	2.8	36	34
468	28	1	2	1	5000	4	1250	4	2	2	1	1	DISTRICT HOSPITAL	2	160	73	77	78	28.515625	30.078125	30.46875	5	50	3	36	33
469	23	2	1	3	2000	5	400	5	2	1	0	0	DISTRICT HOSPITAL	3	157.5	46	52	56	18.54371378	20.96245906	22.57495591	10	48	2.7	33	31
470	28	2	1	1	5000	6	833	5	3	1	0	0	DISTRICT HOSPITAL	2	158	67	69	70	26.83864765	27.63980131	28.04037814	3	49	2.6	34	29
471	22	2	2	3	5000	5	1000	4	2	1	0	0	DISTRICT HOSPITAL	3	160	45	50	52	17.578125	19.53125	20.3125	7	51	2.8	35	34
472	22	2	1	3	10000	8	1250	4	2	2	1	0	DISTRICT HOSPITAL	2	160	38	40	43	14.84375	15.625	16.796875	5	52	3.5	36	34
473	24	1	2	1	14000	3	4667	2	3	2	1	0	DISTRICT HOSPITAL	3	157.5	45	51	62	18.14058957	20.55933485	24.99370118	17	50	3.2	35	33
474	27	2	1	2	10000	5	2000	3	3	2	1	1	DISTRICT HOSPITAL	3	155	55	56	59	22.89281998	23.30905307	24.55775234	4	51	3.1	36	34
475	23	2	2	3	5000	7	714	5	3	2	1	0	DISTRICT HOSPITAL	3	153	53	55	57	22.64086462	23.49523687	24.34960912	4	53	2.9	34	31
476	23	2	2	1	15000	10	1500	4	2	2	1	0	DISTRICT HOSPITAL	2	154	41	43	46	17.2879069	18.13121943	19.39618823	5	50	2.5	32	31
477	28	2	2	1	9000	9	1000	4	2	2	0	1	DISTRICT HOSPITAL	3	152	72	74	75	31.1634349	32.02908587	32.46191136	3	54	3.3	35	34
478	25	2	1	1	10000	6	1667	4	0	3	2	0	DISTRICT HOSPITAL	2	160	42	44	47	16.40625	17.1875	18.359375	5	52	2.8	36	35
479	22	2	2	1	9000	5	1800	4	3	1	0	0	DISTRICT HOSPITAL	3	160	35	40	42	13.671875	15.625	16.40625	7	50	2.8	35	31
480	21	2	1	1	4000	6	667	5	2	3	1	1	DISTRICT HOSPITAL	2	148	45	46	47	20.54419284	21.00073046	21.45726808	2	52	2	35	32
481	26	2	2	1	12000	6	2000	3	3	2	1	0	DISTRICT HOSPITAL	2	134.6	56	57	59	30.90992186	31.46188475	32.56581054	3	50	2.5	34	33
482	25	2	1	1	6000	4	1500	4	1	2	1	0	DISTRICT HOSPITAL	3	157.5	44	46	48	17.73746536	18.54371378	19.34996221	4	52	3.3	36	34
483	20	2	2	1	10000	4	2500	3	B.ed	1	0	0	DISTRICT HOSPITAL	3	163	50	51	56	18.81892431	19.1953028	21.07719523	6	51	3.4	35	31
484	22	2	2	1	5000	6	833	5	3	1	0	0	DISTRICT HOSPITAL	3	160	45	49	55	17.578125	19.140625	21.484375	10	52	3.4	35	33
485	26	2	2	3	10000	4	2500	3	3	1	0	0	DISTRICT HOSPITAL	2	155	48	51	53	19.97918835	21.22788762	22.0603538	5	50	2.8	35	34
486	28	2	1	1	6000	4	1500	4	2	1	0	1	DISTRICT HOSPITAL	3	155	48	52	55	19.97918835	21.64412071	22.89281998	7	51	3.08	36	34
487	25	2	2	2	3000	7	429	5	2	5	3	1	DISTRICT HOSPITAL	2	157.5	72	75	79	29.02494331	30.23431595	31.8468128	7	56	4	37	36
488	24	1	1	1	6000	2	3000	2	1	3	1	1	DISTRICT HOSPITAL	2	155	52	54	55	21.64412071	22.47658689	22.89281998	3	50	3	36	34
489	20	2	2	1	7500	6	1250	4	3	1	0	0	DISTRICT HOSPITAL	2	154	38	39	40	16.0229381	16.44459437	16.86625063	2	51	2.5	37	36
490	20	2	1	1	5000	6	833	5	3	2	1	0	DISTRICT HOSPITAL	3	167.1	46	47	48	16.47422268	16.83235795	17.19049323	2	51	2.8	35	32
491	21	2	2	1	5000	4	1250	4	2	1	0	0	DISTRICT HOSPITAL	2	152.3	41	43	45	17.67600233	18.53824634	19.40049036	4	52	3.5	36	34
492	28	2	1	2	15000	8	1875	3	2	3	2	0	DISTRICT HOSPITAL	3	157	84	85	86	34.0784616	34.48415757	34.88985354	2	53	2.47	34	32
493	24	2	2	2	10000	5	2000	3	1	1	0	0	DISTRICT HOSPITAL	2	152.3	37	41	47	15.95151429	17.67600233	20.26273437	10	50	2.4	36	35
494	31	2	2	1	8000	4	2000	3	3	2	1	0	DISTRICT HOSPITAL	3	157	54	55	59	21.90758246	22.31327843	23.93606231	5	50	2.4	33	29

495	26	2	2	2	10000	11	909	5	1	2	1	0	DISTRICT HOSPITAL	3	157.5	60	65	69	24.18745276	26.20307382	27.81557067	9	51	3.1	36	32
496	25	1	2	2	20000	3	6667	1	3	2	1	0	PRIVATE	2	160	56	59	60	21.875	23.046875	23.4375	4	50	2.3	35	32
497	29	2	1	1	9000	6	1500	4	2	3	2	0	DISTRICT HOSPITAL	2	162.5	70	72	74	26.50887574	27.26627219	28.02366864	4	48	2.5	34	38
498	24	2	2	2	15000	11	1364	4	2	2	1	0	DISTRICT HOSPITAL	2	155	50	55	59	20.81165453	22.89281998	24.55775234	9	50	3.6	36	34
499	22	1	1	1	8000	8	1000	4	2	1	0	0	DISTRICT HOSPITAL	3	155	65	68	72	27.05515088	28.30385016	29.96878252	7	52	3.1	36	34
500	20	2	2	2	15000	12	1250	4	3	2	1	0	DISTRICT HOSPITAL	3	142.35	39	43	45	19.24640694	21.22039739	22.20739262	6	51	3.2	36	33
501	28	1	2	1	25000	4	6250	1	2	3	1	1	KLE	2	144.75	42	45	49	20.04528086	21.47708663	23.386161	7	50	3.2	36	31
502	22	1	2	1	18000	2	9000	1	2	1	0	0	PRIVATE	3	152.3	49	52	54	21.12497839	22.41834441	23.28058843	5	50	2.9	33	32
503	27	2	1	2	11000	8	1375	4	2	1	0	0	DISTRICT HOSPITAL	2	155	40	43	46	16.64932362	17.89802289	19.14672216	6	48	2.8	34	30
504	28	2	2	1	15000	9	1667	4	3	2	1	0	DISTRICT HOSPITAL	2	155	63	66	68	26.2226847	27.47138398	28.30385016	5	54	3	35	30
505	30	1	1	1	10000	2	5000	2	3	1	0	0	KLE	3	155	80	83	89	33.29864724	34.54734651	37.04474506	9	54	3	35	30
506	26	1	2	1	28000	2	14000	1	3	1	0	0	KLE	3	157.5	58	60	62	23.38120433	24.18745276	24.99370118	4	50	2.6	33	28
507	27	2	1	1	19000	8	2375	3	2	2	1	0	DISTRICT HOSPITAL	3	162.5	78	79	80	29.53846154	29.91715976	30.29585799	2	51	3	36	32
508	28	2	2	1	8000	7	1143	4	2	1	0	0	DISTRICT HOSPITAL	3	152.3	38	40	42	16.3826363	17.24488032	18.10712433	4	52	3.1	34	30
509	29	2	1	1	18000	8	2250	3	2	2	1	0	DISTRICT HOSPITAL	3	165.1	45	48	52	16.50890876	17.60950267	19.07696123	7	52	2.5	34	29
510	26	1	2	2	15000	2	7500	1	2	1	0	0	PRIVATE	3	165.1	55	57	59	20.17755515	20.91128443	21.6450137	4	54	2.9	36	32
511	19	2	2	1	7000	10	700	5	3	1	0	0	DISTRICT HOSPITAL	2	160	59	61	62	23.046875	23.828125	24.21875	3	50	2.4	35	32
512	22	2	1	1	12000	7	1714	4	2	2	1	0	DISTRICT HOSPITAL	3	152.3	42	45	49	18.10712433	19.40049036	21.12497839	7	51	2.6	36	29
513	24	2	2	2	15000	9	1667	4	3	1	0	0	DISTRICT HOSPITAL	3	142.35	34	36	40	16.77891887	17.7659141	19.73990455	6	52	2.8	35	30
514	28	2	2	1	10000	6	1667	4	2	2	1	0	DISTRICT HOSPITAL	2	167.1	56	59	61	20.05557543	21.12998126	21.84625181	5	50	2.6	35	30
515	26	2	1	1	13000	8	1625	4	2	1	0	0	DISTRICT HOSPITAL	3	152.3	48	52	63	20.69385638	22.41834441	27.1606865	15	52	2.8	36	31
516	29	1	2	1	20000	3	6667	1	2	2	1	0	PRIVATE	2	165.1	57	59	62	20.91128443	21.6450137	22.74560762	5	51	2.8	35	31
517	25	1	1	1	25000	2	12500	1	3	1	0	0	KLE	3	144.75	47	52	53	22.43162382	24.81796678	25.29523537	6	52	3.5	35	32
518	30	2	2	1	19000	8	2375	3	2	2	1	0	DISTRICT HOSPITAL	3	160	60	65	69	23.4375	25.390625	26.953125	9	52	3.5	36	32
519	22	1	2	1	30000	3	10000	1	2	1	0	0	KLE	2	155	69	73	75	28.72008325	30.38501561	31.21748179	6	52	3.4	34	30
520	29	1	2	1	15000	3	5000	2	3	1	0	1	PRIVATE	3	152.3	48	52	54	20.69385638	22.41834441	23.28058843	6	50	2.5	35	34
521	19	2	2	1	8000	9	889	5	2	2	1	0	DISTRICT HOSPITAL	3	157.5	62	64	65	24.99370118	25.79994961	26.20307382	3	50	2.8	34	30
522	22	1	2	1	10000	2	5000	2	2	1	0	0	PRIVATE	3	152.37	42	46	49	18.09049104	19.81339495	21.10557288	7	53	3.5	36	34
523	24	2	2	2	11000	11	1000	4	1	2	1	0	DISTRICT HOSPITAL	2	162.5	55	58	60	20.82840237	21.96449704	22.72189349	5	54	3.2	35	30
524	25	2	2	1	15000	8	1875	4	2	2	1	0	DISTRICT HOSPITAL	3	165.12	58	59	60	21.27299479	21.63977056	22.00654633	2	53	3.2	35	31
525	28	2	2	1	8500	6	1417	4	2	3	1	1	DISTRICT HOSPITAL	2	165.12	43	45	46	15.7713582	16.50490975	16.87168552	3	52	3	36	32
526	26	2	2	2	19000	9	2111	3	2	2	1	0	DISTRICT HOSPITAL	3	157.5	39	42	44	15.72184429	16.93121693	17.73746536	5	53	2.8	35	30
527	23	2	2	1	7000	7	1000	4	3	2	1	0	DISTRICT HOSPITAL	3	142.25	42	43	45	20.75605153	21.25024323	22.23862664	3	50	3.5	36	34
528	25	2	1	2	10000	8	1250	4	2	2	1	0	DISTRICT HOSPITAL	2	157.5	38	42	44	15.31872008	16.93121693	17.73746536	6	52	3.1	35	30
529	27	1	1	1	18000	2	9000	1	3	2	1	0	KLE	2	162.5	42	45	48	15.90532544	17.04142012	18.17751479	6	53	3.2	36	30
530	22	1	2	1	25000	3	8333	1	3	1	0	0	KLE	3	155	72	73	74	29.96878252	30.38501561	30.8012487	2	51	3.2	36	32
531	25	1	2	1	25000	3	8333	1	2	2	1	0	KLE	2	155	48	49	50	19.97918835	20.39542144	20.81165453	2	50	2.3	32	28
532	28	2	2	1	10000	8	1250	4	2	2	1	0	DISTRICT HOSPITAL	3	157.5	56	58	59	22.57495591	23.38120433	23.78432855	3	52	3	35	32
533	26	2	1	1	8000	5	1600	4	1	1	0	0	DISTRICT HOSPITAL	2	152.37	45	48	50	19.38266897	20.6748469	21.53629886	5	50	2.8	33	28
534	21	2	2	1	9000	8	1125	4	3	2	1	0	DISTRICT HOSPITAL	3	157.5	49	51	52	19.75308642	20.55933485	20.96245906	3	52	3	36	34
535	24	1	2	1	20000	3	6667	1	3	2	1	0	PRIVATE	3	165.12	35	37	39	12.83715203	13.57070357	14.30425512	4	55	3.2	33	30
536	25	2	1	2	15000	3	5000	1	3	1	0	0	KLE	2	160	38	40	42	14.84375	15.625	16.40625	4	48	2.2	33	28
537	21	1	1	1	25000	3	8333	1	2	1	0	0	KLE	2	152.37	56	57	59	24.12065472	24.5513807	25.41283265	3	53	2.8	34	31
538	22	2	1	1	9000	6	1500	4	2	2	1	0	DISTRICT HOSPITAL	2	162.12	49	52	58	18.64330437	19.78473117	22.06758476	9	52	3.2	33	28
539	24	2	2	1	10000	8	1250	4	3	2	1	0	DISTRICT HOSPITAL	2	162.5	42	43	48	15.90532544	16.28402367	18.17751479	6	52	3.2	34	31
540	26	1	2	1	11000	7	1571	4	2	1	0	0	DISTRICT HOSPITAL	2	172.75	38	42	45	12.73349097	14.07385844	15.07913404	7	52	3.4	35	32

541	23	2	2	1	10000	5	2000	3	2	1	0	0	DISTRICT HOSPITAL	3	157.5	48	49	52	19.34996221	19.75308642	20.96245906	4	52	3.2	34	30
542	28	2	2	1	8000	7	1143	4	3	2	1	0	DISTRICT HOSPITAL	2	160	45	48	49	17.578125	18.75	19.140625	4	50	3.2	35	32
543	23	2	2	1	13000	6	2167	3	2	2	1	0	DISTRICT HOSPITAL	2	165.12	40	42	43	14.67103089	15.40458243	15.7713582	3	53	3.2	35	31
544	24	2	2	1	9000	8	1125	4	2	1	0	0	DISTRICT HOSPITAL	2	157.5	46	48	49	18.54371378	19.34996221	19.75308642	3	52	2.6	35	31
545	22	1	2	1	10000	2	5000	1	2	1	0	0	PRIVATE	2	155	35	36	37	14.56815817	14.98439126	15.40062435	2	53	2.8	35	32
546	23	2	2	1	9000	7	1286	4	3	1	0	0	DISTRICT HOSPITAL	2	157.5	35	42	43	14.10934744	16.93121693	17.33434114	8	52	3.1	35	32
547	22	2	2	2	12000	6	2000	3	2	1	0	0	DISTRICT HOSPITAL	2	152.37	45	46	48	19.38266897	19.81339495	20.6748469	3	53	3.3	33	31
548	23	2	2	1	9000	8	1125	4	2	1	0	0	DISTRICT HOSPITAL	2	157.5	38	42	44	15.31872008	16.93121693	17.73746536	6	52	3.3	33	28
549	26	2	2	1	10000	8	1250	4	3	1	0	0	DISTRICT HOSPITAL	3	157.5	32	38	41	12.8999748	15.31872008	16.52809272	9	52	3.2	35	32
550	28	2	2	2	15000	8	1875	4	2	1	0	0	DISTRICT HOSPITAL	3	152.37	48	52	54	20.6748469	22.39775081	23.25920277	6	52	3	34	31
551	19	2	2	1	9000	8	1125	4	2	2	1	0	DISTRICT HOSPITAL	3	160	59	61	64	23.046875	23.828125	25	5	52	2.6	36	32
552	21	1	2	1	20000	2	10000	1	3	1	0	0	PRIVATE	3	155	39	43	48	16.23309053	17.89802289	19.97918835	9	51	2.8	35	33
553	23	1	2	1	18000	2	9000	1	3	2	1	1	PRIVATE	2	162.5	65	68	72	24.61538462	25.75147929	27.26627219	7	53	3.5	36	34
554	28	2	1	1	7000	9	778	5	2	2	1	0	DISTRICT HOSPITAL	2	157.5	55	58	62	22.1718317	23.38120433	24.99370118	7	52	3.1	35	32
555	30	1	1	1	22000	3	7333	1	3	2	1	0	KLE	2	155	62	64	65	25.80645161	26.63891779	27.05515088	3	50	3.2	36	33
556	26	2	2	1	11000	9	1222	4	2	1	0	0	DISTRICT HOSPITAL	3	162.5	57	59	62	21.58579882	22.34319527	23.47928994	5	51	3.1	35	30
557	25	2	2	2	8000	8	1000	4	2	1	0	0	DISTRICT HOSPITAL	3	142.25	48	50	52	23.72120175	24.70958516	25.69796856	4	51	3	33	28
558	23	2	1	2	10000	11	909	5	3	2	1	0	DISTRICT HOSPITAL	2	162.5	43	45	48	16.28402367	17.04142012	18.17751479	5	50	2.7	34	31
559	29	1	2	1	23000	2	11500	1	3	1	0	0	KLE	2	172.75	72	78	83	24.12661446	26.13716567	27.812625	11	52	3.2	35	30
560	19	2	2	1	7000	9	778	5	2	2	1	0	DISTRICT HOSPITAL	2	157.5	58	62	65	23.38120433	24.99370118	26.20307382	7	51	3.2	35	32
561	21	1	2	2	13000	2	6500	1	2	1	0	0	PRIVATE	2	152.37	51	52	53	21.96702483	22.39775081	22.82847679	2	52	3.1	35	31
562	23	2	1	1	8000	6	1333	4	3	1	0	0	DISTRICT HOSPITAL	3	165.12	62	64	67	22.74009788	23.47364942	24.57397674	5	52	3.2	35	32
563	24	1	1	1	15000	2	7500	1	3	1	0	0	KLE	2	160	73	74	76	28.515625	28.90625	29.6875	3	50	3	35	31
564	25	2	2	2	18000	8	2250	3	3	3	2	0	DISTRICT HOSPITAL	3	155	38	43	45	15.81685744	17.89802289	18.73048907	7	53	3.2	36	32
565	28	2	2	2	12000	8	1500	4	3	2	1	0	DISTRICT HOSPITAL	3	162.5	42	45	47	15.90532544	17.04142012	17.79881657	5	54	3.2	36	31
566	27	1	1	2	20000	2	10000	1	3	2	1	0	KLE	2	155	50	52	54	20.81165453	21.64412071	22.47658689	4	52	3.3	35	32
567	26	2	2	1	8000	7	1143	4	3	2	1	0	DISTRICT HOSPITAL	3	157.5	37	40	42	45	16.12496851	16.93121693	5	53	3.2	35	31
568	23	1	2	1	10000	8	1250	4	2	2	1	0	DISTRICT HOSPITAL	3	152.37	49	51	54	21.10557288	21.96702483	23.25920277	5	50	3.5	35	32
569	26	2	1	2	11000	9	1222	4	3	3	2	0	DISTRICT HOSPITAL	2	167.62	65	68	72	23.13458344	24.20233344	25.62600012	7	51	3.1	36	31
570	30	1	2	1	25000	2	12500	1	3	1	0	0	KLE	2	160	41	43	46	16.015625	16.796875	17.96875	5	51	3.1	35	33
571	22	1	1	1	10000	3	3333	3	3	2	1	0	DISTRICT HOSPITAL	2	157.5	54	56	58	21.76870748	22.57495591	23.38120433	4	51	3.1	36	31
572	20	2	2	2	9000	6	1500	4	2	1	0	0	DISTRICT HOSPITAL	2	152.37	47	49	50	20.24412093	21.10557288	21.53629886	3	50	3	35	30
573	23	1	2	1	18000	3	6000	1	3	2	1	0	PRIVATE	2	155	39	42	44	16.23309053	17.4817898	18.31425598	5	52	3.3	33	28
574	24	1	2	2	15000	2	7500	1	2	1	0	0	PRIVATE	3	157.5	41	43	45	16.52809272	17.33434114	18.14058957	4	48	2.8	34	32
575	28	1	1	1	7000	8	875	5	3	3	2	0	DISTRICT HOSPITAL	3	152.37	62	64	65	26.70501058	27.56646254	27.99718851	3	52	3	35	32
576	23	1	2	1	20000	2	10000	1	3	1	0	0	PRIVATE	2	162.5	50	54	58	18.93491124	20.44970414	21.96449704	8	51	2.5	34	28
577	23	1	2	1	25000	3	8333	1	2	1	0	0	KLE	2	162.5	42	43	45	15.90532544	16.28402367	17.04142012	3	53	2.8	35	30
578	22	2	1	2	8000	9	889	5	3	2	1	0	DISTRICT HOSPITAL	1	152.37	62	64	67	26.70501058	27.56646254	28.85864047	5	51	3	33	28
579	29	1	2	1	28000	2	14000	1	3	2	1	0	KLE	1	157.5	49	51	53	19.75308642	20.55933485	21.36558327	4	51	2.7	35	32
580	30	2	2	2	18000	8	2250	3	2	3	2	0	DISTRICT HOSPITAL	1	152.37	38	42	44	16.36758713	18.09049104	18.95194299	6	52	3	35	32
581	29	2	2	1	10000	6	1667	4	2	3	2	0	DISTRICT HOSPITAL	3	157.5	68	70	73	27.41244646	28.21869489	29.42806752	5	52	3.2	35	31
582	22	1	1	1	25000	2	12500	1	3	1	0	0	KLE	2	152.375	70	72	75	30.14883971	31.01023513	32.30232826	5	52	3	36	33
583	24	2	2	2	11000	7	1571	4	2	3	2	0	DISTRICT HOSPITAL	2	162.5	65	67	70	24.61538462	25.37278107	26.50887574	5	54	2.8	33	30
584	26	2	1	1	8000	10	800	5	2	2	1	0	DISTRICT HOSPITAL	1	142.25	41	44	47	20.26185983	21.74443494	23.22701005	6	50	2.6	35	32
585	23	1	1	1	30000	2	15000	1	3	1	0	0	KLE	1	155	45	48	52	18.73048907	19.97918835	21.64412071	7	51	2.8	34	32
586	28	2	2	2	12000	9	1333	4	3	2	1	0	DISTRICT HOSPITAL	2	157.5	58	62	64	23.38120433	24.99370118	25.79994961	6	53	3.1	35	33

587	29	1	2	1	20000	2	10000	1	3	1	0	0	PRIVATE	3	152.375	48	54	57	20.67349008	23.25767635	24.54976948	9	51	3.3	33	30
588	19	2	1	1	9000	7	1286	4	3	1	0	0	DISTRICT HOSPITAL	2	155	68	70	71	28.30385016	29.13631634	29.55254943	3	51	2.7	35	34
589	24	2	1	2	13000	8	1625	4	3	3	2	0	DISTRICT HOSPITAL	3	160	53	55	58	20.703125	21.484375	22.65625	5	52	2.8	34	31
590	25	1	1	1	20000	2	10000	1	3	1	0	0	KLE	2	162.5	70	72	74	26.50887574	27.26627219	28.02366864	4	52	2.5	34	32
591	21	2	2	1	5000	5	1000	4	2	2	1	0	DISTRICT HOSPITAL	2	155	52	54	57	21.64412071	22.47658689	23.72528616	5	51	2.2	34	30
592	26	2	2	3	24000	5	4800	2	3	2	1	0	DISTRICT HOSPITAL	2	155	39	40	45	16.23309053	16.64932362	18.73048907	6	54	2.1	35	30
593	22	2	2	3	5000	5	1000	4	2	2	1	0	DISTRICT HOSPITAL	2	155	58	60	62	24.14151925	24.97398543	25.80645161	4	51	3.1	36	35
594	21	2	2	1	6000	3	2000	3	2	2	1	0	DISTRICT HOSPITAL	3	146	42	49	53	19.7035091	22.98742728	24.86395196	11	46	2.5	34	31
595	20	1	2	1	6000	2	3000	2	2	1	0	0	DISTRICT HOSPITAL	2	157	39	47	52	15.82214289	19.06771066	21.09619051	13	51	2.6	35	31
596	26	2	2	1	15000	11	1364	4	5	2	1	0	DISTRICT HOSPITAL	3	144	50	52	56	24.11265432	25.07716049	27.00617284	6	52	2.7	35	31
597	25	2	1	1	10000	6	1667	4	4	2	1	0	DISTRICT HOSPITAL	2	142.25	54	59	65	26.68635197	29.15731049	32.1224607	11	54	2.9	37	33
598	22	2	1	1	20000	8	2500	3	3	2	1	0	DISTRICT HOSPITAL	2	150	38	40	46	16.88888889	17.77777778	20.44444444	8	53	2.9	35	34
599	24	2	2	3	9000	5	1800	4	3	1	0	0	DISTRICT HOSPITAL	1	152	52	58	61	22.50692521	25.10387812	26.40235457	9	52	2.48	33	31
600	22	2	2	1	4000	4	1000	4	2	3	2	0	DISTRICT HOSPITAL	3	160	71	74	85	27.734375	28.90625	33.203125	14	50	2.69	35	33
601	19	2	2	1	8000	4	2000	3	2	1	0	0	DISTRICT HOSPITAL	2	161	53	56	60	20.44674202	21.60410478	23.14725512	7	50	2.58	35	33
602	32	1	2	3	9000	2	4500	2	3	3	1	1	DISTRICT HOSPITAL	2	151	47	48	50	20.613131	21.05170826	21.92886277	3	50	2.8	35	31
603	23	2	1	3	10000	4	2500	3	2	2	1	0	DISTRICT HOSPITAL	2	155	52	56	57	21.64412071	23.30905307	23.72528616	5	52	2.3	33	28
604	22	2	1	1	6000	10	600	5	3	2	1	0	DISTRICT HOSPITAL	3	152	58	63	64	25.10387812	27.26800554	27.70083102	6	54	3.3	35	33
605	27	2	2	1	30000	12	2500	3	5	2	1	0	DISTRICT HOSPITAL	3	158	61	62	66	24.43518667	24.8357635	26.43807082	5	53	2.2	34	30
606	23	2	2	3	4000	7	571	5	2	2	1	0	DISTRICT HOSPITAL	3	155	42	45	47	17.4817898	18.73048907	19.56295525	5	54	2.7	35	34
607	25	2	2	1	5000	5	1000	4	2	3	2	0	DISTRICT HOSPITAL	2	157.5	61	62	63	24.59057697	24.99370118	25.3968254	2	50	2.7	34	33
608	25	2	2	1	6000	9	667	5	3	2	1	0	DISTRICT HOSPITAL	3	157.5	47	50	53	18.94683799	20.15621063	21.36558327	6	52	3.7	34	32
609	22	2	2	1	15000	6	2500	3	2	2	1	0	DISTRICT HOSPITAL	3	160	57	58	60	22.265625	22.65625	23.4375	3	51	2.4	35	33
610	35	2	2	3	10000	5	2000	3	2	3	2	0	DISTRICT HOSPITAL	3	155	55	57	58	22.89281998	23.72528616	24.14151925	3	48	1.7	32	28
611	26	2	2	3	2000	5	400	5	3	2	1	0	DISTRICT HOSPITAL	3	160	40	46	52	15.625	17.96875	20.3125	12	54	3	33	31
612	21	2	1	1	8000	6	1333	4	2	1	0	0	DISTRICT HOSPITAL	2	153	67	76	77	28.62147037	32.4661455	32.89333162	10	51	2.9	34	33
613	20	2	1	1	5000	7	714	5	2	1	0	0	DISTRICT HOSPITAL	2	151	43	45	48	18.85882198	19.73597649	21.05170826	5	56	3	35	34
614	30	1	1	3	30000	4	7500	1	5	2	1	1	KLE	3	160	54	55	57	21.09375	21.484375	22.265625	3	54	2.4	34	32
615	28	1	1	1	10000	3	3333	2	5	2	1	0	DISTRICT HOSPITAL	3	149.87	48	52	58	21.37035924	23.15122251	25.82251741	10	53	3.9	35	32
616	20	2	1	1	5000	6	833	5	1	1	0	0	DISTRICT HOSPITAL	2	159	47	50	51	18.59103675	19.77769867	20.17325264	4	52	2.4	34	33
617	30	2	1	1	4000	10	400	5	2	2	1	0	DISTRICT HOSPITAL	3	157.5	66	70	71	26.60619803	28.21869489	28.6218191	5	50	3.5	36	33
618	26	2	2	1	6000	7	857	5	2	3	2	0	DISTRICT HOSPITAL	3	151	57	58	59	24.99890356	25.43748081	25.87605807	2	50	2.4	35	31
619	23	2	2	1	10000	8	1250	4	2	2	1	0	DISTRICT HOSPITAL	2	142	39	40	44	19.34140052	19.83733386	21.82106725	5	48	2.4	33	30
620	25	2	2	1	10000	5	2000	3	3	3	2	0	DISTRICT HOSPITAL	2	150	42	46	49	18.66666667	20.44444444	21.77777778	7	52	3.2	35	34
621	28	2	1	3	3000	5	600	5	2	3	2	0	DISTRICT HOSPITAL	2	157.5	42	48	52	16.93121693	19.34996221	20.96245906	10	53	2.6	34	31
622	27	2	2	1	10000	7	1429	4	3	2	1	0	DISTRICT HOSPITAL	2	149.875	54	56	58	24.04005006	24.93042228	25.8207945	4	50	3.3	36	34
623	22	2	2	1	7000	9	778	5	1	3	2	0	DISTRICT HOSPITAL	2	144.75	50	52	56	23.86342959	24.81796678	26.72704114	6	51	2.6	36	34
624	24	2	1	2	10000	7	1429	4	2	1	0	0	DISTRICT HOSPITAL	3	160	67	71	74	26.171875	27.734375	28.90625	7	52	2.9	36	34
625	23	1	2	3	10000	5	2000	3	2	1	0	0	DISTRICT HOSPITAL	2	157.5	47	48	49	18.94683799	19.34996221	19.75308642	2	52	2.9	36	34
626	25	1	1	1	6000	2	3000	2	3	2	1	1	DISTRICT HOSPITAL	3	156	46	52	58	18.90203813	21.36752137	23.8330046	12	48	2.5	34	32
627	27	2	2	3	9000	9	1000	4	2	4	4	0	DISTRICT HOSPITAL	2	162	50	52	54	19.05197378	19.81405274	20.57613169	4	52	3.7	35	31
628	24	2	2	3	5000	5	1000	4	2	1	0	0	DISTRICT HOSPITAL	3	157	65	67	68	26.37023814	27.18163009	27.58732606	3	52	2.8	35	34
629	25	2	2	1	9000	4	2250	3	2	3	2	1	DISTRICT HOSPITAL	3	162	60	63	66	22.86236854	24.00548697	25.1486054	6	54	2.4	35	31
630	28	1	1	1	5000	4	1250	4	2	2	1	1	DISTRICT HOSPITAL	2	160	73	77	78	28.515625	30.078125	30.46875	5	48	2.4	34	31
631	23	2	2	3	2000	5	400	5	2	1	0	0	DISTRICT HOSPITAL	2	157.5	46	52	56	18.54371378	20.96245906	22.57495591	10	53	2.4	33	28
632	28	2	2	1	5000	6	833	5	3	1	0	0	DISTRICT HOSPITAL	2	158	67	69	70	26.83864765	27.63980131	28.04037814	3	52	2.9	35	33

633	22	2	2	3	5000	5	1000	4	2	1	0	0	DISTRICT HOSPITAL	3	160	45	50	52	17.578125	19.53125	20.3125	7	52	3.3	34	31
634	22	2	2	3	10000	8	1250	4	2	2	1	0	DISTRICT HOSPITAL	2	160	38	40	43	14.84375	15.625	16.796875	5	50	2.4	35	34
635	24	1	2	1	14000	3	4667	2	3	2	1	0	DISTRICT HOSPITAL	3	157.5	45	52	62	18.14058957	20.96245906	24.99370118	17	48	2.9	36	35
636	27	2	1	2	10000	5	2000	3	3	2	1	1	DISTRICT HOSPITAL	3	155	55	56	59	22.89281998	23.30905307	24.55775234	4	48	2.4	35	31
637	23	2	1	3	5000	7	714	5	3	2	1	0	DISTRICT HOSPITAL	3	153	53	55	57	22.64086462	23.49523687	24.34960912	4	49	2.7	34	31
638	23	2	1	1	15000	10	1500	4	2	2	1	0	DISTRICT HOSPITAL	2	154	41	43	46	17.2879069	18.13121943	19.39618823	5	53	3.1	34	32
639	28	2	2	1	9000	9	1000	4	2	2	0	1	DISTRICT HOSPITAL	3	152	72	74	76	31.1634349	32.02908587	32.89473684	4	48	1.4	33	28
640	25	2	2	1	10000	6	1667	4	1	3	2	0	DISTRICT HOSPITAL	2	160	42	44	47	16.40625	17.1875	18.359375	5	53	2.6	35	34
641	22	2	2	1	9000	5	1800	4	3	1	0	0	DISTRICT HOSPITAL	3	160	35	40	42	13.671875	15.625	16.40625	7	48	1.6	31	28
642	21	2	2	1	4000	6	667	5	2	3	1	1	DISTRICT HOSPITAL	2	148	45	46	47	20.54419284	21.00073046	21.45726808	2	48	2.6	33	28
643	26	2	2	1	12000	6	2000	3	3	2	1	0	DISTRICT HOSPITAL	2	134.6	56	57	59	30.90992186	31.46188475	32.56581054	3	56	2.9	37	36
644	25	2	2	1	6000	4	1500	4	1	2	1	0	DISTRICT HOSPITAL	3	157.5	44	46	48	17.73746536	18.54371378	19.34996221	4	47	2.6	33	29
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651	20	2	1	1	7500	6	1250	4	3	1	0	0	DISTRICT HOSPITAL	2	154	38	39	40	16.0229381	16.44459437	16.86625063	2	46	2.7	33	31
652	20	2	1	1	5000	6	833	5	3	2	1	0	DISTRICT HOSPITAL	2	167.1	46	47	48	16.47422268	16.83235795	17.19049323	2	50	3	36	34
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654	28	2	1	2	15000	8	1875	3	2	3	2	0	DISTRICT HOSPITAL	1	157	84	85	86	34.0784616	34.48415757	34.88985354	2	50	3.4	36	32
655	24	2	1	2	10000	5	2000	3	1	1	0	0	DISTRICT HOSPITAL	2	152.3	37	41	47	15.95151429	17.67600233	20.26273437	10	48	3.2	36	31
656	31	2	1	1	8000	4	2000	3	3	2	1	0	DISTRICT HOSPITAL	1	157	54	55	59	21.90758246	22.31327843	23.93606231	5	51	2.4	35	32
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659	29	2	2	1	9000	6	1500	4	2	3	2	0	DISTRICT HOSPITAL	2	162.5	70	72	74	26.50887574	27.26627219	28.02366864	4	53	2.7	33	31
660	24	2	1	2	15000	11	1364	4	2	2	1	0	DISTRICT HOSPITAL	2	155	50	55	59	20.81165453	22.89281998	24.55775234	9	54	2.8	34	33
661	22	1	2	1	8000	8	1000	4	2	1	0	0	DISTRICT HOSPITAL	2	155	65	68	72	27.05515088	28.30385016	29.96878252	7	52	3.1	36	34
662	20	2	1	2	15000	12	1250	4	3	2	1	0	DISTRICT HOSPITAL	1	142.35	39	43	45	19.24640694	21.22039739	22.20739262	6	54	3.4	37	34
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665	27	2	1	2	11000	8	1375	4	2	1	0	0	DISTRICT HOSPITAL	2	155	40	43	46	16.64932362	17.89802289	19.14672216	6	55	3.7	36	35
666	28	2	1	1	15000	9	1667	4	3	2	1	0	DISTRICT HOSPITAL	2	155	63	66	68	26.2226847	27.47138398	28.30385016	5	53	2.8	33	28
667	30	1	2	1	10000	2	5000	2	3	1	0	0	PRIVATE	2	155	80	83	89	33.29864724	34.54734651	37.04474506	9	53	2.7	33	28
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669	27	2	1	1	19000	8	2375	3	2	2	1	0	DISTRICT HOSPITAL	1	162.5	78	79	80	29.53846154	29.91715976	30.29585799	2	46	2.4	32	26
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671	29	2	1	1	18000	8	2250	3	2	2	1	0	DISTRICT HOSPITAL	2	165.1	45	48	52	16.50890876	17.60950267	19.07696123	7	53	2.5	35	34
672	26	1	2	2	15000	2	7500	1	2	1	0	0	PRIVATE	2	165.1	55	57	59	20.17755515	20.91128443	21.6450137	4	51	2.9	33	24
673	19	2	2	1	7000	10	700	5	3	1	0	0	DISTRICT HOSPITAL	2	160	59	61	62	23.046875	23.828125	24.21875	3	55	2.4	34	32
674	22	2	1	1	12000	7	1714	4	2	2	1	0	DISTRICT HOSPITAL	2	152.3	42	45	49	18.10712433	19.40049036	21.12497839	7	51	3	35	32
675	24	2	1	2	15000	9	1667	4	3	1	0	0	DISTRICT HOSPITAL	2	142.35	34	36	40	16.77891887	17.7659141	19.73990455	6	53	3	36	34
676	28	2	2	1	10000	6	1667	4	2	2	1	0	DISTRICT HOSPITAL	2	167.1	56	59	61	20.05557543	21.12998126	21.84625181	5	50	3	33	28
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686	25	2	1	1	15000	8	1875	4	2	2	1	0	DISTRICT HOSPITAL	2	165.12	58	59	60	21.27299479	21.63977056	22.00654633	2	50	2.7	37	32
687	28	2	2	1	8500	6	1417	4	2	3	1	1	DISTRICT HOSPITAL	2	165.12	43	45	46	15.7713582	16.50490975	16.87168552	3	48	2.7	33	34
688	26	2	2	2	19000	9	2111	3	2	2	1	0	DISTRICT HOSPITAL	2	157.5	39	42	44	15.72184429	16.93121693	17.73746536	5	47	2.2	33	31
689	23	2	2	1	7000	7	1000	4	3	2	1	0	DISTRICT HOSPITAL	1	142.25	42	43	45	20.75605153	21.25024323	22.23862664	3	53	3	34	32
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694	28	2	1	1	10000	8	1250	4	2	2	1	0	DISTRICT HOSPITAL	1	157.5	56	58	59	22.57495591	23.38120433	23.78432855	3	50	2.2	34	31
695	26	2	1	1	8000	5	1600	4	1	1	0	0	DISTRICT HOSPITAL	2	152.37	45	48	50	19.38266897	20.6748469	21.53629886	5	54	3	37	34
696	21	2	1	1	9000	8	1125	4	3	2	1	0	DISTRICT HOSPITAL	1	157.5	49	51	52	19.75308642	20.55933485	20.96245906	3	52	2.8	34	31
697	24	1	2	1	20000	3	6667	1	3	2	1	0	PRIVATE	1	165.12	35	37	39	12.83715203	13.57070357	14.30425512	4	51	3.5	36	32
698	25	2	1	2	15000	3	5000	2	3	1	0	0	KLE	1	160	38	40	42	14.84375	15.625	16.40625	4	52	2.7	36	31
699	21	1	2	1	25000	3	8333	1	2	1	0	0	KLE	3	152.37	56	57	59	24.12065472	24.5513807	25.41283265	3	48	2.5	33	29
700	22	2	1	1	9000	6	1500	4	2	2	1	0	DISTRICT HOSPITAL	2	162.12	49	52	58	18.64330437	19.78473117	22.06758476	9	50	2.8	35	34

ANNEXURE-V

KEY TO MASTER CHART

A. Serial number

B. Age in years

C. Type of family

- **a.** Nuclear
- **b.** Joint

D. Address

- **a.** Rural
- **b.** Urban

E. Religion

- **a.** Hindu
- **b.** Muslim
- **c.** Others

F. Annual income

G. Total number of family members

H. Per capita income Rs. _____

I. Socio-economic status

- **a.** Class I
- **b.** Class II
- **c.** Class III
- **d.** Class IV
- **e.** Class V

J. Education

- **a.** No formal education
- **b.** Primary education
- **c.** Secondary education
- **d.** Pre University college
- **e.** Degree

K. Number of pregnancies

L. Number of living children

M. History of abortion

- **a.** Yes
- **b.** No

N. Place of registration

- **a.** District/ government facility
- **b.** KLE
- **c.** Private hospital

O. Total number of ANC visits

- **a.** ≤4
- b. 5-13
- **c.** >13

P. Maternal Height _____cm

Q. 3rd month weight _____kg

R. 7th month weight _____kg

S. 9th month weight _____kg

T. 1st trimester BMI _____kg/m^2

U. 2nd trimester BMI _____kg/m^2

V. 3rd trimester BMI _____kg/m^2

W. Total weight gain _____kg

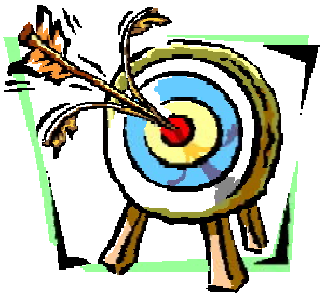
X. New-born length _____cm

Y. New-born birth weight _____kg

Z. New-born head circumference _____cm

AA. New-born chest circumference_____cm

Introduction



Objectives

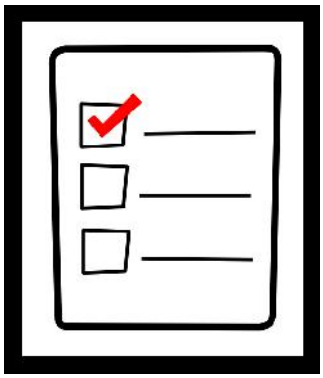
Review of Literature

Methodology

Results

Discussion

Conclusion

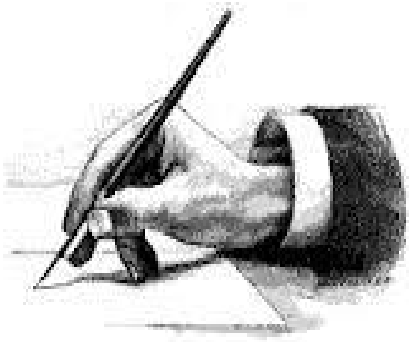


Limitations

Recommendations

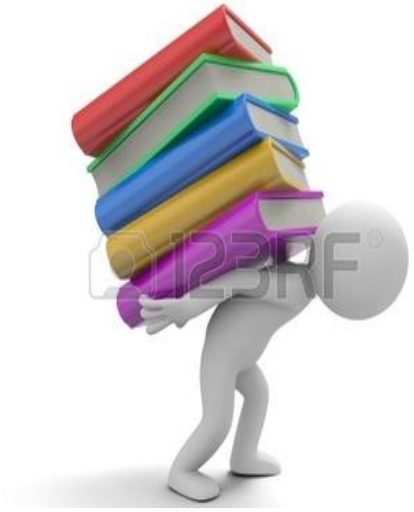
Summary

Bibliography



Annexure-I

Annexure-II



Annexure-III

Annexure-IV

Annexure-V