

"ASSESSMENT OF NUTRITIONAL STATUS OF  
UNDER-FIVE CHILDREN RESIDING IN RURAL  
AREA - A CROSS SECTIONAL STUDY"

REG.NO.BD0110003

Dissertation

Submitted to the  
KLE University, Belgaum, Karnataka

In Partial Fulfillment  
of the requirements for the degree of

M. D.  
in  
COMMUNITY MEDICINE

**DEPARTMENT OF COMMUNITY MEDICINE,  
JAWAHARLAL NEHRU MEDICAL COLLEGE,  
BELGAUM, KARNATAKA**

**APRIL - 2013**

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**ENDORSEMENT**

This is to certify that the dissertation entitled  
“ASSESSMENT OF NUTRITIONAL STATUS OF UNDER-  
FIVE CHILDREN RESIDING IN RURAL AREA - A CROSS  
SECTIONAL STUDY” is a bonafide research work done by  
**CANDIDATE with REG. NO. BD0110003.**

Dr. S.M.KATTI <sup>MD</sup>  
Professor and Head,  
Department of Community Medicine,  
J. N. Medical College,  
Nehru Nagar, Belgaum – 10

Dr. A.S. GODHI <sup>MS,FICS</sup>  
Principal,  
J. N. Medical College,  
Nehru Nagar, Belgaum – 10

Date:  
Place: Belgaum

Date:  
Place: Belgaum

## LIST OF ABBREVIATIONS USED

BMI – Body Mass Index

CC – Chest circumference

DF - Degrees of freedom

EBF – Exclusive breast feeding

H/A - Height for age

HAZ - Height for age z scores

HC – Head circumference

IAP – Indian academy of pediatrics

ICMR – Indian Council of Medical Research

LBW – Low birth weight

MUAC – Mid-upper Arm Circumference

NCHS – National Centre for Health Statistics

NNMB – National Nutrition Monitoring Bureau

PEM – Protein energy malnutrition

PHC – Primary Health Centre

SAM – Severe acute malnutrition

W/A - Weight for age

W/H - Weight for height

WAZ - Weight for age z scores

WHZ - Weight for height z scores

$x^2$  – Chi-square

## **ABSTRACT**

### **Background and Objectives**

India is home to more than one-third of the world's under-nourished children. According to the WHO Health statistics of 2012 for India, the proportion of stunting was 47.9% and that of underweight was 43.5%. According to the NFHS -3 survey conducted in 2005-06, 48% of children were stunted, 20% were wasted and 43% were underweight. In Karnataka, the prevalence of underweight ranges from 35% to 39%. The objectives of the present study were to assess the nutritional status of under- five children and to find the factors associated with it.

### **Methods**

The present cross sectional study was conducted in Handignur Primary Health Centre from January 2011 to December 2011. 933 children in the age group of 1-5yrs of age were selected by simple random technique. A pre-designed and pre-tested questionnaire was used to collect demographic information, breastfeeding practices, socio-cultural and economic factors and anthropometric data. Children were considered as with underweight, stunting and wasting if their weight for age, height for age and weight for height z scores were below -2 SD of WHO standards.

### **Results**

In the present study out of 933 children, 48.55 % were males and 51.45% were females. Majority of the children belonged to Class IV (32.2%) and Class V (30%), 24% belonged to Class III, 11.4% Class II and only 2.5% belonged to

Class I. The overall prevalence of underweight, stunting and wasting was 32.36 %, 34.19 % and 22.07%, respectively. 8.3 %, 12.8 % and 7.4 % of children were found to be severely underweight, stunted and wasted, respectively. By using NCHS reference, the prevalence of wasting, underweight and stunting in our study was 23.6%, 46.6% and 33.1% respectively. Kappa statistics showed a good agreement between WHO and NCHS standards with a kappa value of > 0.6. Type of family, overcrowding, existing co-morbidities, birth order, birth weight, duration of exclusive breast feeding and administration of pre-lacteal feeds were found to have an adverse effect on the nutritional status.

### **Conclusion and interpretation**

Faulty feeding practices like use of pre-lacteal feeds, delayed age of weaning and inappropriate choice of weaning food were commonly observed in this area and majority of the children's diet was not adequate for calories and proteins as per ICMR guidelines. Though ICDS tries to combat malnutrition in children, this should be implemented properly so as to identify malnutrition at an early stage.

### **Keywords**

Nutritional status, under-five children, rural area

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# Chapter 1

## Introduction



## **INTRODUCTION**

In the world of medicine, philosophical phrases on the role of food and nutrition are commonly cited, such as the one from Hippocrates dating from 400 BC. Food is medicine, 'let your medicine be your food'. However looking at the extent of global childhood malnutrition which is a direct or indirect cause for 55% of the mortality of children below 5 years of age (around 12 million / year) and also at the prevalence of clinical malnutrition somewhere along the way the true meaning of these phrases has been lost. One of the striking contradictions in today's world is that although we produce more food than even before, 1/ 10<sup>th</sup> people on earth are hungry<sup>1</sup>.

Malnutrition derives from the etymological origins *malus* (bad) and *nutire* (to nourish). It conveys and denotes the sense of improper nutritional status, outside the norm of healthy boundaries, either to the under-nutrition side or the over-nutrition side. Dynamic changes in the nature of developing societies and deepening of our understanding of human and clinical nutrition have put a changing face on the problem of malnutrition in developing countries<sup>1</sup>.

The global community has set a target of halving the prevalence of underweight children by 2015 as a key indicator of progress towards the Millennium Development Goal (MDG) of eradicating extreme poverty and hunger. During 1996-2004, more than 26% of world's under-five years children were underweight for their age. The proportion ranged from one per cent in developed countries to 27 percent in developing countries<sup>2</sup>.

India is home to more than one-third of the world's under-nourished children. In 2010, 1 in 5 children were estimated to be underweight in

developing countries <sup>2</sup>. The WHO Health statistics of 2012 for India show the proportion of stunting as 47.9% and that of underweight as 43.5% <sup>3</sup>. According to the NFHS -3 survey conducted in 2005-06, 48% of children were stunted, 20% were wasted and 43% were underweight <sup>4</sup>. A survey conducted by the National Nutritional Monitoring Bureau in 2001 revealed that nearly 62% of both boys and girls of 1-5 years were underweight, 50% of boys had various degrees of stunting while 23% were having wasting <sup>5</sup>. In Karnataka the prevalence of underweight ranges from 35% to 39% <sup>4</sup>.

Socio-demographic factors like neglect of the girl child, large family size and lack of child spacing due to non –use of family planning methods (unplanned maternity) have an adverse effect on child survival and child development. Environmental factors like parental education, socio-economic status, sanitation, standard of living, parental attitudes and child rearing practices influence the growth and development of children. Nutritional factors like breast-feeding practices, weaning practices and diet during illness influence the growth and development of children. Maternal malnutrition, low birth weight and recurrent infections are other important factors that lead to malnutrition <sup>6</sup>.

India's malnutrition is firmly trapped between two cycles - the Intergenerational Cycle of Malnutrition and the Cycle of Calorie, Protein and Micronutrient Deficit, (CPMD) and Poverty. The Intergenerational Cycle of Malnutrition firmly binds low birth weight babies, stunted, underweight or wasted children, anemic, underweight adolescent girls who become malnourished mothers and again give birth to low birth weight babies, perpetuating the cycle of malnutrition. The other vicious Concentric Cycle of Calorie, Protein and

Micronutrient Deficit (CPMD) and Poverty afflicts at least 30% of India's households, cutting across all age groups. Among children, it reduces physical/cognitive growth and learning capability and causes morbidity and mortality<sup>7</sup>.

Children between one and five years of age are the most vulnerable section of the population. They constitute 16.5% of the total population whereas mortality in this age group constitutes 40% of the total deaths in the country<sup>8</sup>. Malnutrition is a man made disease which often starts in the womb and ends in the tomb. Its associated retarding influences cause a lot of morbidity, growth faltering, developmental retardation and significant mortality. A number of studies have also demonstrated a relationship between growth status, school performance and intellectual achievement.

Despite efforts by the Government to improve the nutritional status of children, especially through the ICDS, there has not been much improvement in the nutritional status of children under 3 years of age in recent years. The percentage of children who are stunted decreased by less than 1% per year over the 7 years between the two surveys from 51% in NFHS-2 to 45% in NFHS -3. Similarly percentage of underweight decreased from 43% to 40%. Wasting among children has actually become somewhat worse overtime increasing from 20% to 23%<sup>4</sup>. Moreover, in India the problem of malnutrition is more worse in rural areas where the proportion of underweight is 49% compare to 36% in urban areas<sup>5</sup>.

Nutritional status and the reasons for under-nutrition differ in different geographical area due to the type of diet, customs, beliefs, child rearing practices etc. Hence the present study has been undertaken in primary health centre area

among children aged between 1-5 years, mainly to assess the nutritional status of these children and to find the associated factors responsible for it.

# Chapter 2

## Objectives



## **OBJECTIVES**

The objectives of the present study were:

- 1) To assess the nutritional status of under- five children using clinical and anthropometric measures.
  - 2) To find the factors associated with malnutrition.
  - 3) To find the prevalence of morbidity among malnourished children.
- .

# Chapter 3

## Review of Literature



## **REVIEW OF LITERATURE**

WHO has defined Protein Energy malnutrition (PEM) as a range of pathological conditions arising from coincident lack of protein and calories in varying proportions, occurring most frequently in infants and young children and commonly associated with infections.

Malnutrition in a broad sense can mean over-nutrition or under-nutrition but, PEM is restricted to under-nutrition. The term Protein calorie malnutrition (PCM) was coined by Jelliffe to include all clinical types of malnutrition in 1959. The International system of units proposed the replacement of the term 'calorie' by 'joule' (1 cal = 4.184 J) as a unit and the term 'energy' for general use resulting in the term PEM instead of PCM. The term Energy protein malnutrition was used to emphasise the energy gap rather than protein deficiency and also to stress the overall energy crisis of mankind.

**Kwashiorkar**, one of the severe forms of PEM was first recognized by Prof. Cicely Williams in 1933 from Gold Coast. She attributed it to protein deficiency. She observed that this was the disease of the first child when the second was on the way displacing the first child from the breast. She named it as Kwashiorkar. The word was taken from the Ga language of Ghana, which means the 'red boy' due to characteristic pigmentary changes. A classic case of kwashiorkor is apathetic, miserable, stunted in growth and has edema, hepatomegaly, anaemia, hair and skin changes.

**Marasmus** was recognized hundreds of years ago as a major contributor of infant mortality. The word marasmus is derived from the greek word marasmos,

which means ‘wasting’. Affected children exhibit extreme wasting and have an old man appearance with just skin and bones.

Marasmic kwashiorkor develops when marasmic children develop oedema.

Pre-kwashiorkor affected children have poor nutritional status and certain features of Kwashiorkor like hair changes, moon face and hepatomegaly but do not have edema.

Nutritional dwarfing (bonsai children or pocket editions) is seen in children with prolonged PEM starting early in life and going on over a number of years without developing kwashiorkor or marasmus results in nutritional dwarfing.

Underweight is seen when the child is malnourished but does not have any features of marasmus or kwashiorkor.

Invisible PEM is not very evident. A flat curve or a downward curve in the growth chart is of concern even when it is within the ‘road to health’.

#### **Classification of PEM:**

PEM is generally classified according to weight for age. Chronic malnutrition is classified according to height for age and acute malnutrition according to weight for height.

##### *i. Classification according to weight for age:*

**Gomez classification** – Gomez was credited with the first classification of PEM which came in 1956. It has 3 degrees. All cases with edema were included in third degree PEM irrespective of weight for age.

**Jelliffe’s classification:** It has 4 degrees of PEM and was proposed in 1965.

**Welcome trust or International classification:** It is a clinical classification suggested by the Welcome Trust in 1970. It is based on weight for age and the presence or absence of oedema.

**Indian academy of Pediatrics (IAP) classification:** It is the most popular classification in India proposed by IAP in 1972. It has 4 grades of PEM. If the patient has oedema of nutritional origin, the letter 'K' is placed along with the grade of PEM in order to denote kwashiorkor.

ii. *Classification according to height for age* – Waterlow from London and McLaren from Beirut, independently came out with the height for age and weight for height concept to indicate stunting and wasting respectively in 1972. Another classification for height for age is Vishweshwara Rao's classification

iii. *Classification according to weight for height* – It is used to grade wasting. Wasting indicates recent or acute PEM. Classifications used are Waterlow's and McLaren's.

iv. *WHO cut-off for assessment of PEM in community studies:* The WHO cut-off to estimate PEM in population analysis is the mean value minus two standard deviations (SD). As adopted from Waterlow's classification, the combined position of two indicators, i.e weight for height and height for age distinguishes between wasting caused by acute PEM and stunting caused by chronic PEM.

v. **Standard deviation (SD) or Z score:** SD score is used in population studies. Percentage of the median is calculated first to interpret data at population level and Z score is then calculated. Practically, 80% of the reference median for weight for age and weight for height and 90% for height for age correspond to 2 SD below the median. Third centile corresponds to median minus 2 SD.

PEM is a disease of multifactorial deprivation. The causes are –

- a) Conditioning influences – Low birth weight and infections like diarrhea, ARI, vaccine preventable diseases like measles, whooping cough, TB and helminthiasis initiate malnutrition and aggravate existing malnutrition.
- b) Cultural practices: Food habits, customs, beliefs, traditions, religion, food fads, cooking practices, child rearing practices, attitudes and superstitions, people tend to consume poor diet when good ones are available.
- c) Socio-economic factors – Parents unable to afford food.
- d) Factors related to food production and intake
- e) Availability and utilization of health and other services <sup>6</sup>.

### **Magnitude of the problem**

More than half (54 percent) of all deaths before age five years in India are related to malnutrition. Because of its extensive prevalence in India, mild to moderate malnutrition contributes to more deaths (43 %) than severe malnutrition (11 %). According to NFHS survey 2005-06, the prevalence of underweight in children was higher in India than in any of the other 40 developing countries, but was only slightly higher than the prevalence in Bangladesh and Nepal. The prevalence of

underweight in children in India (48 percent) is almost twice as high as the average prevalence for the 26 sub-Saharan African countries that have similar data (25 percent).

Nutritional problems are substantial in every state in India.

The proportion of under- five children who are underweight ranges from 20 percent in Sikkim and Mizoram to 60 percent in Madhya Pradesh. In addition to Madhya Pradesh, more than 50% of young children are underweight in Jharkhand and Bihar. Other states where more than 40 percent of children are underweight are Meghalaya, Chhattisgarh, Gujarat, Uttar Pradesh, and Orissa.

In Meghalaya, Madhya Pradesh, and Jharkhand, more than one in every four children is severely underweight.

Although the prevalence of underweight is relatively low in Mizoram, Sikkim, and Manipur, even in those states more than one-third of children are stunted. The prevalence of underweight in Karnataka ranges from 35 – 39%.

Wasting is quite high in Madhya Pradesh (35 percent), Jharkhand (32 percent), and Meghalaya (31 percent).

Among the eight cities, the prevalence of underweight is highest in Indore (39 percent) and lowest in Hyderabad and Kolkata (20-21 percent). In every city except Meerut, underweight is much more prevalent in slum areas than non-slum areas. However, even in non-slum areas of the eight cities, the prevalence of underweight is substantial (16-37 percent). In Indore, half of the children in slum areas are underweight and 19 percent are severely underweight.

In rural areas, half of young children are stunted, almost half are underweight,

and one out of every five is wasted. Although nutritional deficiencies are lower in urban areas than in rural areas, even in urban areas under-nutrition is very widespread. In urban areas, 40 percent of young children are stunted, one-third are underweight, and 17 percent are wasted <sup>4</sup>.

A cross sectional study was conducted during 2003-04 in urban Allahabad to study the nutritional status of under-five children and to assess whether infant feeding practices are associated with under-nutrition. The sample size was 217 and nutritional assessment was done by WHO criteria. Among all under-five surveyed 36.4% were underweight, 51.6% were stunted and 10.6% wasted. Proportion of underweight and stunting were found maximum among children aged 13-24 months. Wasting was more prevalent among children aged 37-48 months. Initiation of breast feeding after 6 hours of birth, deprivation from colostrum and improper complementary feeding were found significant risk factors for underweight. This study suffers some bias in terms of more representation of infants selected according to inclusion criterion, which was due to their easy availability with mothers at home at the time of survey and more willingness to participate shown by their mothers <sup>9</sup>.

A community based cross-sectional study was conducted in Urban health centre Nagpur in April 2005- July 2006 to assess the nutritional status of under-five children and the dietary pattern and its correlation with nutritional status. 434 children were selected by systematic random sampling and nutritional status was assessed using IAP classification. Diet survey was done in 40% of sub-sample in 2-5 years age group. Results showed 32.18% were in Grade I, 16.09% in grade II, 3.46% in Grade III and 0.5% in Grade IV malnutrition. The mean calorie intake

of children in the age group of 2-3 years was 842.6 Kcal, 3-4 years was 956.12 Kcal and 4-5 years was 1096.24 Kcal respectively. In the present study the association between per capita monthly income and nutritional status was not found significant as there was no equal representation of all socio-economic classes<sup>10</sup>.

A nutritional survey of 1061 preschool children (1-5 years) was carried out in rural Udaipur during 1971 among tribal and non-tribal children to find the incidence of nutritional deficiency diseases. Age –independent criteria i.e weight / height<sup>2</sup> index was used to determine the prevalence of under-nutrition was 23.15% among tribal and 20.9% among non-tribal children with an index of < 0.15. The percentage prevalence of full-blown marasmus and kwashiorkor was 7.2% and 2.1% respectively. 0.3% in tribals and 0.6% in non-tribals showed signs of vitamin B12 deficiency (Angular stomatitis) and 1.5% and 2.7% respectively had rickets. The prevalence of anemia was 2.0% and 2.6% in tribal and non-tribals respectively. In the present study, signs of vitamin deficiency and anaemia was assessed by clinical examination and there is a possibility of subjective bias and hence the true prevalence could not be assessed<sup>8</sup>.

Another cross sectional survey of 200 randomly selected under-five children done in urban slum of Ludhiana in 2009 revealed that 74% of children were found to be stunted , 42% of them wasted and 29.5% of them underweight. NCHS standard were used as reference anthropometric indices. This study also demonstrated the role of multiple risk factors for childhood malnutrition like birth spacing of < 2 years, incomplete vaccination status, frequent infections and worm infestation. Other factors included female children, children aged 48-59 months,

children born to older mothers aged 30-49 years, children with > 3 siblings, low birth weight, those exclusively breast fed for > 6months or < 4 months, having an illiterate mother or father who is an unskilled laborer. The author uses NCHS standard in the present study which gives the international standard. WHO standards 2006 for developing countries would have been more appropriate <sup>2</sup>.

A cross sectional study was done in Urban slums of Patiala during 2004 among 1-5 year old children to study the effect of various maternal factors on the prevalence of underweight and stunting. 482 children participated in the study out of which 272 were males and 210 were females. Overall 38.38% children were underweight by IAP classification and 46.06% of children were stunted. Both underweight and stunting were common in females than in males. Children of educated mothers were better nourished and prevalence of malnutrition was more when mother's age was less than 20 years. Maximum children who were underweight were in the age group of 12-23 months and the number decreased as age increased <sup>11</sup>.

A community based cross sectional study was conducted to determine the current nutritional status of preschool children of Kodaku tribe of Madhya Pradesh in the year 2000. A total of twenty five villages were selected by stratified proportional sampling method. 485 households and 182 preschool children were covered in this study. Both boys and girls were shorter and lighter than NCHS standard. 59.8% were underweight (<-2SD) and 26.2% of children were severely underweight (-3SD). 43% of children suffered from stunting and 35% recorded wasting. Higher prevalence of Vitamin A deficiency was observed.

The present study was carried out in a tribal region and nutritional intake of the tribal children would be different from the general population <sup>12</sup>.

A cross sectional survey was undertaken in anganwadi centres of 20 villages of primary health centre, Anji of Wardha district, Maharashtra in December 2005. Total of 1491 under-six year children attending in Anganwadi centres were studied for nutritional status. Nutritional status was analysed by NCHS standards by using Epi-info 6.04 software package and also by newly introduced WHO child growth standards by Anthro 2005 software package. According to WHO standards, the prevalence of underweight and severe underweight for children 0-6 years 47.4% and 16.9% respectively. By NCHS reference, the overall prevalence of underweight and severe underweight for children 0-6 years was 53% and 15% respectively. The prevalence of underweight as assessed by WHO standards was significantly lower when compared with the assessment based on NCHS reference ( $p < 0.01$ ). But WHO standards gave higher prevalence of severe underweight than NCHS reference though the difference was not statistically significant <sup>13</sup>.

A longitudinal study was conducted in 4 villages in the Medak district of Andhra Pradesh in the year 1995. 197 children upto 4 years were selected in the study area. Pre-tested, structured interviews were conducted to collect information child related maternal, paternal and socio-economic factors from the households. Information about each preschool child diet was collected using a 24- hour food weighing method which was compared with RDA prescribed by ICMR. Nutritional status was assessed by Gomez and Waterlow's classification. 32.5% were Grade I, 58.9% were Grade II, and 8.6% were Grade III by Gomez

classification and 32.5% stunted, 3.65 were wasted and 13.2% were both stunted and wasted by Waterlow's classification. The calorie adequacy of 47.4% was < 50% .The number of diarrhoeal episodes, upper respiratory infections and other infections had a negative effect on the growth status. The study summarizes the characteristics of the study children and families according to the four groups of factors examined- child-related, maternal, paternal, and socio-economic. The author uses both Gomez and Waterlow's classification in this study because Gomez classification alone does not give information about stunting <sup>14</sup>.

A cross sectional survey was conducted in Jhangara town, located in district Dadu, rural Sindh during July to December 1997. A total of 800 children less than 5 years of age were enrolled. Anthropometric measurements were made and indices were expressed as z-scores relative to NCHS reference population. The overall prevalence of stunting was 61% in the study population. In multivariate analysis, various risk factors for stunting were ethnicity (OR = 2.1) and birth interval < 2 years (OR = 1.5). Breastfeeding, prolonged breast feeding, weaning age, low birth weight were not identified as risk factors for stunting <sup>15</sup>.

To assess the nutritional status among poor children aged 1-5 years, a cross-sectional study was undertaken during Feb-June 2006 in 3 municipal wards of North 24 paraganas district, West Bengal. All information like age, sex, religion, caste, weight and height were collected through questionnaire following simple random sampling. Nutritional status was assessed using NCHS standards. A total of 899 children (boys – 517, girls – 382) aged 1-5 years were included. Overall the prevalence of underweight, stunting, and wasting was 63.6%, 52.7% and 22%. Overall 16.7%, 25.1% and 5.3% children were found to be severely

underweight, stunted and wasted respectively. The prevalence of underweight was significantly higher among tribal (71.5%) children than Muslim (67.2%) and Hindu (57.6%). On the other hand the prevalence of stunting and wasting was higher among Hindu and Muslim children respectively <sup>16</sup>.

A total of 6531 Punjabi children (3720 males and 2811 females) in the age range of 1-5 years were measured in a cross-sectional study during the months of October-December 2001 inhabiting different parts of Punjab for assessing malnutrition. The percentage of children who were underweight, stunted, wasted and having low MUAC was 15.04%, 11.42%, 10.76% and 38.52% respectively. The comparison of BMI values was made with the standards of BMI prepared by Rolland-Cachera et al. The findings showed that males in the age group of 1.5, 2.5 and 3 years and females in the age group of 1 and 1.5 years have BMI values below the 10<sup>th</sup> percentile on the BMI charts <sup>17</sup>.

A cross-sectional epidemiological study was carried out in a field practice area of Banaras Hindu University in 1999-2000 among pre-school children aged 1-5 years. The prevalence of PEM as screened out by weight for age criteria, using IAP classification was 63.3%. The prevalence was higher in the 3<sup>rd</sup> year age period compared to the 4<sup>th</sup> and 5<sup>th</sup> year. During 2<sup>nd</sup> year of life PEM prevalence was observed to be lowest. Prevalence of PEM in male children was 58.3% as compared to female children (68.6%). The difference was significant. Among the socio-economic factors, mother's literacy and caste were associated significantly with PEM. Children deprived of colostrum and EBF also showed significant difference in prevalence of PEM <sup>18</sup>.

A survey done in Bangladesh during 1999-2000 to examine the nutritional status and to identify the determinants of malnutrition among under-five children (0-59 months) revealed that 45% of children were suffering from chronic malnutrition, 10.5% acutely malnourished and 48% had underweight problem by NCHS standards. Bivariate analysis and multivariate analysis (Cox's linear logistic regression model) were used to identify the determinants of under-five malnutrition. The main contributing factors for under-five malnutrition were found to be previous birth interval, birth weight, mother's body mass index at time of child's birth and parent's education. As this study has used Cox's linear logistic regression, the determinants of malnutrition have been identified well, which would help in planning strategies <sup>19</sup>.

A cross-sectional comparative study was conducted in Dhankuta district of Nepal during June - July 2008 to determine the prevalence of malnutrition and the factors associated with malnutrition. Prevalence of underweight, stunting and wasting were 27%, 37% and 11% respectively. In the final model of logistic regression statistical tool, male sex was found protective for stunting. Comparatively the risk of being underweight in the children from the poor socio-economic class was almost 4 times as much as in the children from the rich socio-economic status. Children from joint family were found protective against stunting than children in the nuclear family. Other covariates such as age at pregnancy and ethnicity of the child were found to be significantly associated only at 10% level of significance. About the limitations of study, sample size was determined considering the national prevalence of underweight and 8% level of precision. Some of the factors which had influence on the nutritional status were

found statistically significant only at 10% level of significance. Groups were broken down into different exposure categories, power of the results may have been affected<sup>20</sup>.

Another study conducted in Nepal during 2006 to identify the factors associated with the nutritional status of under-five children showed that increasing body mass index of mothers and wealth index showed decreasing likelihood of malnutrition among children. Rural children showed insignificant higher likelihood of different forms of underweight and wasting as compared to urban areas. Female children were more likely to be stunted, underweight and wasted compared to male. Female headed households are more likely to have moderately and mildly stunted children and mixed results were observed for underweight and wasting. The likelihood for all forms of malnutrition was higher among children with smaller than average size at birth as compared to average or bigger size at birth. Mixed results are observed regarding likelihood of different forms of malnutrition among children with mothers having different education level. This study tries to associate new variables like BMI of mothers, frequency of radio listening and television viewing, wealth index factor score to nutritional status in children<sup>21</sup>.

A study was conducted in Simanjiro district in Northern Tanzania in 2006 to determine the nutritional status of under-five children in a pastoral community. Weight and height measurement were carried out on 250 children and that of mean upper arm circumference on 226 children. The z-scores of weight for age, weight for height and height for age indicated that 31.2% of the children were underweight and 6% were severely underweight. Wasting was

observed in 17.2% children of whom 3.2% were severely wasted. Severely stunted children were 3.2% while 14% were moderately stunted. Measurements of MUAC indicated that 35% and 3.5% of the children were moderately and severely undernourished respectively. The nutritional status of the children under study was slightly lower than the national average. The study focuses on children in a pastoral community subsisting essentially on meat and dairy products. It excludes infants 0-6months assuming them to have normal growth<sup>22</sup>.

A secondary analysis was done using data from a cross sectional survey including children under-five years of age (n= 2485) and their mothers in rural districts of the Eastern Cape and Kwazulu –Natal provinces of South Africa in 2009-10 .The anthropometric status of the children was reassessed using the WHO growth standards by WHO Anthro software version 2 and expressed as z-scores. The NCHS/WHO reference was only used to compare with the WHO standards in the prevalence of child malnutrition. The prevalence of stunting, overweight and wasting was generally higher when using the WHO child growth standards as compared to the NCHS reference , especially so in under-nutrition rates for children < 6months.Using the WHO child growth standards stunting was the most prevalent (28.6%) adverse anthropometric outcome, followed by combined overweight and obesity (16.1%) . Of the stunted children (n=711), 18.6% were underweight, while 23.6% were overweight (BAZ> 2 SD). Of the wasted children (n=85) 20% were stunted and 61% were underweight. Using the WHO child growth standards and WHO criteria for classifying severity of under-nutrition in populations, stunting was of high severity, except in the first year of life while underweight and wasting were of low severity in all age groups<sup>23</sup>.

A study carried out in Cambodia in 2005 to assess the child health related knowledge, attitudes and practices of mothers of children less than 60 months of age indicated that maternal KAP of common childhood illness is deficient. Antenatal care for mothers as well as vaccination rates and nutritional status of children were unacceptably poor. 14.5% of all children (n=200) under 60 months had experienced diarrhea in the 2 weeks before the survey. Almost all mothers (98.5%) breastfed their infants, however only 18.5% breastfed within the first hour following birth. The percentage of children who were malnourished (< 3<sup>rd</sup> percentile) by NCHS was 58.5% stunting, 43% underweight and 14.5% wasting. 19.5% of mothers reported that their child had never received any vaccination. The study takes head circumference as a parameter to assess nutritional status in 0-36 months but no mention is made in the results <sup>24</sup>.

A study conducted in rural households of Kadura and Karo states of Nigeria evaluated the nutritional status of preschool children and identified the influencing factors of malnutrition. Results revealed that the proportion of children with other moderate or severe nutritional problems were 61%, 17% and 40% respectively. Soyabean consumption, mother's education, mother's position among housewives (first wife, second wife and so on) and child's height were positively related to the child's nutritional status. Also mother's age, child's age and dependency ratio had negative influence on nutritional status. Tobit decomposition framework was used to estimate the elasticities. A 10% increase in dependency ratio and child's mother's age would result to a 1.70 to 0.46% increase in total elasticity of children malnutrition. The present study uses

Empirical tobit model to determine and quantify the relationship between nutritional status of children and the explanatory variables<sup>25</sup>.

A cross sectional survey was conducted in Botswana during 2005-06 to evaluate the level of malnutrition and the impact of some socio-economic and demographic factors of households on the nutritional status of children under 3 years of age. Factors included, number of children < 3 years of age in the family, occupation of the parents, marital status, family income, parental education, maternal nutritional knowledge, residence location, gender and breast feeding practices. Reference standards used were NCHS. The results showed that the level of wasting, stunting and underweight were 5.5%, 38.7% and 15.6% respectively. Malnutrition was significantly higher among boys than girls. The prevalence of underweight decreased significantly as family income increased. The higher the level of the mother's education, the lower the level of child underweight observed. Breastfeeding was found to reduce the occurrence of underweight among children<sup>26</sup>.

A National cross – sectional survey of Kuwaiti preschool children aged 6-59 months was conducted. A multistage stratified sample of 1280 Kuwaiti preschool children ( 645 males and 635 females ) was selected. The country was divided into 5 governorates, the number of children selected from each governorate was based on the number of preschool children in each governorate as listed in the national census. Mothers were interviewed to collect data on socio-economic variables. The results showed that 11.5% of the boys and 9.9% of the girls were stunted. The prevalence of wasting was fairly similar in both sexes (10.1 – 10.9%). Obesity was more prevalent in girls (18.4%) than boys (16.1%).

Anaemia was more prevalent in boys (32.9%) than girls (25.8%). Factors such as birth order, family income and mother's education and employment were found to affect the prevalence of under-nutrition<sup>27</sup>.

A questionnaire based, cross-sectional survey was conducted using a multistage cluster sampling technique in Ifewara, a rural community of Nigeria during 2003-04 to assess the nutritional status of children aged 1-5 years. A total of 420 children were recruited from 344 households. By modified Wellcome classification, prevalence of PEM was 20.5% and using the WHO/NCHS cutoff points, the prevalence rates of underweight, wasting and stunting were 23.1%, 9% and 26.7%. 112 (26.7%) children had borderline malnutrition. Only 4 (1%) had marasmus while there were no cases of Kwashiorkar or Marasmic-kwashiorkar. There was no statistical significance between the pattern of wasting and stunting and maternal and paternal education. Low maternal income and overcrowding were associated with higher prevalence of wasting. No association was found between the source of drinking water or social class and malnutrition<sup>28</sup>.

A secondary analysis of data of 5348 children taken from a national representative two-stage cluster sample survey was performed in 1995 in Libya to describe the nutritional status of children under five years of age in Libya. Prevalence rates of underweight, wasting, stunting and overweight were determined using standard definition in reference to newly established WHO growth charts. The study revealed that 4.3% of children were underweight, 3.7% wasted, 20.7% stunted and 16.2% overweight. 70% of children had normal weight. Under-nutrition was more likely to be found in males, in rural areas and

in underprivileged groups. Overweight was more likely found in urban, privileged groups. Wasting was more common in arid regions and stunting more common in mountainous regions<sup>29</sup>.

A study was conducted in November 2007, to assess the nutritional status and characteristics related to malnutrition in children less than five years of age in Nghean, Vietnam. 650 child-mother pairs were selected using a two-stage cluster sampling methodology. Anthropometric assessment was done using NCHS/WHO standards. The mean z-scores for weight for age, height for age and weight for height were -1.46, -1.44 and -0.71 respectively. Of the children included 193 (31.8%) were underweight, 269 (44.3%) were stunted and 72 (11.9%) were wasted. Region of residence, mother's level of education and occupation, household size, number of children in the family, weight at birth and duration of exclusive breast feeding were found to be significantly related to malnutrition<sup>30</sup>.

The third National Health and Morbidity survey (NHMS III) was conducted in 2006 on a nationally representative sample of population in Malaysia. The nutritional status of children aged 0-59.9 months was assessed. Mean z-score for weight for age, height for age and BMI for age were compared with the z-score table of the WHO standards. The overall prevalence of underweight and stunting of the children were 12.9% and 17.2% respectively. These levels included 2.4% severe underweight and 6% severe stunting. In terms of z-scores, the age group of 0-5.9 months showed the best nutritional status with mean WAZ of -0.33 and -0.40 for boys and girls respectively while mean HAZ was 0.64 for boys and 0.76 for girls. Mean HAZ and WAZ status was least satisfactory after about 6 months suggesting a faltering in growth rate at an age

that coincides with dependence on complementary feeding. Prevalence of overweight based on BMI for age for the sexes combined was 6.4% while that based on WAZ was 3.4% <sup>31</sup>.

# Chapter 4

## Methodology



## **METHODOLOGY**

### **Study area**

The present study was conducted in Handignur Primary Health Centre, a field practice area of Jawaharlal Nehru Medical College, Belgaum, Karnataka. The PHC covers a population of approximately 34,000. Agriculture is the main occupation of the people here.

### **Study design and period**

It was a cross-sectional study, conducted over a period of 12 months from January 2011 to December 2011.

### **Study population**

The study population consisted of children 1-5yrs of age and their mothers.

### **Sample size**

In Karnataka, prevalence of underweight in under five children is 30%. (NFHS-3)<sup>4</sup> The optimal sample size of 933 study subjects was calculated on the basis of 30% prevalence of underweight children using the following formula,  $N = 4pq/d^2$ , where p= prevalence, q = 100 – p, d = allowable error 10% of p

### **Sampling procedure (method)**

A total of 2098 children were registered between 1-5 yrs age group. Simple random sampling was used to select 933 children from the total children registered.

### **Ethical Clearance**

The present study was approved by JNMC Institutional Ethics Committee on Human subjects' Research. (Ref: JNMC IEC Letter no MDC/PG/2241 dated 08.10.2010)

**Method of collection of data:**

A pre-designed and pre-tested questionnaire was used to collect information from the child's mother after taking written informed consent. A pilot study was conducted in 50 children in the age group of 1-5 years to test the feasibility of the survey and the test proforma. The questionnaire covered demographic information, breastfeeding practices, socio-cultural and economic factors and anthropometric data. After taking preliminary information at the child's home, they were called at the Anganwadi along with their mother. Every child was subjected to anthropometric measurements. The measurements taken were weight, height, Mid-arm circumference, head circumference and chest circumference as per the technique explained below.

**Selection criteria**

**Inclusion Criteria:**

All children aged 1-5 years selected by simple random technique who are permanent residents (residing for > 1 yr) of the study area and who give consent.

**Statistical Analysis.**

Data was analysed by using percentage. Logistic Regression analysis was used to find the association between malnutrition and qualitative variables. Kappa statistics was used to compare the modified WHO guidelines for developing countries and earlier used NCHS reference. Student t test was used to assess the differences in height and weight. One-way ANOVA was used to test age variations of height and weight. WHO Anthro software was used to find the values of z-scores and percentiles.

Children were considered as with underweight, stunting and wasting if their weight for age, height for age and weight for height z scores were below -2 SD of NCHS/WHO standards while severe and moderate undernutrition was defined as z-scores below -3 SD and -3SD to below -2SD respectively. Age and Sex specific mean height and weight of children were compared with the ICMR standards <sup>32</sup>.

**Definition of study variables:**

**Age:** Age was recorded to the nearest completed month.

**Religion** – Religion was classified and recorded as “Hindu”, “Muslim”, “Christian” or “Others” accordingly.

**Education:** Educational qualifications were grouped as:

- Illiterate – A person who could not read and write with understanding in any language
- Primary – A person who has studied till or less than VII std
- Secondary – A person who has studied between VII to X std
- Post SSLC – A person who has attended pre-university after passing secondary school.
- Diploma – A person who has completed or pursuing the diploma course.
- Graduation – A person who has completed or pursuing the graduation.

**Occupation:**

- Farmer – A person employed in cultivation of land.

- Coolie – A person who works on daily wages in the industries, construction sites etc.
- Private – A person employed or working in a private company or owning a private business.
- Government employee – A person who is employed in Government institution.
- House wife – Women engaged in household activities.
- Skilled – A person employed in a job requiring special skills ,eg: mason
- Others – Unemployed persons and children less than 5 years old.

**Type of Family :**

- **Nuclear family** – It consists of married couple and their children while they are still regarded as dependent.
- **Joint family** – It consists of a number of married couples and their children who are living together in same house.

**Socio economic status:** Per capita income in Rs. / month was classified using the modified B.G. Prasad's classification.

<b>Social class</b>	Prasad's Classification, 1961 (per capita income in Rupees per month)	Modified Prasad's Classification - per capita income in Rupees per month. (January – August 2011)
<b>I</b>	100 and above	4372 and above
<b>II</b>	50-99	2186-4371
<b>III</b>	30-49	1311-2185
<b>IV</b>	15-29	656-1310
<b>V</b>	Below 15	Below 656

Modification was done with the aid of multiplication factor, which was obtained as follows,

Multiplication factor was calculated by taking average of Consumer Price Index (CPI) <sup>33</sup> from January to August 2011

Mean CPI from January to August 2011 = 887

$$\begin{aligned} \text{Multiplication factor} &= \frac{\text{Mean CPI for January to August 2011} \times 4.93}{100} \\ &= \frac{887 \times 4.93}{100} = 43.72 \end{aligned}$$

#### **Birth Order:**

The birth order of the child was taken in relation to the number of living children.

**Types of houses:**

- **Pucca House:** A pucca house is one, which has walls and roof made of the following material.
  - Wall material: Burnt bricks, stones (packed with lime or cement), cement concrete, timber, etc
  - Roof Material: Tiles, GCI (Galvanised Corrugated Iron) sheets, asbestos cement sheet, RBC (Reinforced Brick Concrete), RCC (Reinforced Cement Concrete) and timber etc.
- **Kutch House:** The walls and/or roof of which are made of material other than those mentioned above, such as un-burnt bricks, bamboos, mud, grass, reeds, thatch, loosely packed stones, etc. are treated as kutch house.
- **Semi -Pucca house:** A house that has fixed walls made up of pucca material but roof is made up of the material other than those used for pucca house.

**Housing standards:**

**Overcrowding** - The degree of overcrowding expressed as the no. of persons divided by no. of rooms. It is called overcrowding if these standards are exceeded.

1 room - 2 persons

2 rooms- 3 persons

3 rooms – 5 persons

4 rooms – 7 persons

5 or more rooms – 10 persons (additional 2 for each further room)

**Water supply :**

Overhead tank – If water was supplied by means of pipes and tap from a main source in the village.

Borewell - If water was fetched from a nearby tube-well with a hand-pump.

Open well – If water was fetched from a dug open well.

**Solid waste** –Includes garbage (food wastes), rubbish (paper, plastics, wood, metal, throw-away containers, glass) demolition products (bricks, masonry, pipes), sewage treatment residue (sludge and solids from the coarse screening of domestic sewage ), dead animals, manure and other discarded material excluding night soil.

**Sullage** – Includes waste water which does not contain human excreta., eg: waste water from kitchens and bathrooms.

**Birth weight** : Was noted down from the Anganwadi registars and confirmed from the mothers.

**Complications after birth** – Any medical condition requiring immediate admission to the hospital.

**Primary Immunisation status** –

**Complete** – A child who has taken all the doses of vaccine before its first birthday.

**Incomplete** – A child who has taken only a few but not all doses of vaccine before its first birthday.

**Not immunised** – A child who has not taken a single dose of vaccine before its first birthday.

**Anganwadi attendance** –

**Regular** – If the child attended the anganwadi for atleast 5 days a week.

**Irregular** – If the child attended the anganwadi for less than 5 days a week.

**Not applicable** – If the child is less than 3 years and does not attend the anganwadi.

**Exclusive Breast feeding** – If the child has received nothing but only breast milk in the initial years of life, not even prelacteal feeds.

**Prelacteal feed** – Any food given to the child before the initiation of breast feeding.

**Weaning food** – Any food started as a supplement to breast feeding.

**Diet type :**

Vegetarian – If the diet consumed at home was purely vegetarian

Mixed – If the diet consumed at home was both vegetarian and non-vegetarian

**Dietary assessment :**

Dietary intake of calories and proteins was assessed using the 24 hour recall method. The quantity of food intake was assessed using a bowl of known quantity as reference, This was compared with the recommended daily allowance prescribed by the Indian Council of Medical Research (ICMR) <sup>34</sup>.

**Past hospitalisation :** The history was taken from the mother if the child was admitted in the hospital for any medical reason in the past except in the neonatal period.

**Present morbidity** – The history was taken from the mother as well as the anganwadi teacher if the child suffered any illness in the past 15 days.

**Anthropometry** <sup>35</sup>

**Weight** – was measured by Salter scale in the anganwadi for all children with minimum clothing and without shoes. The machine was regularly calibrated. Method employed for weighing was near accuracy of 100gm.

**Height** – Height was measured by making the child, after removing the shoes to stand on a flat surface with feet parallel and with heels, buttocks, shoulders and back of head touching the wall. The head was held comfortably erect and arms were made to hang at sides in a natural manner. Measurement was done with the help of a non-flexible measuring tape.

For children who could not stand, length was measured by making the child lie on the flat surface, head positioned firmly against the fixed hardboard with eyes looking vertically. The knees extended by applying firm pressure and feet flexed at right angles to the lower legs on the board. Length was measured between the two boards to the nearest accuracy of 0.1 cm.

**Mid-arm circumference** – was measured on the left arm midway between the olecranon process of ulna and the acromion process of scapula with a flexible measuring tape.

**Head circumference** – The maximum occipito-frontal circumference was measured by placing the flexible tape firmly over the most prominent region of the occiput and frontal crests.

**Chest circumference** – was measured at the level of nipples with the help of a flexible measuring tape.

MAP OF HANDIGNUR



# Chapter 5

## Results



## **RESULTS**

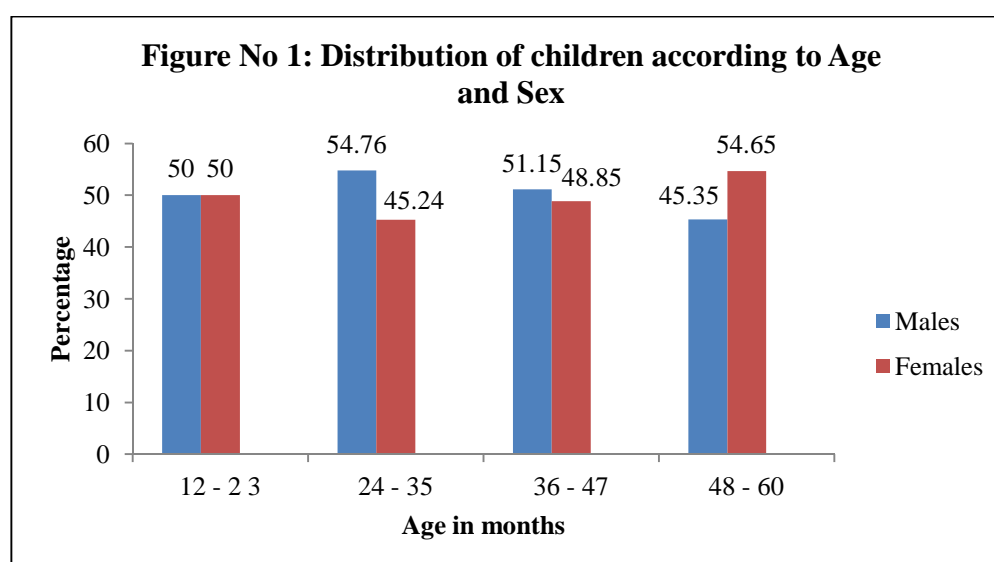
Results of our study are presented as follows:

- 1. Socio-Demographic Profile**
- 2. Infant Feeding Practices**
- 3. Nutritional status**
- 4. Association of nutritional status with other variables**
- 5. Knowledge of mothers regarding infant feeding practices and personal hygiene**

## 1. SOCIO-DEMOGRAPHIC PROFILE

**Table 1: Distribution of children according to Age and Sex**

S. No	Age (in months)	Male		Female		Total	
		No.	%	No.	%	No.	%
1	12 - 23	105	50.00	105	50.00	210	22.5
2	24 - 35	115	54.76	122	45.24	237	25.4
3	36 - 47	111	51.15	106	48.85	217	23.3
4	48 - 60	122	45.35	147	54.65	269	28.8
<b>Total</b>		<b>453</b>	<b>48.55</b>	<b>480</b>	<b>51.45</b>	<b>933</b>	<b>100</b>

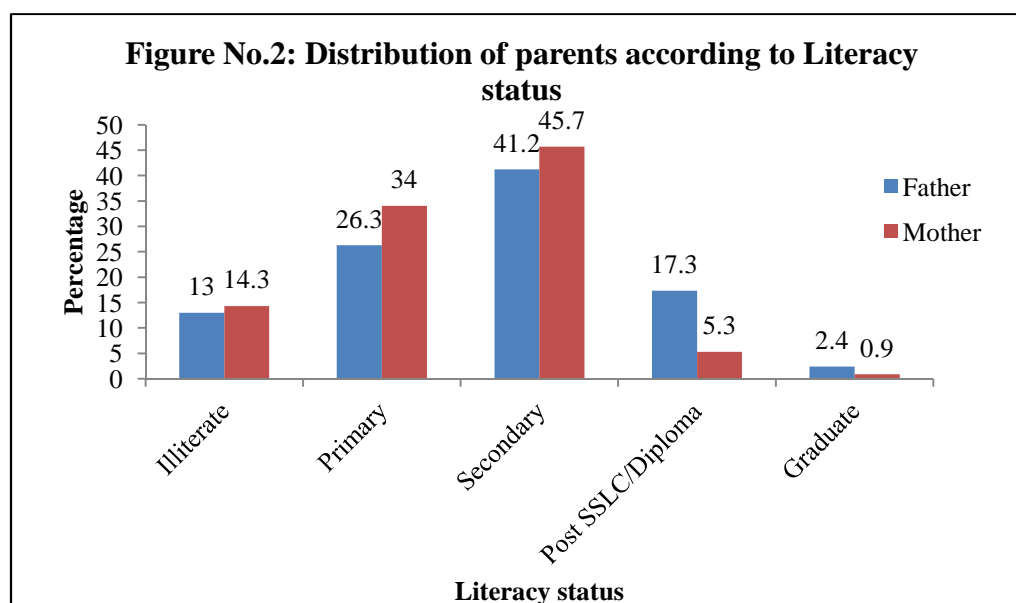


In the present study, 48.55 % were males and 51.45% were females. With regards to age distribution it was observed that in 12-23 months age group, male and female children were represented equally with 50% each. In 24-35 months group, males were 54.76% and females were 45.24%; similarly in 36-47 months and 48-60 months age groups, males and females were 51.15% and 48.85%, 45.35% and 54.65% respectively.

In our study except for 1 child all 932 (99.9%) children belonged to Hindu religion.

**Table No.2: Distribution of children according to education of their parents**

Literacy status	Father		Mother	
	No.	Percentage	No.	Percentage
Illiterate	121	13.0	133	14.3
Primary	245	26.3	317	34.0
Secondary	384	41.2	426	45.7
Post SSLC/ Diploma	161	17.3	49	5.3
Graduate	22	2.4	8	0.9
<b>Total</b>	<b>933</b>	<b>100</b>	<b>933</b>	<b>100</b>

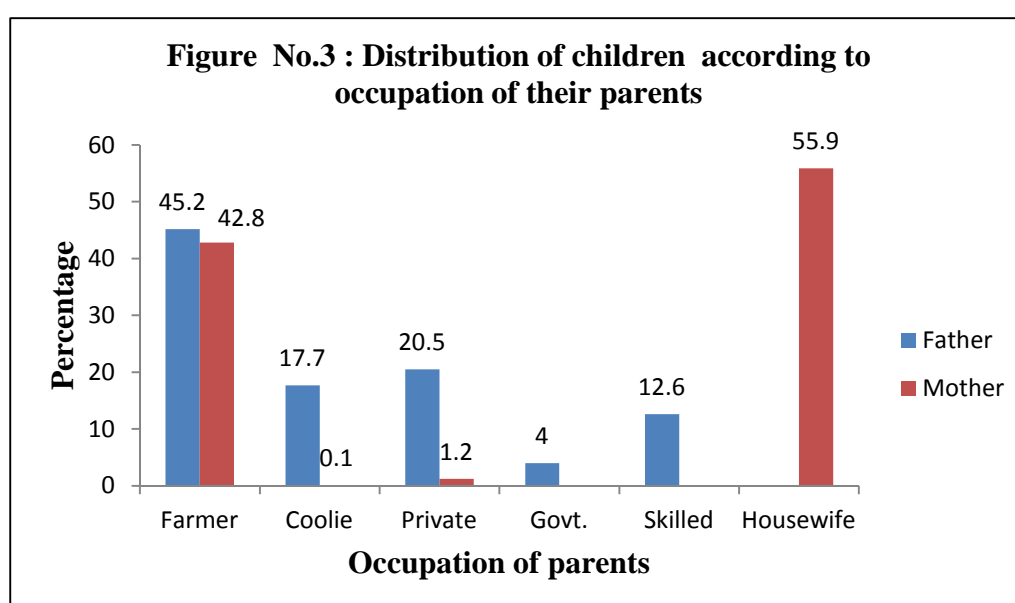


In context to the literacy status of parents, 13.0% of fathers and 14.3% mothers were illiterates. Among the literate fathers, it was observed that 26.3% had primary education, 41.2% had completed high school/secondary education,

17.3% had post SSLC/Diploma education and 2.4% had completed their graduation. Among mothers, 34.0% had primary education, 45.7% had secondary education, 5.3% had undergone post SSLC/Diploma education and only 0.9% had completed graduation

**Table No.3: Distribution of the children according to Occupation of their parents**

Occupation	Father		Mother	
	No.	Percent	No.	Percent
Farmer	422	45.2	399	42.8
Coolie	165	17.7	1	0.1
Private	191	20.5	11	1.2
Government	37	4.0	-	-
Skilled	118	12.6	-	-
Housewife	-	-	522	55.9
<b>Total</b>	<b>933</b>	<b>100.0</b>	<b>933</b>	<b>100</b>

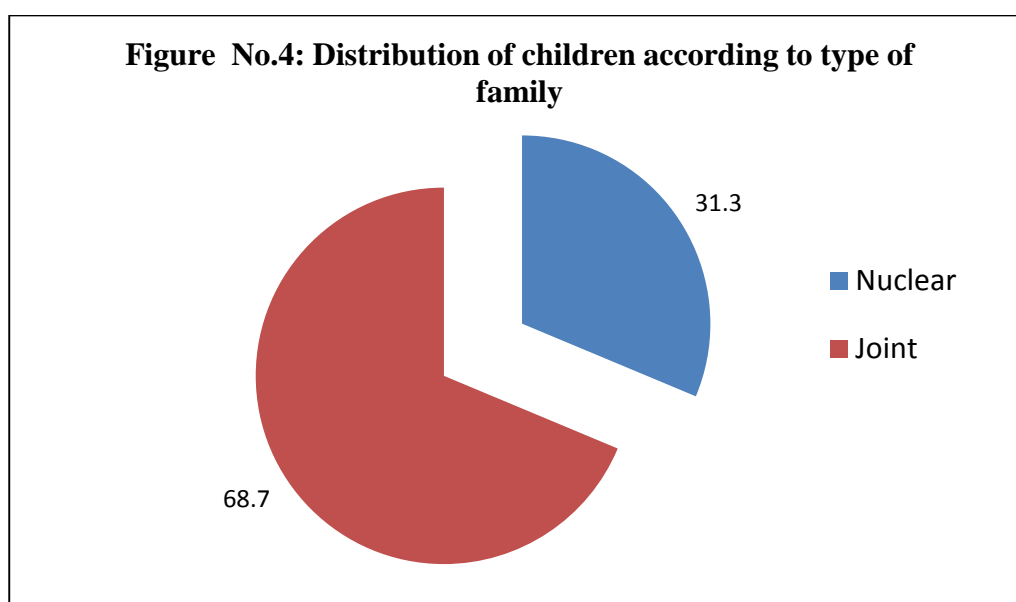


In the present study, it was observed that majority of father's were farmers by occupation (45.1%) , 17.7% involved in coolie work. 20.5% had their own private business or worked in private firms, 12.6% were skilled labourers involved in masonry work and 4% were employed in Government jobs.

Among mothers, majority were housewives (55.9%), 42.8% worked in farms and 1.2% were employed in private firms.

**Table No.4: Distribution of children according to type of family**

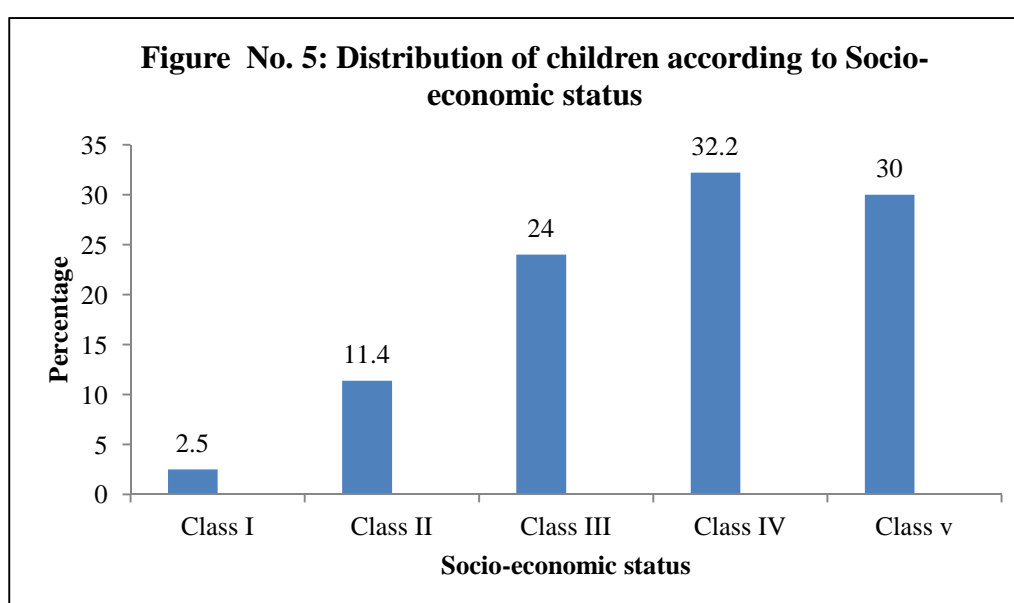
Type of family	Number	Percentage
Nuclear	292	31.3
Joint	641	68.7
<b>Total</b>	<b>933</b>	<b>100.0</b>



Majority of the children in our study (68.7%) belonged to joint families and 31.3% belonged to nuclear families.

**Table No.5: Distribution of children according to Socio-economic status**

Socio-economic status	Number	Percentage
Class I	23	2.5
Class II	106	11.4
Class III	224	24.0
Class IV	300	32.2
Class V	280	30.0
<b>Total</b>	<b>933</b>	<b>100.0</b>



With regards to socio-economic status, majority of the children belonged to Class IV (32.2%) and Class V (30%) according to Modified B.G. Prasad classification. 24% belonged to Class III, 11.4% Class II and only 2.5% belonged to Class I.

In our study, 48.5% of households had 2 children who were less than 5 years (including the study child), 38.9% had only 1 child (study child), 9.8% had 3 children and 2.8% had 4 or more children in their households.

**Table No.6: Distribution of children according to Birth Order**

Birth Order	Number	Percentage
1	401	43.0
2	377	40.4
3	114	12.2
4	41	4.3
<b>Total</b>	<b>933</b>	<b>100.0</b>

In the context of birth order, majority (43%) of the children were of birth order 1, 40.4% of birth order 2, 2.2% of order 3, and 4.3% of birth order 4 and above.

**Table No.7: Distribution of children according to housing condition**

Type of house	Number	Percentage
Kaccha	258	27.7
Pucca	210	22.5
Semi-pucca	465	49.8
<b>Overcrowding</b>		
Present	622	66.7
Absent	311	33.3
<b>Source of water supply</b>		
Over-head tank (provided by panchayat)	458	49.1
Bore-well	193	20.7
Open-well	282	30.2

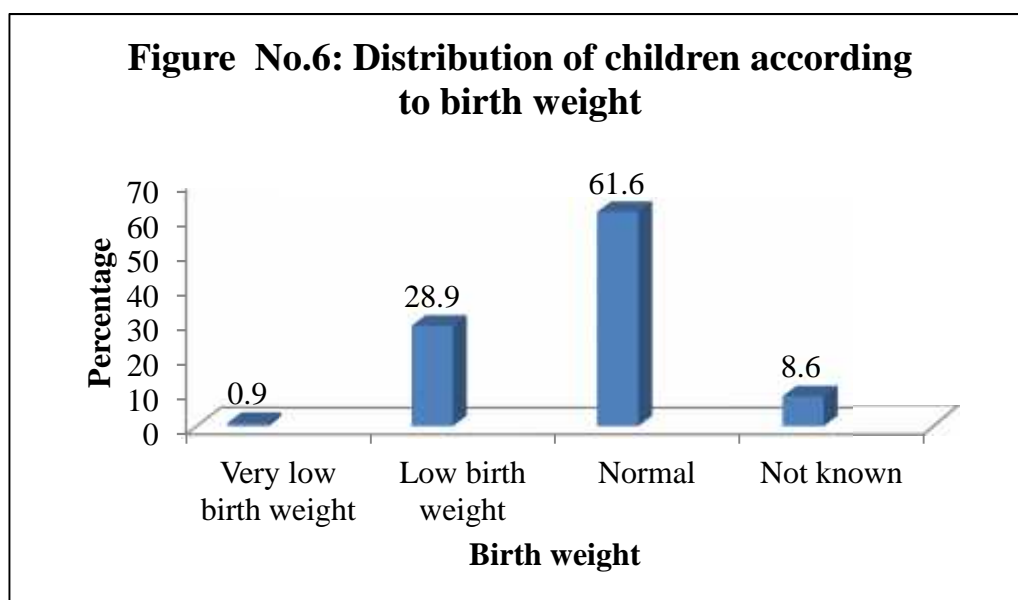
<b>Toilet facility</b>		
Present	704	75.5
Absent	229	24.5
<b>Method of solid waste disposal</b>		
Manure pit	507	54.3
Dumped in Backyard	292	31.3
Others	134	14.4
<b>Type of sullage disposal</b>		
Underground Drain	351	37.6
Kitchen garden	168	18.0
Let free in the open	347	37.2
Biogas plant	67	7.2

As far as housing conditions were concerned, 27.75% resided in kaccha houses, 49.8% in semi-pucca houses and only 22.5% reside in pucca houses. Overcrowding was present in 66.7% of the houses. Most of them used overhead tank as a source of water supply (49.1%), followed by open-well (30.2%) and bore-well (20.7%). Toilet facility was present in 75.5% of the houses whereas others (24.5%) still practiced open air defaecation.

Solid waste was disposed in manure pits in most of the houses (54.3%), some preferred to bury it in backyard (31.3%) and others (14.4%) disposed it in open land. Similarly sullage was disposed in drains (37.6%), kitchen garden (18%), biogas (7.2%) and was let free outside in 37.2% of the houses.

**Table No.8: Distribution of children according to birth weight**

Birth weight	Number	Percentage
Very low birth weight (<1.5kg)	8	0.9
Low birth weight ( 1.5 - 2.5 kg)	270	28.9
Normal (>2.5 kg)	575	61.6
Not known	80	8.6
Total	933	100.0



In our study, 61.6% of children had normal birth weight (>2.5 kg) where as 29.8% had low birth weight (< 2.5kg). Among low birth weight children, 0.9% had a birth weight of less than 1.5 kg. Birth weight of 8.6% of children was not known.

**Table No.9: Distribution of children according to complications after birth**

Complications after birth	Number	Percentage
Absent	839	89.9
Present		
No Hospital admission	8	0.9
NICU admission < 48 hours	59	6.3
NICU admission > 48 hours	27	2.9
<b>Total</b>	<b>933</b>	<b>100</b>

89.9% of children had no complications after birth. Among 10.1% of children who had complications, 0.9% refused hospital admission, 6.3% children were admitted in NICU for < 48 hours and 2.9% were admitted for > 48 hours.

**Table No.10: Distribution of children according to immunization status**

Immunisation status	Number	Percentage
Complete	895	95.9
Partial	38	4.1
Total	933	100.0

As far as primary immunization was concerned, 95.9% were fully immunized against the 6 killer diseases whereas 4.1% were only partially immunized. 35.9% of children less than 3 years did not attend angawadis. Among those who attended (64.1%), 54.2% were regular and 9.9% were irregular. 98.9% of those who attended the anganwadi consumed the food given in the anganwadis

and hence the compliance of anganwadi food was good. Almost all (98.9%) of children attained milestones normally except 1.1% who had delayed milestones.

## 2. INFANT FEEDING PRACTICES

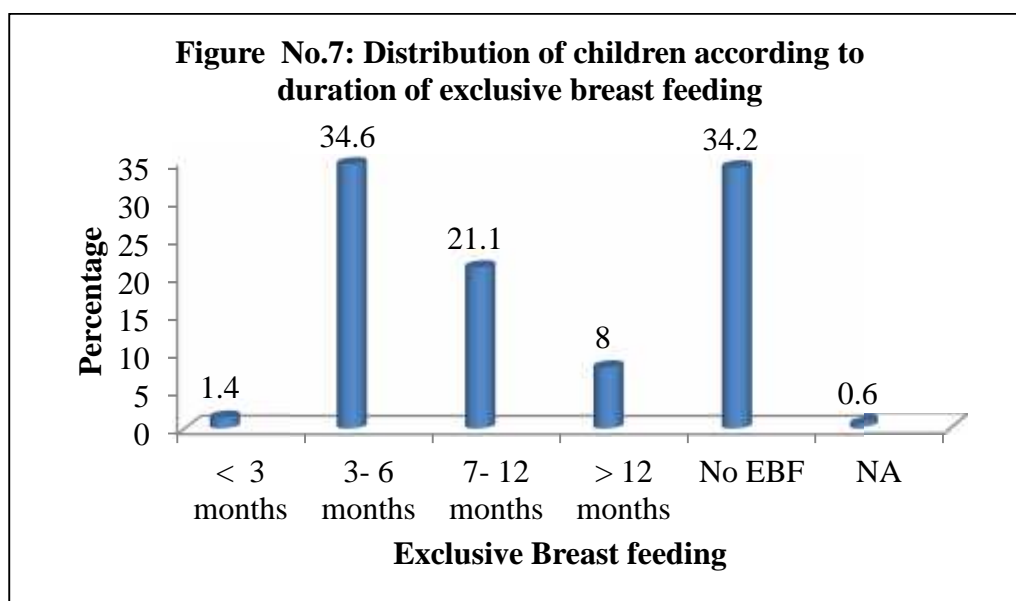
**Table No.11: Distribution of children according to breast feeding practices**

<b>Breast feeding</b>	<b>Number</b>	<b>Percentage</b>
Given	927	99.4
Not given	6	0.6
<b>Total</b>	<b>933</b>	<b>100.0</b>

99.4% of mothers breast fed their infants except 0.6% who did not breast feed due to complications after delivery.

**Table No.12: Distribution of children according to duration of Exclusive breast feeding**

<b>Duration of Exclusive breast feeding</b>	<b>Number</b>	<b>Percentage</b>
< 3 months	13	1.4
3-6 months	323	34.6
7-12 months	197	21.1
> 12 months	75	8.0
No EBF	319	34.2
Not applicable	6	0.6
<b>Total</b>	<b>933</b>	<b>100.0</b>



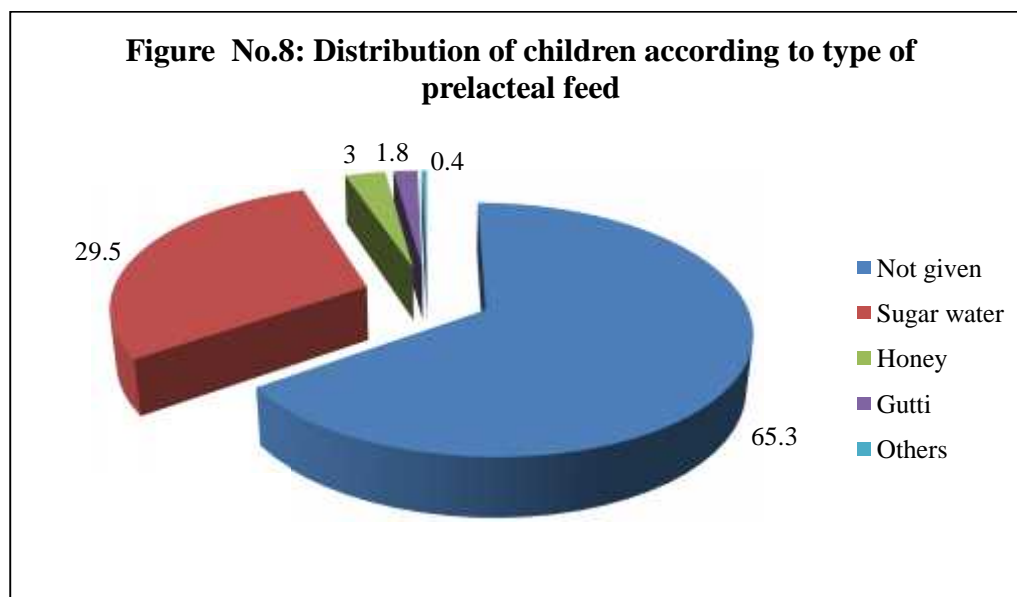
Exclusive breast feeding was practiced by 65.1% of mothers, thus excluding 34.2% mothers who used prelacteal feeds and top feeds. 1.4% of mothers exclusively breast fed for < 3 months, while 34.6% did so for 3-6 months. 29.1% did not remember the exact duration of exclusive breast feeding and answered as 7 -12 months and more than 12 months.

**Table No.13: Distribution of children according to type of pre-lacteal feeds given**

Pre-lacteal feed	Number	Percentage
Not given	609	65.3
Sugar water	275	29.5
Honey	28	3.0
Gutti	17	1.8
Others*	4	0.4
<b>Total</b>	<b>933</b>	<b>100.0</b>

(\*Others – dry fruit paste, gripe water )

Prelacteal feeds were given to 34.7% of children and the most preferred prelacteal feed was sugar water (29.5%), followed by honey (3%), gutti (1.8%) and others (0.4%).



**Table No.14: Distribution of children according to type of weaning food**

Type of weaning food	Number	Percentage
Cereals	366	39.2
Pulses	29	3.1
Both cereals & pulses	256	27.4
Others	249	26.7
Cereals + Others	33	3.5
Total	933	100.0

( Others – cerelac, milk, mashed vegetables)

During the initiation of weaning period, 39.2% of mothers preferred to give only cereal based weaning foods like rice ganji, whereas 3.1% preferred only pulse based food. 27.4% preferred a mixture of both cereals and pulses and the rest (30.2%) preferred a combination of multiple weaning foods.

Most of the children were of mixed diet type (85.7%) and 14.3% were strict vegetarians.

**Table No.15: Distribution of children according to calorie deficit**

Percentage calorie deficit	Number	Percentage
< 10%	93	10.0
11-20%	172	18.4
21-30%	268	28.7
31-40%	184	19.7
41-50%	69	7.4
> 50%	30	3.2
Adequate	117	12.5
<b>Total</b>	<b>933</b>	<b>100.0</b>

**Table No.16: Distribution of children according to protein deficit**

Percentage protein deficit	Number	Percentage
< 10%	30	3.2
11-20%	51	5.5
21-30%	108	11.6
31-40%	216	23.2
41-50%	271	29.0
> 50%	251	26.9
Adequate	6	0.6
<b>Total</b>	<b>933</b>	<b>100.0</b>

When the total calorie intake was assessed, only 12.5% of children were adequate in their calorie intake. 3.25% of children were deficient by more than 50% whereas 10% were deficit by < 10%. 74.2% were in the intermediate category with the deficiency ranging between 11 – 50%.

Similarly with proteins, only 0.6% had adequate intake of proteins whereas 26.9% had a gross protein deficit of > 50%. Majority (52.2%) had a deficiency ranging between 30-50% and a deficiency of 10-30% was seen in 17.1% of children.

**Table No.17: Distribution of children according to past illness requiring hospitalisation**

<b>Past illness requiring hospitalisation</b>	<b>Number</b>	<b>Percentage</b>
No major illness	776	83.2
Fever	31	3.3
Acute GE	44	4.7
LRTI	35	3.8
Convulsions	19	2.0
Trauma	9	1.0
Others	13	1.4
NICU	6	0.6
<b>Total</b>	<b>933</b>	<b>100.0</b>

When mothers were enquired about child's past illness requiring hospitalization, it was found that 83.2% did not suffer from any major illness. Among the rest (16.8%) who underwent hospitalization, the most common

morbidity noticed was acute GE (4%), ARI (3.8%), fever (3.3%) and febrile convulsions (2%).

**Table No. 18: Distribution of children according to presence of morbidity in last 15 days**

<b>Morbidity in past 15 days</b>	<b>Number</b>	<b>Percentage</b>
No morbidity	663	71.1
Fever	46	4.9
Cold/URTI	79	8.5
LRTI	69	7.4
Acute GE	33	3.5
Eye	7	0.8
ENT	7	0.8
Skin	19	2.0
Others	10	1.1
<b>Total</b>	<b>933</b>	<b>100.0</b>

Acute respiratory infections was the most commonly reported morbidity (15.9%) in the past 15 days, followed by fever (4.9%). Acute Gastroenteritis was reported in 3.5% children and eye, ENT and skin together contributed 3.6%.

Common morbidities noted at the time of study were Anaemia (10.9%), Caries teeth (10.3%), URTI (8.6%) and pyoderma (6%). 1.4% had circulatory system (murmurs) involvement followed by respiratory system (LRTI) (1.3%), Per abdomen (splenomegaly – 0.2%) , Central nervous system (spasticity, aphasia) (0.2%) and rest had no systemic involvement (96.9%).

### 3. NUTRITIONAL STATUS PROFILE

**Table No.19: Sex-wise distribution of children according to mean height and age**

Age in months	Males		Females	
	Children observed	Height (mean $\pm$ SD)	Children observed	Height (mean $\pm$ SD)
12 - 23	105	77.08 $\pm$ 6.25	105	75.24 $\pm$ 6.22
24 - 35	115	85.63 $\pm$ 6.09	122	85.06 $\pm$ 5.63
36 - 47	111	92.03 $\pm$ 5.38	106	91.50 $\pm$ 5.07
48 - 60	122	98.63 $\pm$ 5.28	147	97.77 $\pm$ 5.56
Total	453	88.72 $\pm$ 9.8	480	88.22 $\pm$ 10.06
<b>Student 't' = 0.758, DF = 931, p = 0.448</b>				

**Table No.20: Sex-wise distribution of children according to mean weight and age**

Age in months	Males		Females	
	Children observed	Weight (kg $\pm$ SD)	Children observed	Weight (kg $\pm$ SD)
12 - 23	105	9.1 $\pm$ 1.37	105	8.6 $\pm$ 1.45
24 - 35	115	10.68 $\pm$ 1.40	122	10.39 $\pm$ 1.51
36 - 47	111	12.24 $\pm$ 1.52	106	12.01 $\pm$ 1.62
48 - 60	122	13.77 $\pm$ 1.70	147	14.07 $\pm$ 7.7
Total	453	11.54 $\pm$ 2.29	480	11.48 $\pm$ 4.9
<b>Student 't' = 0.217, DF= 931, p= 0.828</b>				

Boys had slightly higher mean values for height than girls (boys vs girls: 88.72 vs. 88.22), the difference was not statistically significant ( $p=0.448$ ). Similarly no significant difference was noted in the mean values of weight between the two sexes.

However there was a significant difference in the mean values of head circumference between boys and girls with mean head circumference in boys being  $47.66 \pm 2.18$  cm and the value in girls being  $46.76 \pm 1.75$  cm ( $p=0.000$ ). Similarly chest circumference was higher in boys with mean values  $48.73 \pm 3.67$  cm and that in girls was  $48.19 \pm 2.86$  cm. The difference was statistically significant ( $p=0.012$ ). No significant difference was noted in the mean mid-arm circumference among boys and girls ( $p=0.690$ )

**Table No. 21 : Sex-wise distribution of children according to mean head circumference, chest circumference and mid-upper arm circumference**

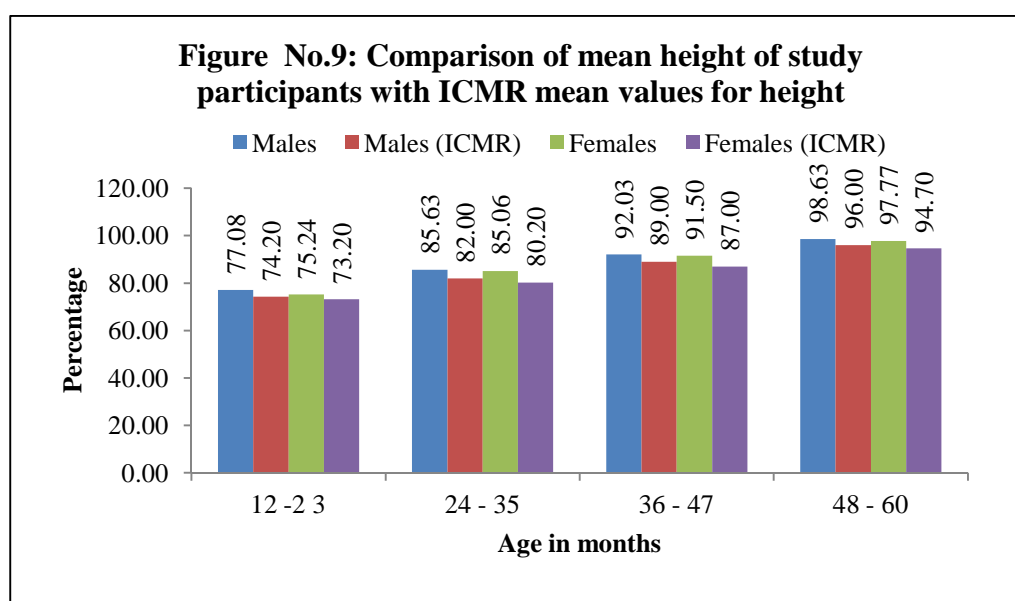
Anthropometry	Males (n= 453)		Females (n= 480)		Student's t	p value
	Mean	$\pm$ SD	Mean	$\pm$ SD		
Head circumference	47.66	2.18	46.76	1.75	6.93	<0.001
Chest circumference	48.73	3.67	48.19	2.86	2.51	0.012
Mid –upper arm circumference	14.10	1.00	14.08	1.10	0.39	0.690

**Table No.22a: Comparison of mean height of male study participants with ICMR mean values for height**

Age in months	Present study	ICMR	z-value	p-value
12 - 23	77.08 + 6.25	74.2 +5.07	5.81	p< 0.001
24 - 35	85.63 + 6.09	82.0 +5.45	7.14	p< 0.001
36 - 47	92.03+ 5.38	89.0 +6.40	4.99	p< 0.001
48 - 60	98.63 + 5.28	96.0 +6.98	4.16	p< 0.001

**Table No.22b: Comparison of mean height of female study participants with ICMR mean values for height**

Age in months	Present study	ICMR	z-value	p-value
12 - 23	75.24 + 6.22	73.2 + 5.60	3.71	p< 0.001
24 - 35	85.06 +5.63	80.2 + 5.89	9.11	p< 0.001
36 - 47	91.50 + 5.07	87.0 + 6.24	7.42	p< 0.001
48 - 60	97.77 + 5.56	94.7 + 6.42	5.79	p< 0.001



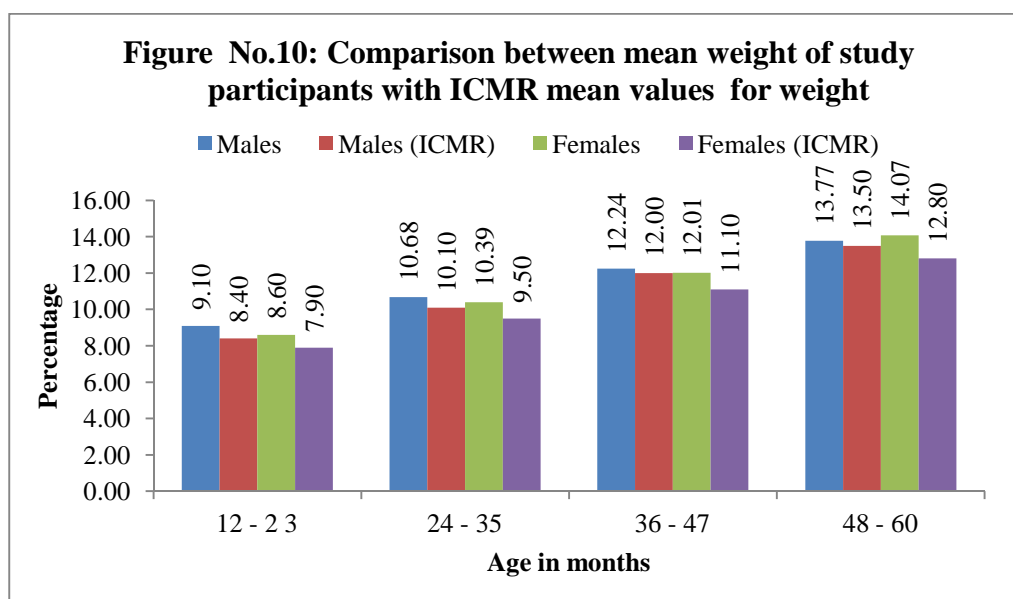
Male children in our study were much taller than male children in ICMR study ( $p < 0.001$ ). Similarly female children were also taller than their counterparts in ICMR study with a significant difference with  $p$  value  $< 0.001$ .

**Table No.23a: Comparison of mean weight of male study participants with ICMR mean values for weight**

Age in months	Present study	ICMR	z-value	p-value
12 - 23	9.1 + 1.37	8.4 +1.47	4.89	$p < 0.001$
24 - 35	10.68 + 1.40	10.1 +1.71	3.65	$p < 0.001$
36 - 47	12.24 + 1.52	12.0 +1.87	1.35	$p = 0.177$
48 - 60	13.77 + 1.70	13.5 +2.02	1.47	$P = 0.141$

**Table No.23b: Comparison of mean weight of female study participants with ICMR mean values for weight**

Age in months	Present study	ICMR	z-value	p-value
12 - 23	8.6 + 1.45	7.9 +1.62	4.43	$p < 0.001$
24 - 35	10.39 + 1.51	9.5 +1.74	5.63	$p < 0.001$
36 - 47	12.01 + 1.62	11.1 +1.79	5.23	$p < 0.001$
48 - 60	14.07 + 7.7	12.8 + 2.11	7.29	$p < 0.001$

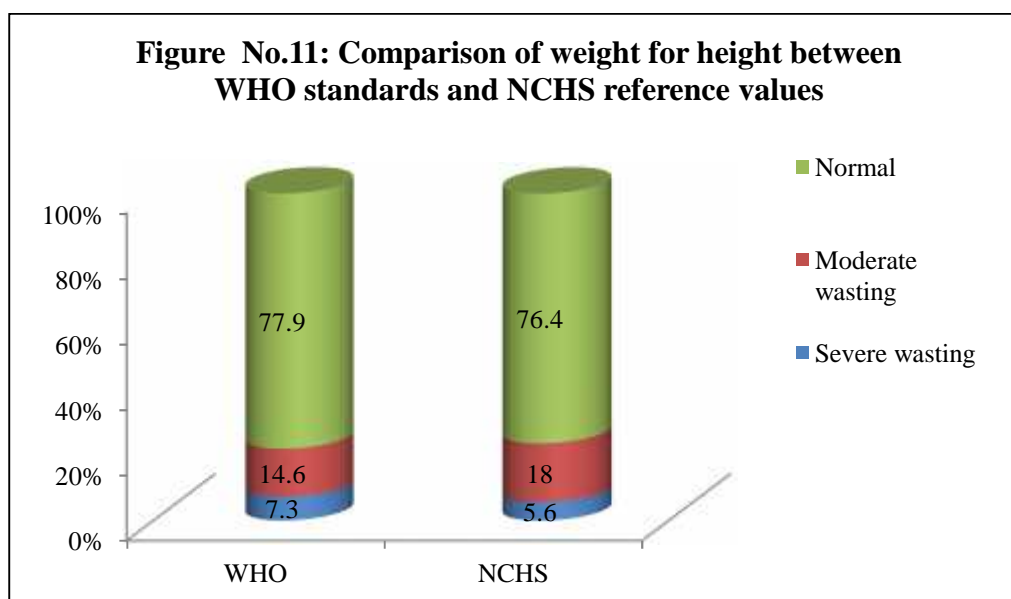


When the mean weights were compared, males in the age group of 12 -23 months and 24 – 35 months weighed much higher than children in the same age group of ICMR study ( $p < 0.001$ ). However no much difference in weight was noticed in the age groups of 36 – 47 months and 48 -60 months between the two studies. Females in all the age groups were much heavier than their counterparts in ICMR study ( $p > 0.05$ ).

**Table No.24: Distribution of study children according to WHO standards and NCHS reference values**

**I) Weight for Height**

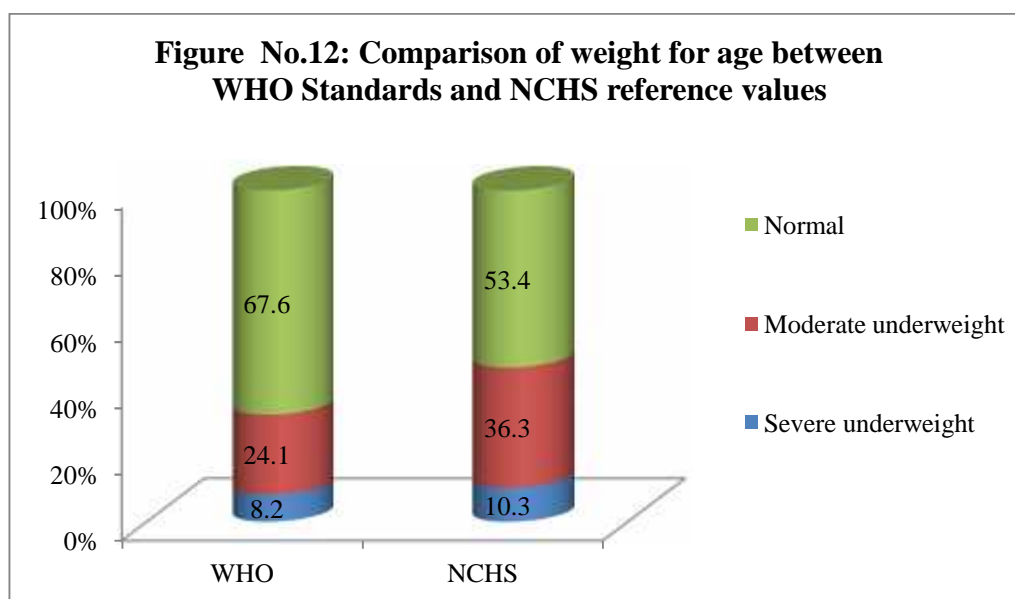
Weight for height	WHO		NCHS	
	No.	%	No.	%
Severe wasting	69	7.3	52	5.6
Moderate wasting	137	14.6	168	18.0
Normal	727	77.9	713	76.4
<b>Total</b>	<b>933</b>	<b>100</b>	<b>933</b>	<b>100</b>
<b>Measure of agreement kappa = 0.785 (p&lt;0.001)</b>				



According to WHO classification, the prevalence of wasting (weight for height  $< -2SD$ ) was 22.1% whereas by NCHS reference the prevalence was 23.6%. The prevalence of severe wasting (Severe acute malnutrition- SAM)<sup>36</sup> defined by weight for height  $< -3SD$  was 7.4% by WHO and 5.6% by NCHS. The prevalence of overweight (weight for height  $> +2SD$ ) was 0.8%. Kappa statistics showed a good agreement between the two reference standards with kappa 0.785.

## II) Weight for age

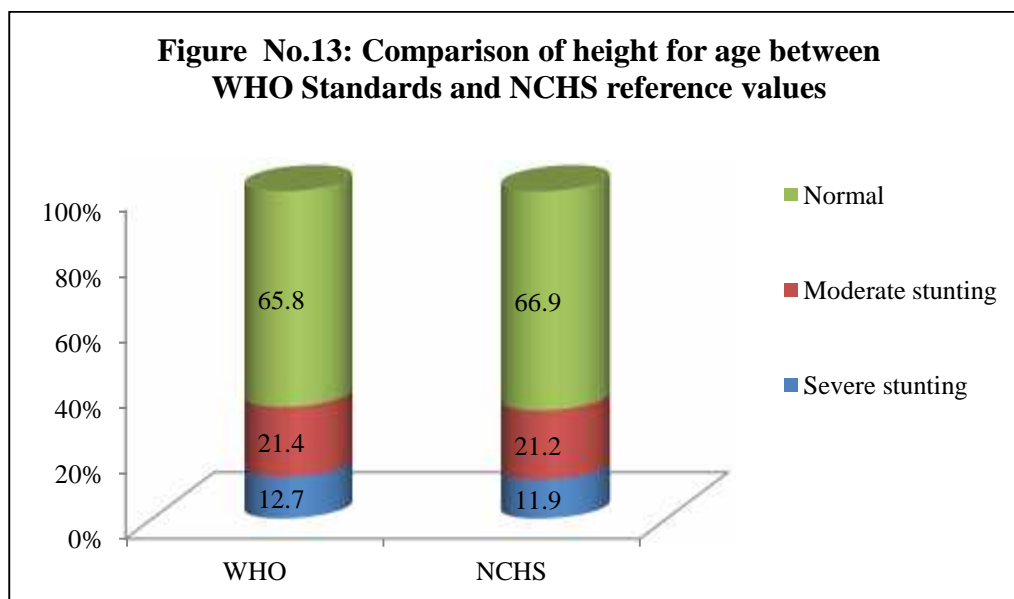
Weight for age	WHO		NCHS	
	No	%	No	%
Severe underweight	77	8.2	96	10.3
Moderate underweight	225	24.1	339	36.3
Normal	631	67.6	498	53.4
<b>Total</b>	<b>933</b>	<b>100</b>	<b>933</b>	<b>100</b>
<b>Measure of agreement kappa = 0.682 (p &lt; 0.001)</b>				



Similarly prevalence of underweight (weight for age < -2 SD) was 32.4% by WHO and 46.6% by NCHS reference. The prevalence of severe underweight (weight for age < -3SD) was 8.3% by WHO standards and 10.3% by NCHS reference. A good agreement was seen between the two standards with kappa = 0.682.

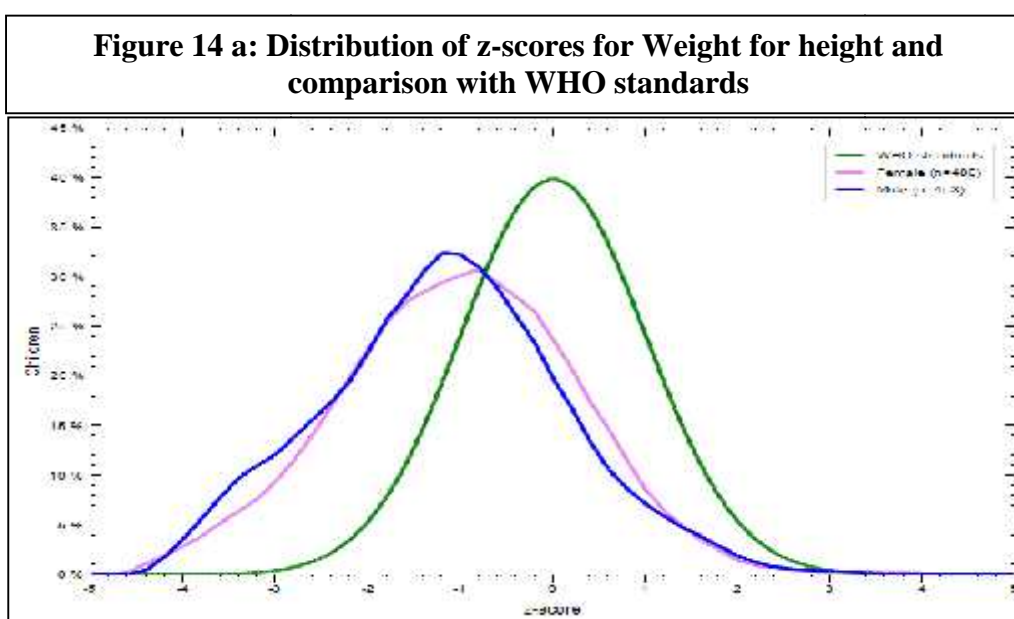
### III) Height for age

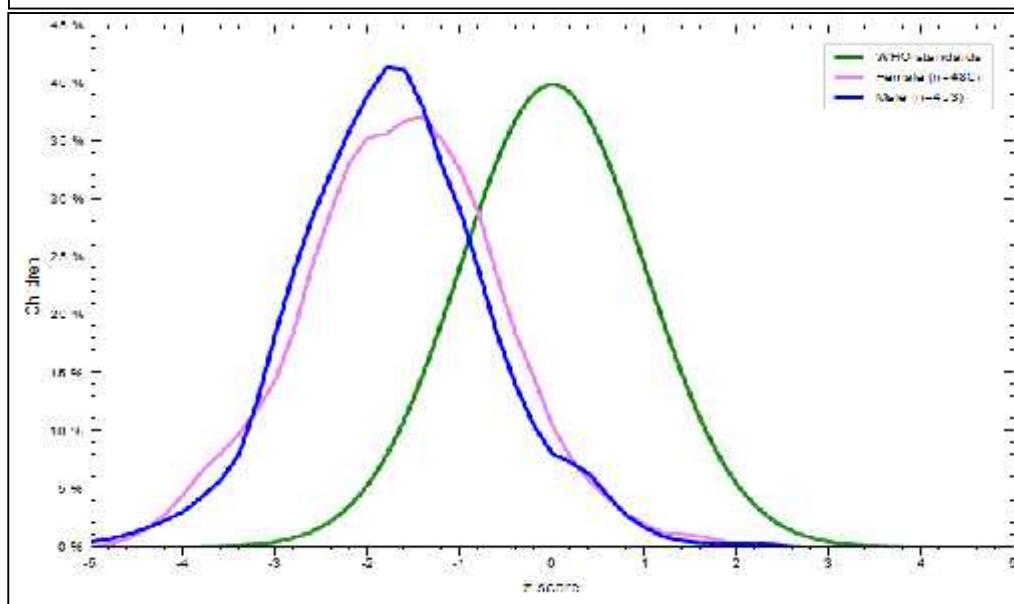
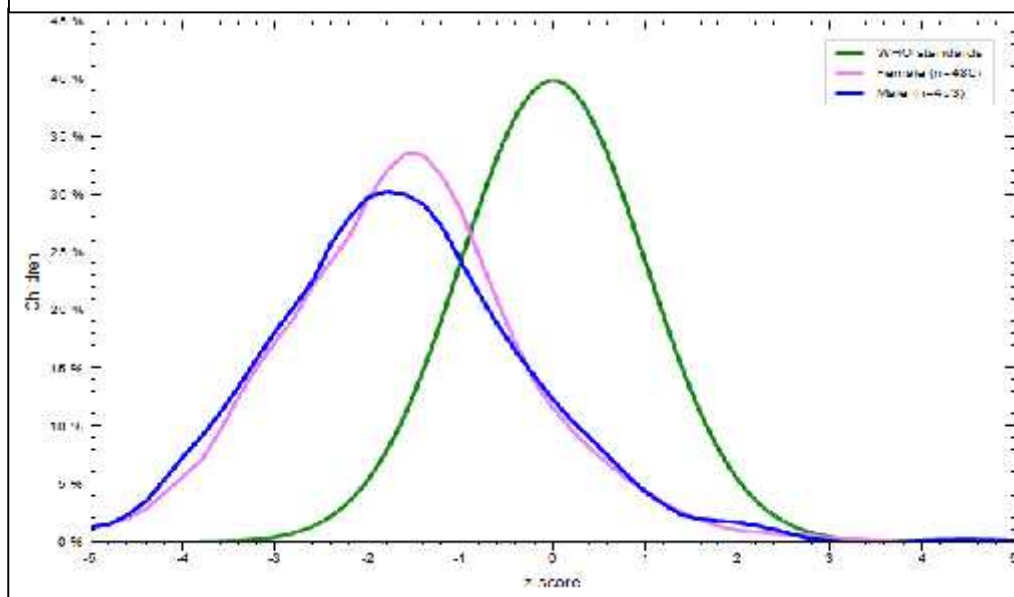
Height for age	WHO		NCHS	
	No	%	No	%
Severe stunting	119	12.7	111	11.9
Moderate stunting	200	21.4	198	21.2
Normal	614	65.8	624	66.9
<b>Total</b>	<b>933</b>	<b>100</b>	<b>933</b>	<b>100</b>
<b>Measure of agreement kappa = 0.749 (p&lt;0.001)</b>				



By WHO standards, the prevalence of stunting (height for age  $< -2SD$ ) was 34.2% whereas the same by NCHS reference was 33.1%. The prevalence of severe stunting (height for age  $< -3 SD$ ) was 12.8% by WHO and that by NCHS was 11.9%. Kappa showed a good agreement between WHO standards and NCHS reference values with a value of 0.749.

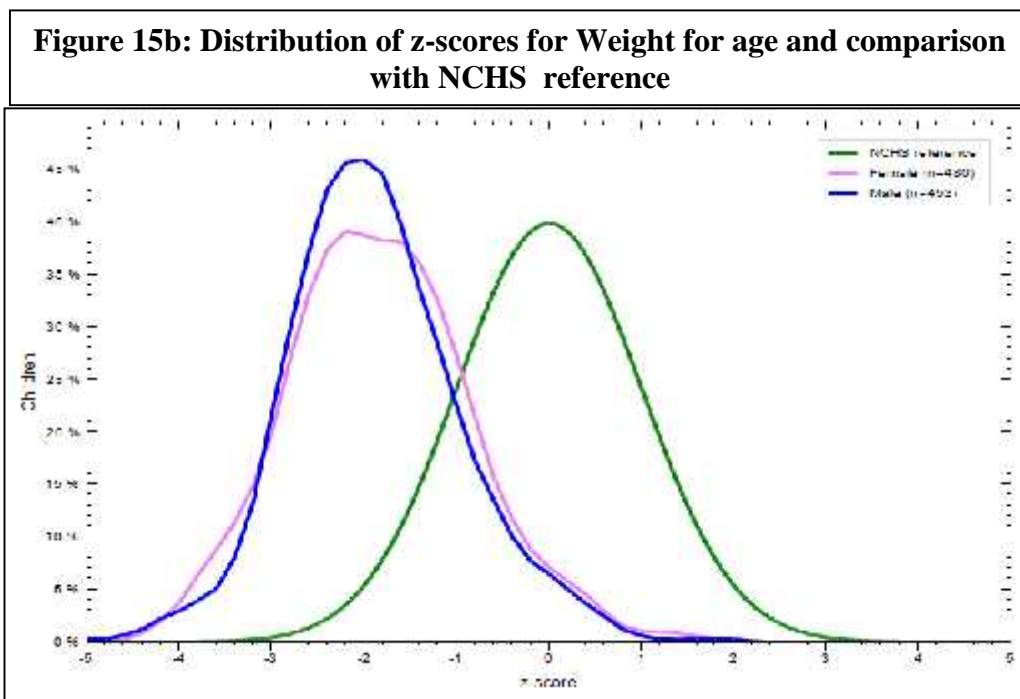
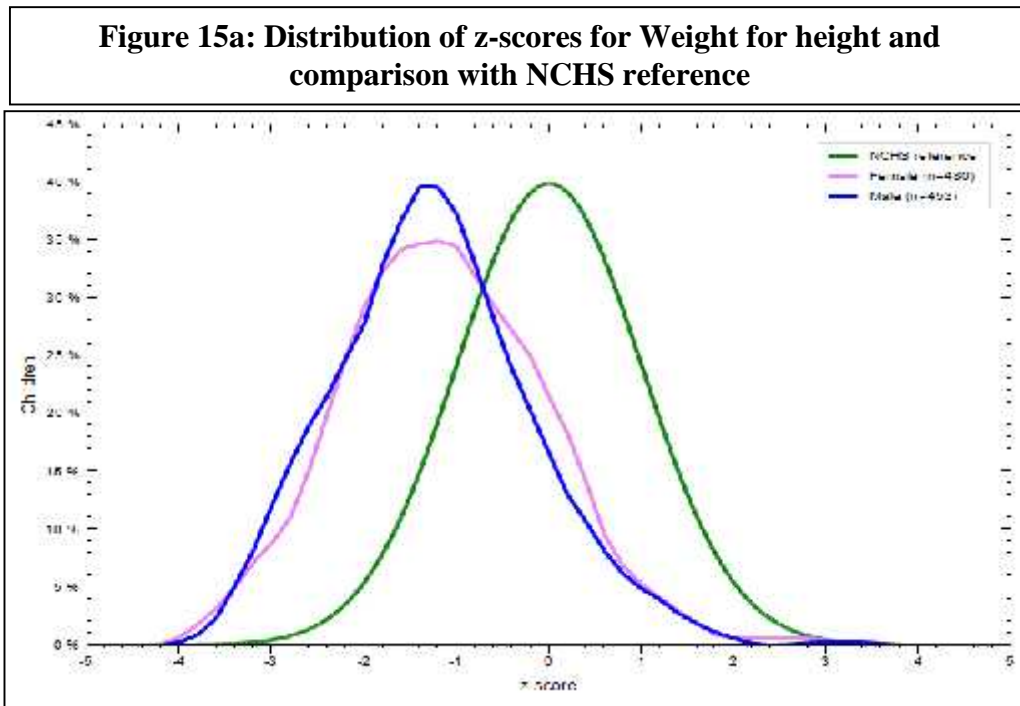
The prevalence of overweight as assessed by BMI with  $> 85^{\text{th}}$  percentile was 4.7% and that of obesity with BMI  $> 95^{\text{th}}$  percentile was 2%.



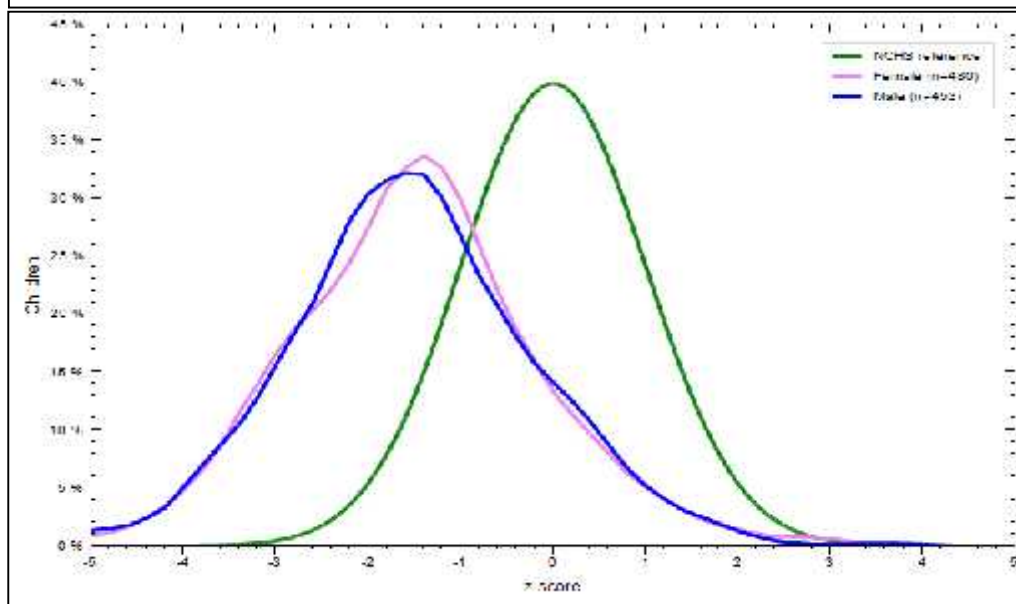
**Figure 14 b: Distribution of z-scores for Weight for age and comparison with WHO standards****Figure 14 c: Distribution of z-scores for Height for age and comparison with WHO standards**

The distribution curve for the three nutritional indicators were skewed to the left with the mean z-scores lying between -1 to -2.5 i.e the average weight and height of children in the present study was lower than the reference median

of WHO standards. The peak for WAZ scores was almost comparable with WHO standards.

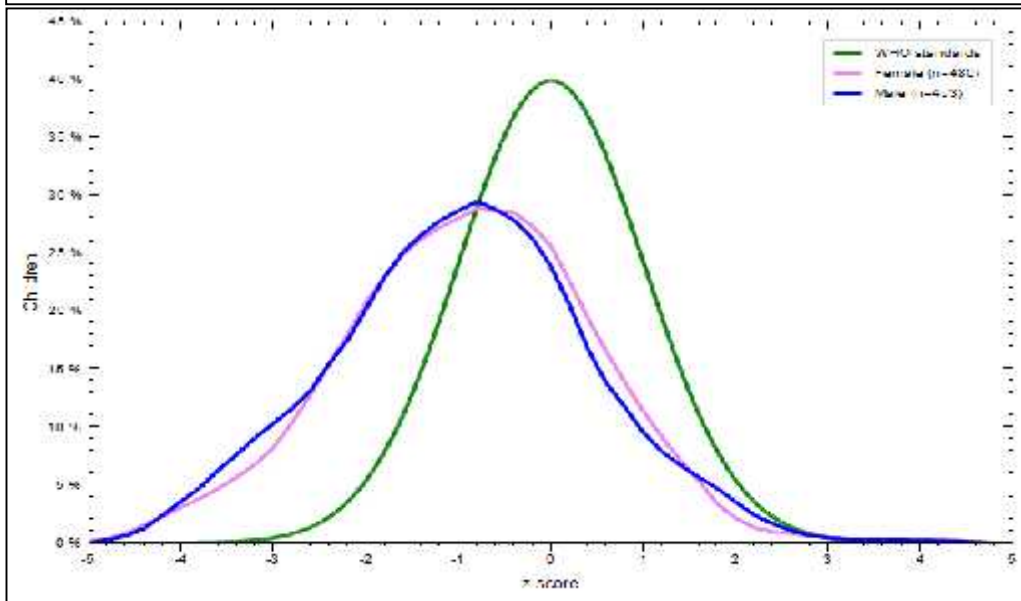


**Figure 15c: Distribution of z-scores for Height for age and comparison with NCHS reference**

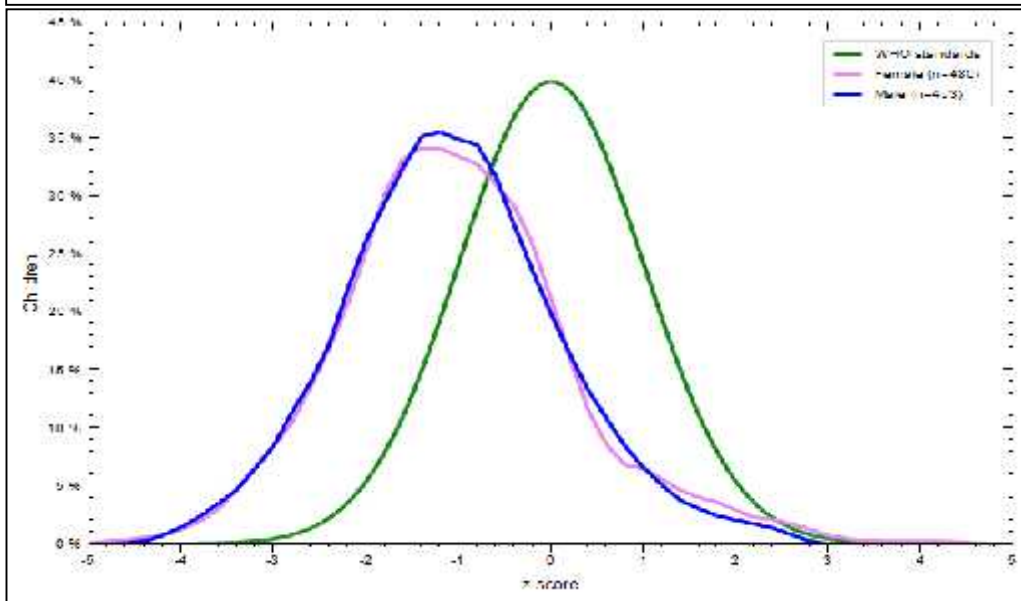


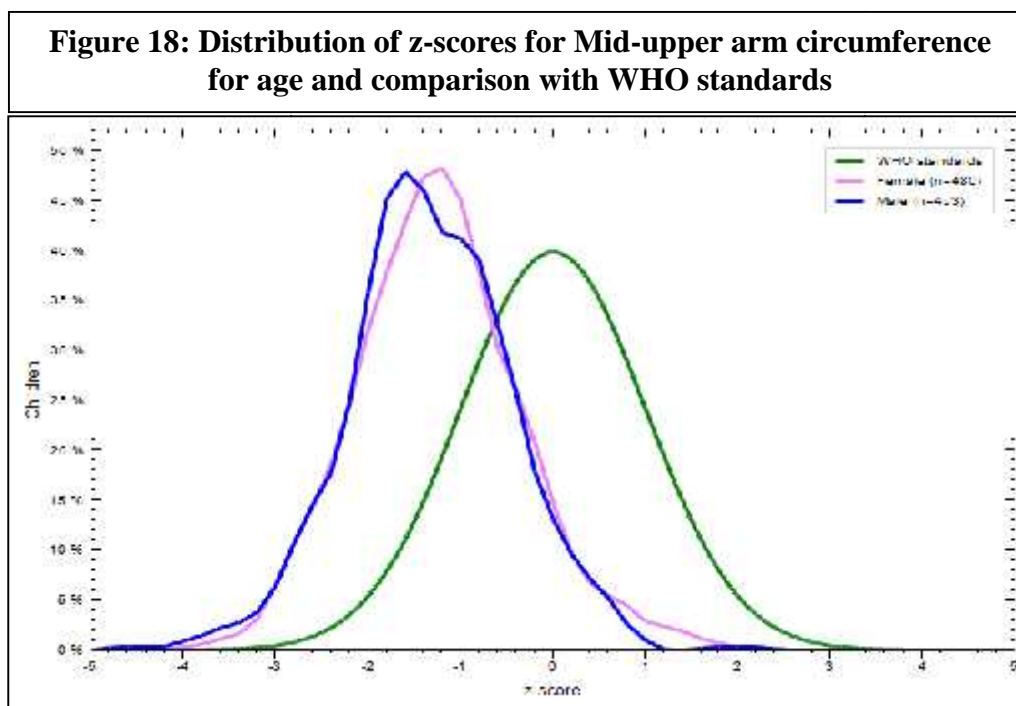
The distribution curve for the three nutritional indicators were skewed to the left with the mean z-scores lying between -1 to -2.5 i.e. the average weight and height of children in the present study was lower than the reference median of NCHS standards. The peak of WHZ scores for males was almost comparable with WHO standards but the peak of WAZ scores for males was much higher than NCHS standards.

**Figure 16: Distribution of z-scores for BMI for age and comparison with WHO standards**



**Figure 17: Distribution of z-scores for Head circumference for age and comparison with WHO standards**

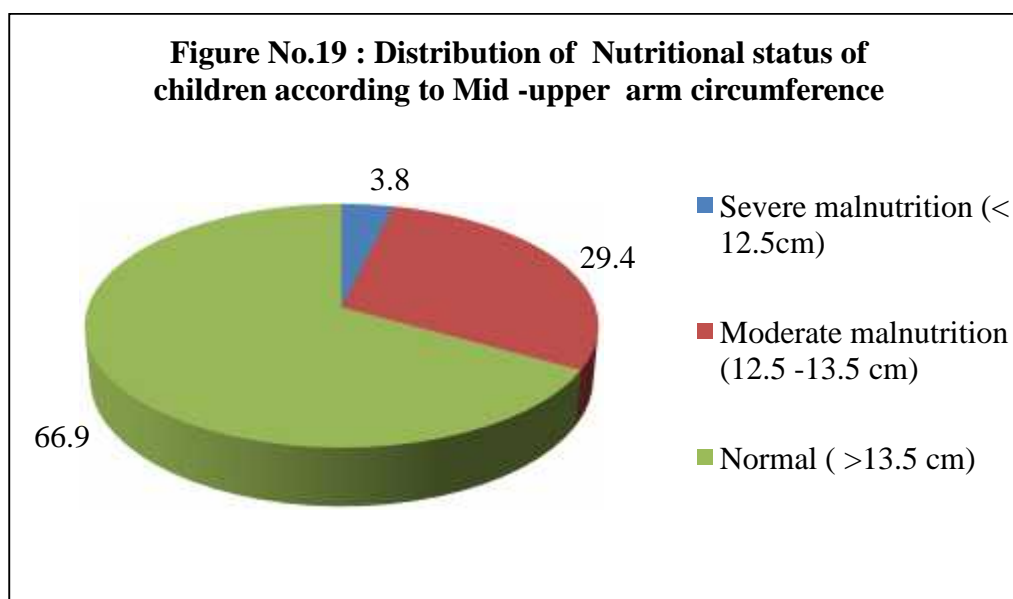




The distribution curve for the three nutritional indicators were skewed to the left with the mean z-scores lying between -1 to -2 i.e. the average measures for BMI, head circumference and Mid-upper arm circumference of children in the present study was lower than the reference median of WHO standards. The distribution curves for both males and females were almost similar. The peak of mid-upper arm circumference z- scores was much higher than WHO standards.

**Table No.25: Distribution of nutritional status of children according to mid-upper arm circumference**

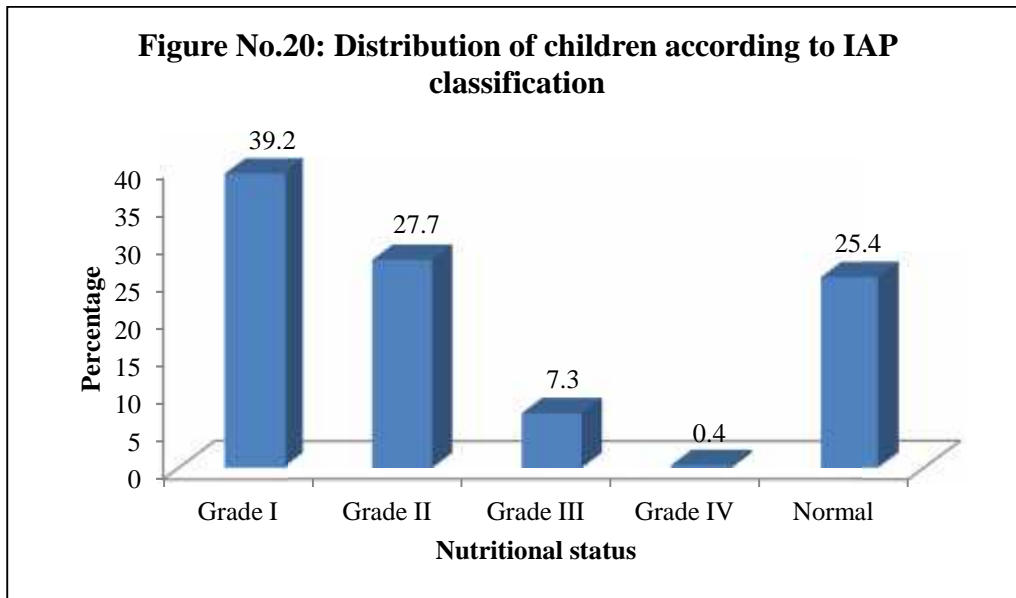
Mid-arm circumference ( in cms)	Number	Percentage
< 12.5	35	3.8
12.5– 13.5	274	29.4
> 13.5	624	66.9
<b>Total</b>	<b>933</b>	<b>100.0</b>



When malnutrition was assessed by mid-upper arm circumference (MAC), 3.8% of children were found to be severely malnourished with a mid-arm circumference of < 12.5 cm, 29.4% were moderately malnourished (12.5 – 13.5 cm) and 66.9% had a normal mid-arm circumference of > 13.5 cm.

**Table No.26: Distribution of nutritional status of study children according to IAP classification**

Nutritional status	Number	Percentage
Grade I	366	39.2
Grade II	258	27.7
Grade III	68	7.3
Grade IV	4	0.4
Normal	237	25.4
Total	933	100

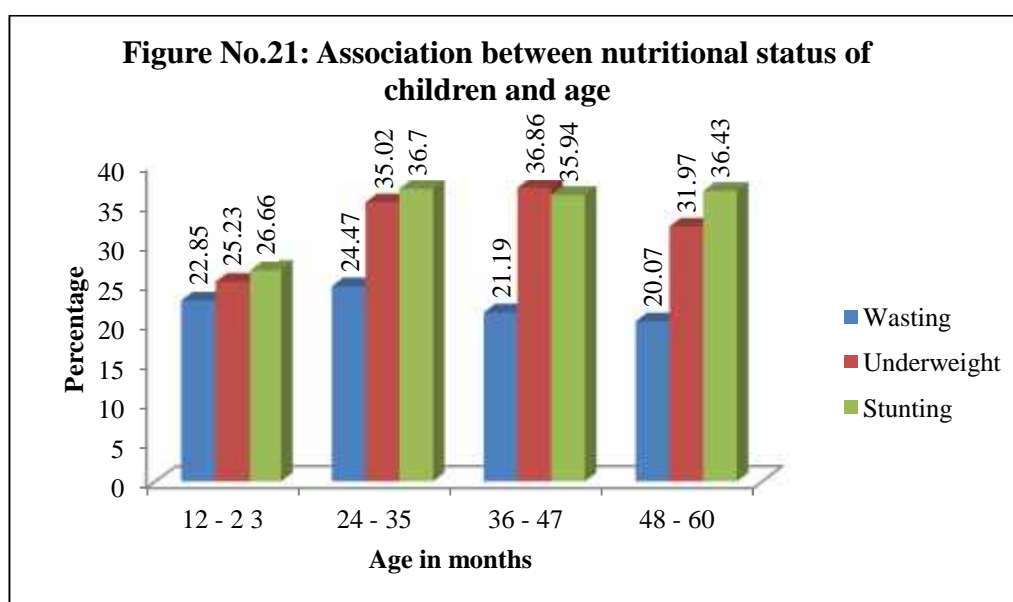


Nutritional status of children assessed by IAP classification showed that 39.2% belonged to Grade I, 27.7% belonged to Grade II, 7.3% and 0.4% belonged to Grade III and Grade IV respectively. 25.4% were normal and showed no degree of malnourishment.

#### 4. ASSOCIATION OF NUTRITIONAL STATUS OF CHILDREN WITH OTHER VARIABLES

Table No.27: Association between nutritional status of children and age

Age in months	Children observed		Wasted		Underweight		Stunted	
	No.	%	No.	%	No.	%	No.	%
12 -23	210	22.50	48	22.85	53	25.23	56	26.66
24 -35	237	25.40	58	24.47	83	35.02	87	36.70
36 - 47	217	23.25	46	21.19	80	36.86	78	35.94
48- 60	269	28.83	54	20.07	86	31.97	98	36.43
<b>Total</b>	<b>933</b>	<b>100</b>	<b>206</b>	<b>22.07</b>	<b>302</b>	<b>32.36</b>	<b>319</b>	<b>34.19</b>
			$\chi^2 = 1.589,$ DF = 3 p = 0.662		$\chi^2 = 7.664,$ DF = 3 p = 0.053		$\chi^2 = 6.848,$ DF = 3 p = 0.077	

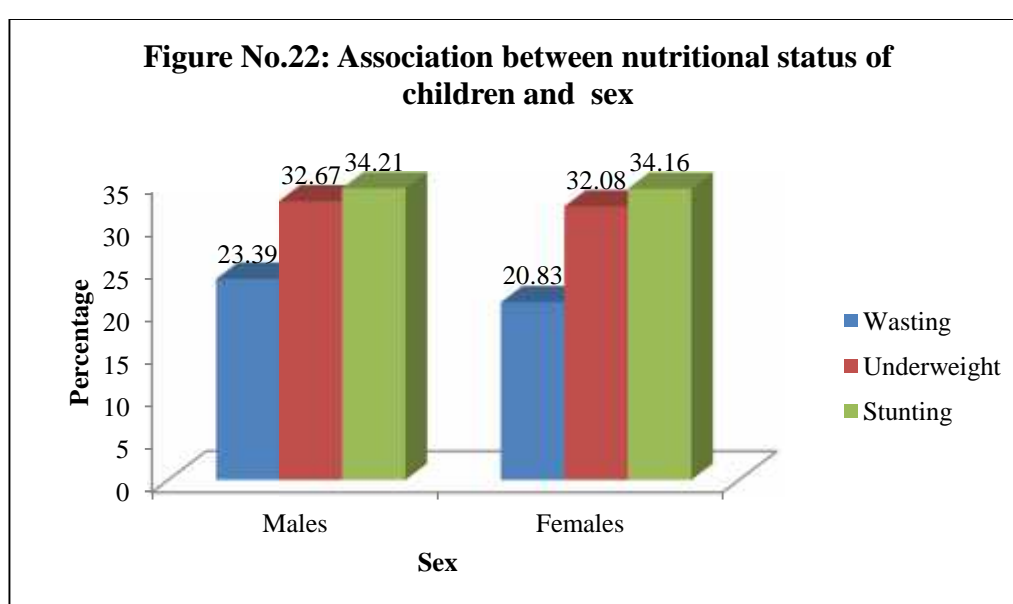


When nutritional status was assessed with respect to age it was observed that wasting was maximum (24.47%) in the age group 24 – 35 months but its distribution was not statistically significant. With respect to underweight,

maximum degree of underweight was noted in 36 – 47 months (36.86%) and 24 – 35 months (35.02%). The difference was marginally significant statistically with  $p=0.053$ . When stunting was assessed, least degree of stunting (26.66%) was noted in 12 -23 month age group whereas significant degrees was noted in other age groups i.e 36.70%, 35.70% and 36.43% in the age groups 24-35, 36 – 47 and 48 – 60 months respectively, but the distribution was not statistically significant ( $p=0.077$ ).

**Table No.28: Association between nutritional status of children and sex**

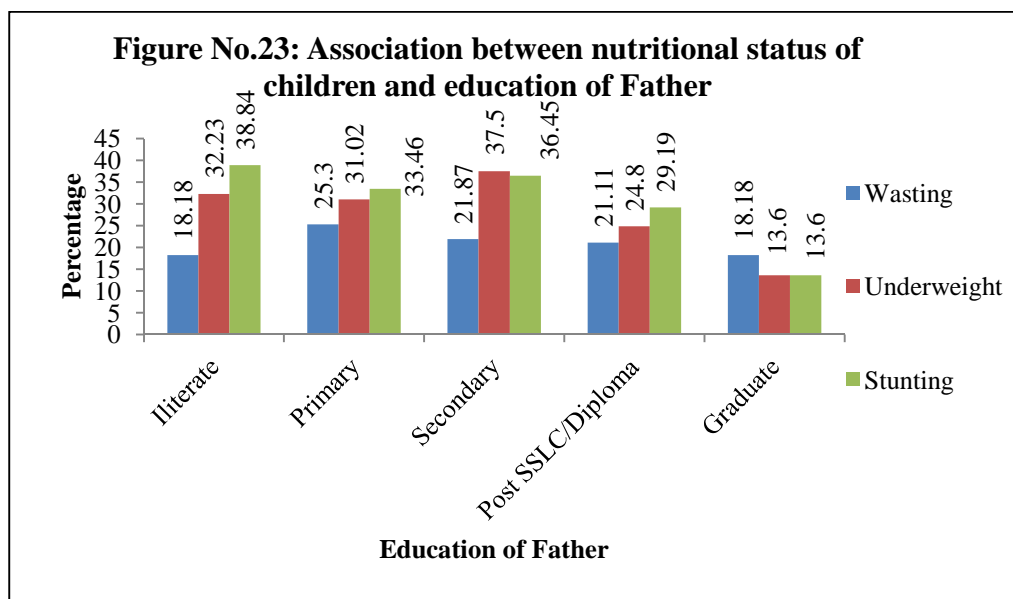
Sex	Total		Wasting		Underweight		Stunting	
	No.	%	No.	%	No.	%	No.	%
Male	453	48.55	106	23.39	148	32.67	155	34.21
Female	480	51.44	100	20.83	154	32.08	164	34.16
<b>Total</b>	<b>933</b>	<b>100</b>	<b>206</b>	<b>22.07</b>	<b>302</b>	<b>32.36</b>	<b>319</b>	<b>34.19</b>
			$\chi^2=0.892$ , DF=1 $p=0.345$		$\chi^2=0.037$ , DF=1 $p=0.848$		$\chi^2=0.000$ , DF=1 $p=0.987$	



Males and females showed no much difference in their nutritional status as far as underweight and stunting was concerned. Males showed a higher prevalence of wasting (23.39%) than females (20.83%). Both sexes showed the same degree of underweight (Males vs. Females: 32.67 vs. 32.08%). Similarly the degree of stunting was 34.21% in males and 34.16% in females. The distribution was not significant in any of the nutritional indices.

**Table No.29: Association between nutritional status of children and education of father**

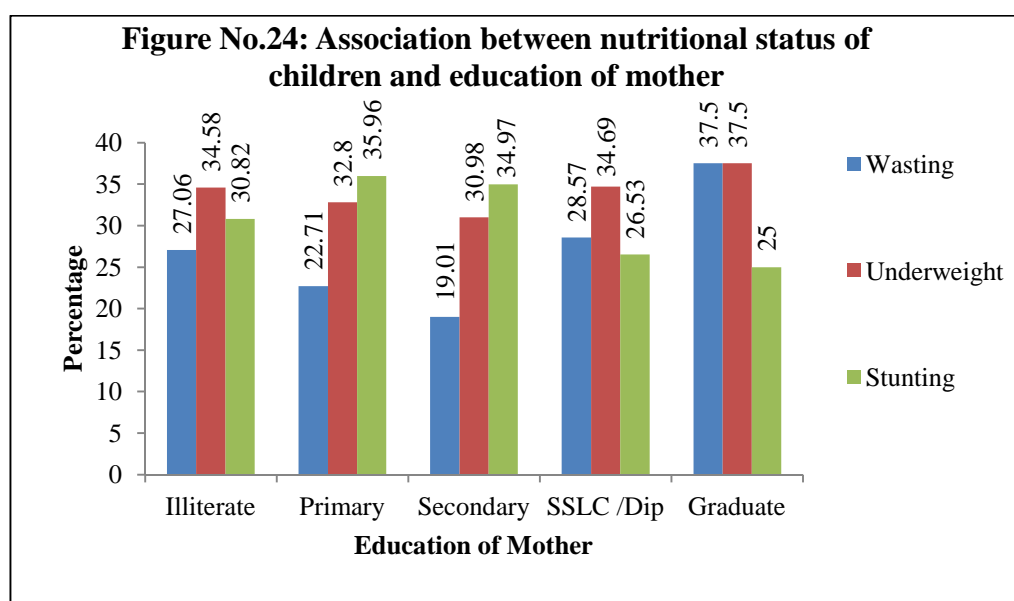
Education	Children observed		Wasted		Underweight		Stunting	
	No.	%	No.	%	No.	%	No.	%
Illiterate	121	12.96	22	18.18	39	32.23	47	38.84
Primary	245	26.25	62	25.30	76	31.02	82	33.46
Secondary	384	41.15	84	21.87	144	37.50	140	36.45
Post SSLC /Diploma	161	17.25	34	21.11	40	24.80	47	29.19
Graduate	22	2.35	04	18.18	03	13.6	03	13.6
<b>Total</b>	<b>933</b>	<b>100</b>	<b>206</b>	<b>22.07</b>	<b>302</b>	<b>32.36</b>	<b>319</b>	<b>34.19</b>
			$\chi^2 = 2.841,$ <b>DF=4</b> <b>p = 0.585</b>		$\chi^2 = 12.513,$ <b>DF=4</b> <b>p = 0.014</b>		$\chi^2 = 8.016,$ <b>DF =4</b> <b>p = 0.091</b>	



When nutritional status was compared with education of father, stunting was found to be maximum in children of illiterate fathers (38.84%) and least was noted in children of graduate fathers (13.6%). However, this was not statistically significant ( $p=0.091$ ). Wasting was highest in children where fathers had primary education (25.30%) followed by fathers with secondary education (21.87%). Similarly underweight was highest in children of fathers with secondary education (37.50%) followed by children of illiterate fathers (32.23%). It was less among children of fathers who had post-SSLC education. This association was statistically significant ( $p=0.014$ ).

**Table No.30: Association between nutritional status of children and education of mother**

Education	Children observed		Wasted		Underweight		Stunting	
	No.	%	No.	%	No.	%	No.	%
Illiterate	133	14.25	36	27.06	46	34.58	41	30.82
Primary	317	33.97	72	22.71	104	32.80	114	35.96
Secondary	426	45.65	81	19.01	132	30.98	149	34.97
Post SSLC /Diploma	49	5.25	14	28.57	17	34.69	13	26.53
Graduate	08	0.85	03	37.50	03	37.5	02	25.00
<b>Total</b>	<b>933</b>	<b>100</b>	<b>206</b>	<b>22.07</b>	<b>302</b>	<b>32.36</b>	<b>319</b>	<b>34.19</b>
			$\chi^2= 6.630,$ <b>DF=4</b> <b>p=0.157</b>		$\chi^2=0.916,$ <b>DF=4</b> <b>p=0.922</b>		$\chi^2=2.806,$ <b>DF=4</b> <b>p=0.591</b>	

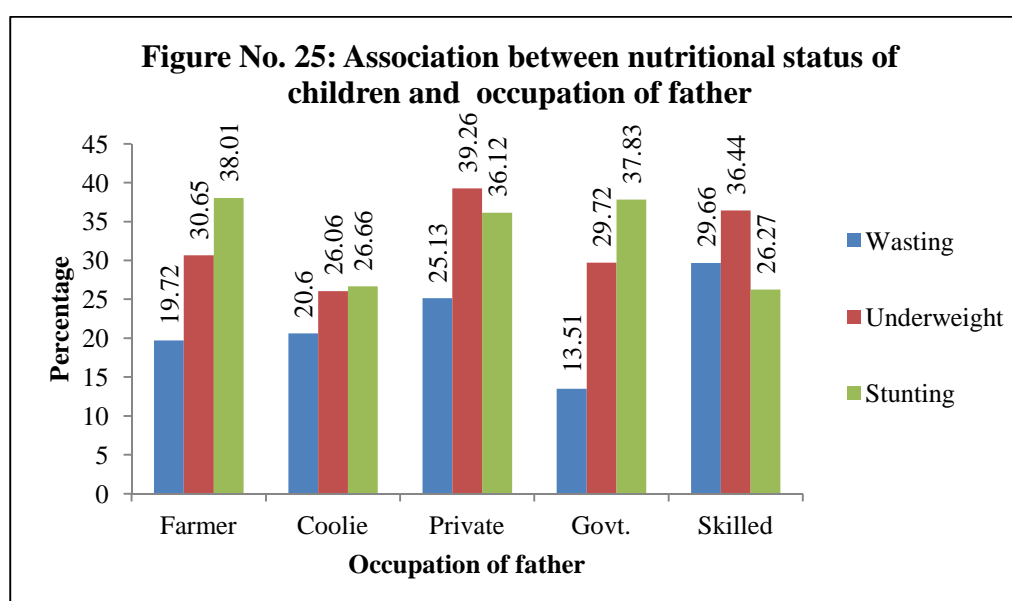


Wasting and underweight was more in children of mothers who had education upto graduation level (37.5%). Stunting was more among children of

mothers who had secondary and below level of education . It was not statistically significant.

**Table No.31: Association between nutritional status of children and occupation of father**

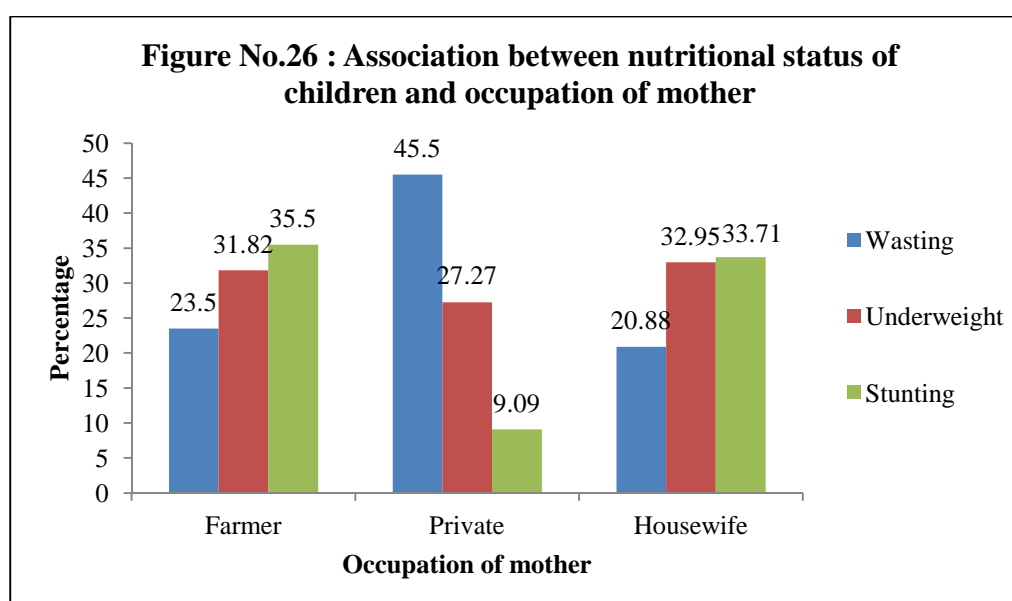
Occupation	Children observed		Wasted		Underweight		Stunting	
	No.	%	No.	%	No.	%	No.	%
Farmer	421	45.12	83	19.71	129	30.64	160	38.00
Coolie	165	17.68	34	20.60	43	26.06	44	26.66
Private	191	20.47	48	25.13	75	39.26	69	36.12
Govt.	37	3.96	05	13.51	11	29.72	14	37.83
Skilled	118	12.64	35	29.66	43	36.44	31	26.27
<b>Total</b>	<b>933</b>	<b>100</b>	<b>206</b>	<b>22.07</b>	<b>302</b>	<b>32.36</b>	<b>319</b>	<b>34.19</b>
			$\chi^2=11.660,$ <b>DF=5</b> <b>p=0.040</b>		$\chi^2=10.826,$ <b>DF=5</b> <b>p=0.055</b>		$\chi^2=12.624,$ <b>DF=5</b> <b>p=0.027</b>	



With occupation of father, children of skilled labourers showed a higher degree of wasting (29.66%) than others. Similarly children of fathers working in private business showed a higher proportion of underweight followed by skilled labourers (36.44%). Stunting was more seen in children whose fathers were farmers (38.15%) ( $p=0.027$ ). Both wasting and stunting and father's occupation were statistically significant and for underweight it was marginally significant.

**Table No.32: Association between nutritional status of children and occupation of mother**

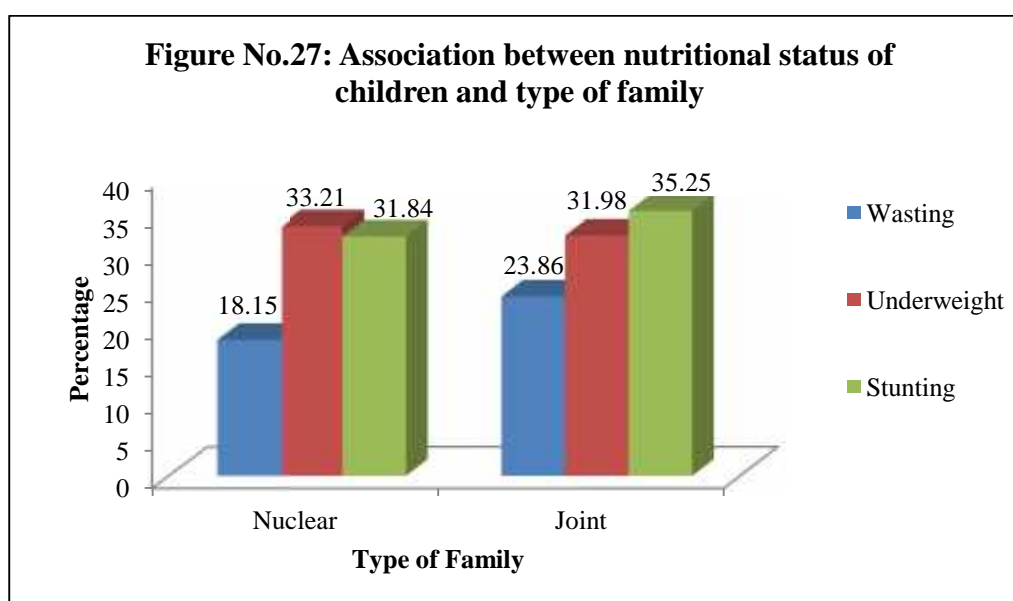
Occupation	Children observed		Wasting		Underweight		Stunted	
	No.	%	No.	%	No.	%	No.	%
Farmer	400	42.87	92	23.05	127	31.82	142	35.5
Private	11	1.17	05	45.45	3	27.27	01	9.09
Housewife	522	55.94	109	20.88	172	32.95	176	33.71
<b>Total</b>	<b>933</b>	<b>100</b>	<b>206</b>	<b>22.07</b>	<b>302</b>	<b>32.36</b>	<b>319</b>	<b>34.19</b>
			$\chi^2=4.133,$ <b>DF=2</b> <b>p = 0.127</b>		$\chi^2=0.288,$ <b>DF=2</b> <b>p = 0.868</b>		$\chi^2= 3.444,$ <b>DF=2</b> <b>p = 0.179</b>	



With occupation of mother, wasting was more in mothers working in private companies (45.45%) although mothers working as farmers also had higher prevalence (23.05%). Underweight was seen more in children whose mothers were housewives (32.95%) followed by mothers working as farmers (31.82%). Stunting was higher in mothers working as farmers (35.5%). None of the distributions were statistically significant.

**Table no.33: Association between nutritional status of children and type of family**

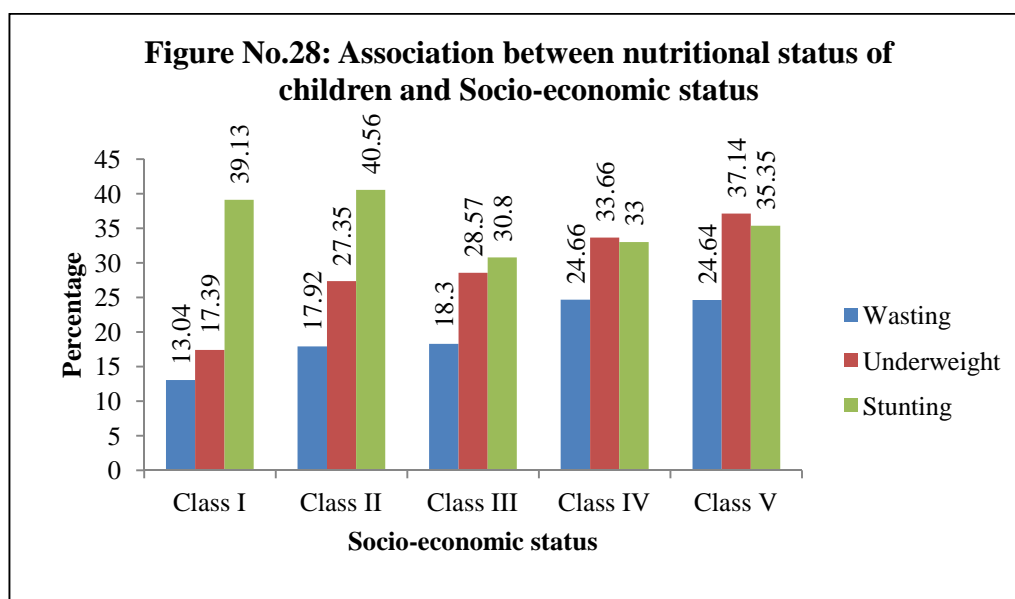
Family type	Children observed		Wasting		Underweight		Stunting	
	No.	%	No.	%	No.	%	No.	%
Nuclear	292	31.29	53	18.15	97	33.21	93	31.84
Joint	641	68.70	153	23.86	205	31.98	226	35.25
<b>Total</b>	<b>933</b>	<b>100</b>	<b>206</b>	<b>22.07</b>	<b>302</b>	<b>32.36</b>	<b>319</b>	<b>34.19</b>
			$\chi^2=3.813,$ <b>DF=1</b> <b>p=0.051</b>		$\chi^2=0.140,$ <b>DF=1</b> <b>p=0.708</b>		$\chi^2=1.036,$ <b>DF=1</b> <b>p=0.309</b>	



Wasting was more in children living in joint families (23.86%), than in children of nuclear families (18.15%). This distribution was marginally significant ( $p=0.051$ ). Although stunting was high among children living in joint families (35.25%) than nuclear families (31.84%), statistically it was not significant. Underweight on the other hand was slightly more in nuclear families (33.21%) than joint families (31.98%), but this was not statistically significant.

**Table No.34: Association between nutritional status of children and socio-economic status**

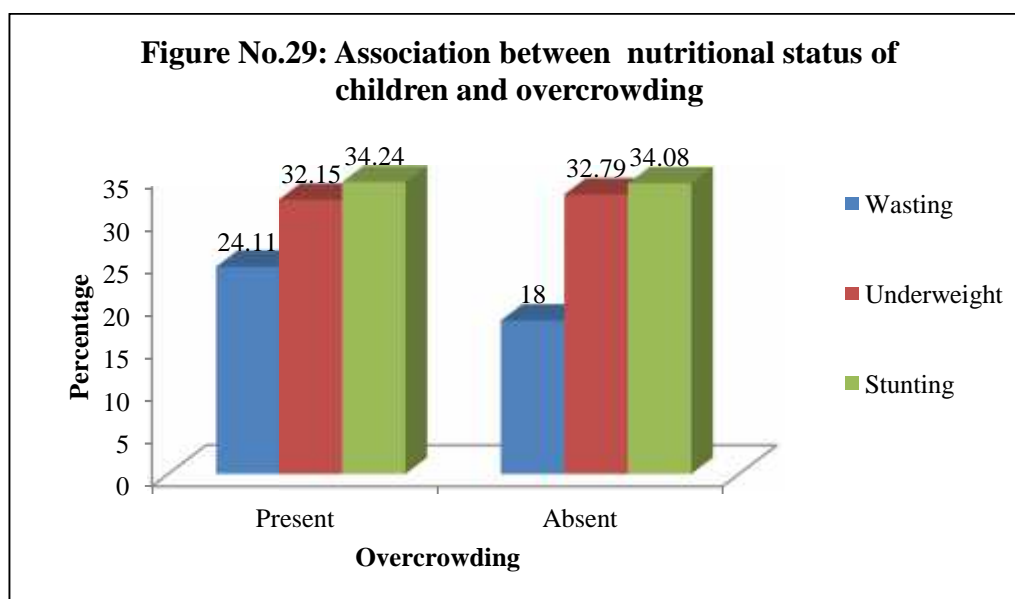
Socio-economic status	Children observed		Wasting		Underweight		Stunting	
	No.	%	No.	%	No.	%	No.	%
Class I	23	2.46	03	13.04	04	17.39	09	39.13
Class II	106	11.36	19	17.92	29	27.35	43	40.56
Class III	224	24.00	41	18.30	64	28.57	69	30.80
Class IV	300	32.15	74	24.66	101	33.66	99	33.00
Class V	280	30.01	69	24.64	104	37.14	99	35.35
	933	100	206	22.07	302	32.36	319	34.19
			$\chi^2=6.248,$ <b>DF=4</b> <b>p=0.181</b>		$\chi^2=8.194,$ <b>DF=4</b> <b>p=0.085</b>		$\chi^2=3.665,$ <b>DF=4</b> <b>p=0.453</b>	



According to socio-economic status wasting was more in Class IV and Class V ( 24.66% and 24,64%).Underweight was maximum in Class V ( 37.14%) followed by Class IV( 33.66%) and stunting was more in Class II and Class I (40.56% and 39.13%). Socio-economic status and nutritional status showed no statistical significance.

**Table No.35: Association between nutritional status of children and overcrowding**

Overcrowding	Total		Wasting		Underweight		Stunting	
	No.	%	No.	%	No.	%	No.	%
Present	622	66.66	150	24.11	200	32.15	213	34.24
Absent	311	33.33	56	18.00	102	32.79	106	34.08
<b>Total</b>	<b>933</b>	<b>100</b>	<b>206</b>	<b>22.07</b>	<b>302</b>	<b>32.36</b>	<b>319</b>	<b>34.19</b>
			$\chi^2=4.498,$ <b>DF=1</b> <b>p= 0.034</b>		$\chi^2=0.039,$ <b>DF=1</b> <b>p=0.843</b>		$\chi^2=0.002,$ <b>DF=1</b> <b>p=0.961</b>	



Overcrowding was significantly associated with a higher prevalence of wasting (24.11%) than in houses with no overcrowding (18%) ( $p=0.034$ ). There was no association between wasting and stunting and overcrowding with  $p$  value 0.843 and 0.961.

**Table No.36: Association between nutritional status of children and past illness requiring hospitalisation**

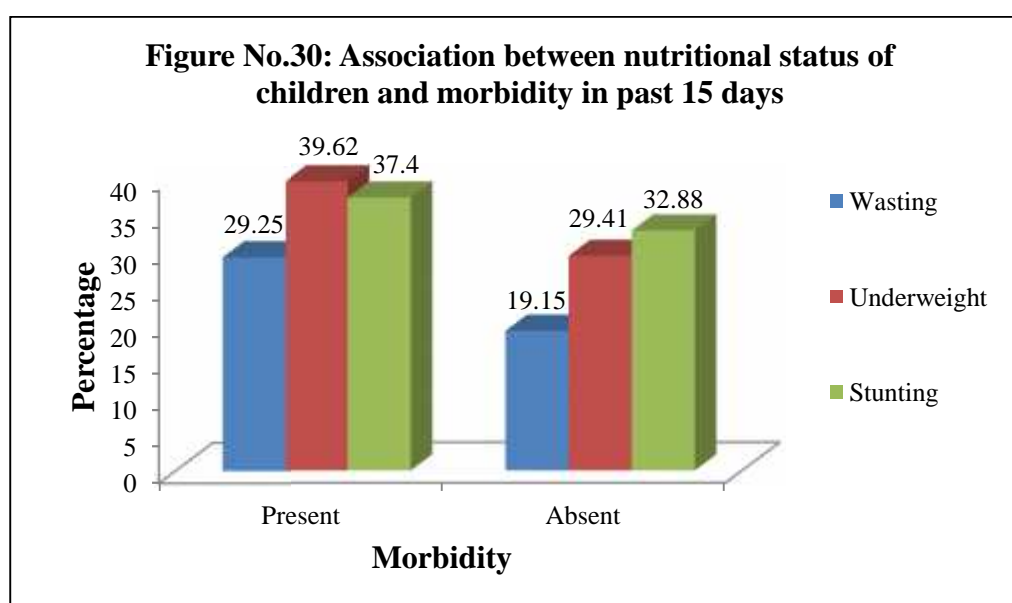
Past illness	Total children		Wasting		Underweight		Stunted	
	No.	%	No.	%	No.	%	No.	%
Present	157	16.82	36	22.92	57	36.30	46	29.29
Absent	776	83.17	170	21.90	245	31.57	273	35.18
<b>Total</b>	<b>933</b>	<b>100</b>	<b>206</b>	<b>22.07</b>	<b>302</b>	<b>32.36</b>	<b>319</b>	<b>34.19</b>
			$\chi^2=0.079$ , DF=1 $p=0.778$		$\chi^2=1.337$ , DF=1 $p=0.248$		$\chi^2=2.007$ , DF=1 $p=0.157$	

More number of children with underweight (36.30%) and stunting (29.29%) had history of previous hospitalization but this difference was not

statistically significant with p value 0.248 and 0.157. Prevalence of wasting was almost similar in children with and without history of past hospitalization.

**Table No.37: Association between nutritional status of children and morbidity over past 15 days not requiring hospitalisation**

Present illness	Total		Wasting		Underweight		Stunting	
	No.	%	No.	%	No.	%	No.	%
Present	270	28.93	79	29.25	107	39.62	101	37.40
Absent	663	71.06	127	19.15	195	29.41	218	32.88
<b>Total</b>	<b>933</b>	<b>100</b>	<b>206</b>	<b>22.07</b>	<b>302</b>	<b>32.36</b>	<b>319</b>	<b>34.19</b>
			$\chi^2=11.385, DF=1, p=0.001$		$\chi^2=9.150, DF=1, p=0.002$		$\chi^2=1.747, DF=1, p=0.186$	

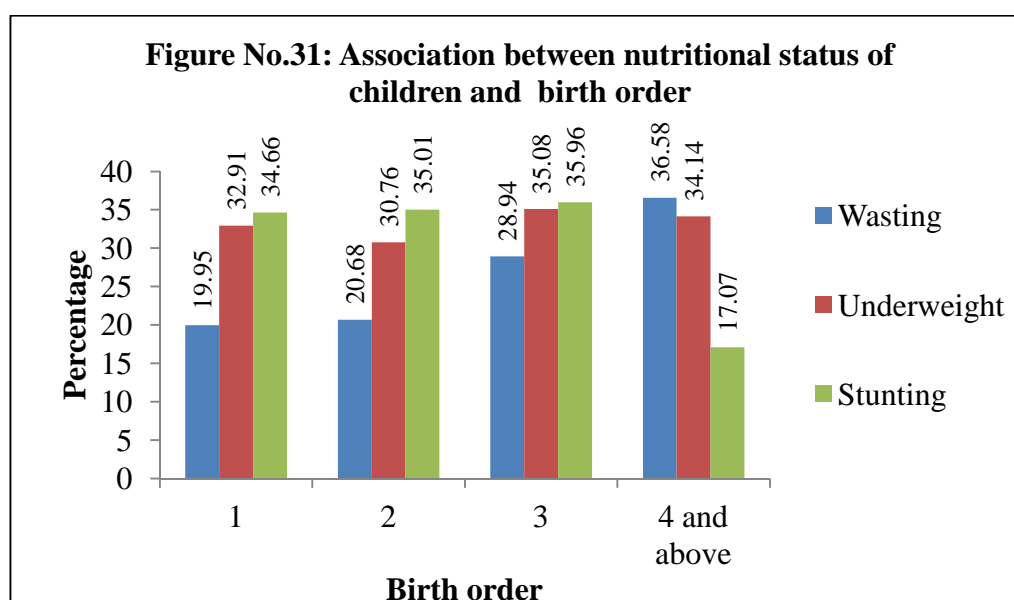


On the other hand, children who recently suffered from minor illnesses were more wasted (29.25%) and underweight( 39.62%) than those who did not (wasting 19.15% and underweight 29.14%).Both these were statistically significant ( wasting p=0.001 and underweight p=0.002). However stunting was

not much significant in both groups (illness present vs. absent: 37.40% vs. 32.88%)

**Table No.38: Association between nutritional status of children and birth order**

Birth order	Total		Wasting		Underweight		Stunting	
	No.	%	No.	%	No.	%	No.	%
1	401	42.97	80	19.95	132	32.91	139	34.66
2	377	40.40	78	20.68	116	30.76	132	35.01
3	114	12.21	33	28.94	40	35.08	41	35.96
4 and above	41	4.39	15	36.58	14	34.14	07	17.07
<b>Total</b>	<b>933</b>	<b>100</b>	<b>206</b>	<b>22.07</b>	<b>302</b>	<b>32.36</b>	<b>319</b>	<b>34.19</b>
			$\chi^2=9.620$ , DF=3 p=0.022		$\chi^2=0.940$ , DF=3 p=0.816		$\chi^2=5.652$ , DF=3 p=0.130	



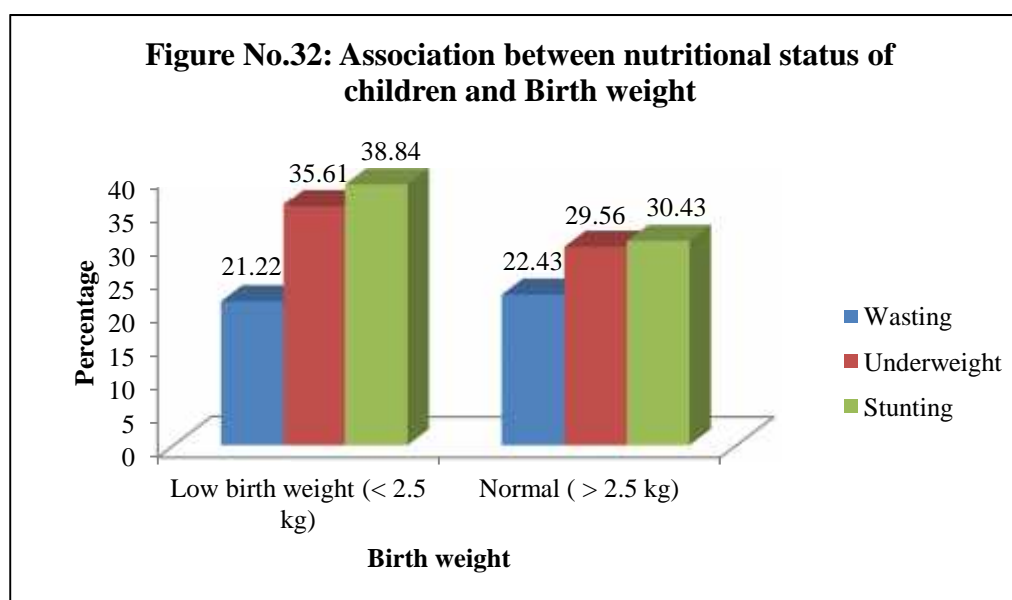
Wasting was significantly associated ( $p=0.022$ ) with birth order 4 and above where the prevalence was 36.58% and the least was noted with birth order

1 (19.95%). The association was not so with underweight and stunting, underweight was slightly more with birth order 3 and 4 (35.08% and 34.14% respectively) and stunting was slightly more with 3<sup>rd</sup> birth order (35.96%).

**Table No.39: Association between nutritional status of children and birth weight**

Birth weight	Total		Wasting		Underweight		Stunting	
	No.	%	No.	%	No.	%	No.	%
Low birth weight	278	32.59	59	21.22	99	35.61	108	38.84
Normal	575	67.40	129	22.43	170	29.56	175	30.43
<b>Total</b>	<b>853*</b>	<b>100</b>	<b>188</b>	<b>22.03</b>	<b>269</b>	<b>31.53</b>	<b>283</b>	<b>33.17</b>
			$\chi^2=0.160,$ <b>DF=1</b> <b>p=0.689</b>		$\chi^2=3.173,$ <b>DF=1</b> <b>p=0.075</b>		$\chi^2=5.984,$ <b>DF=1</b> <b>p=0.014</b>	

(\* Birth weight of 80 children was not known)



In our study, wasting had no association with birth weight, the prevalence in the two groups being 21.22% (LBW group) and 22.43% (Normal group).

Underweight was maximum (35.61%) in children who had low birth weight than children with normal weight (29.56%). But statistically the association was not significant ( $p=0.075$ ). Stunting was more common in LBW children (38.84%) compared to children with normal weight (30.43%). This was statistically significant with a  $p$  value of 0.014.

**Table No.40: Association between nutritional status of children and complications after birth**

Complications after birth	Total		Wasting		Underweight		Stunting	
	No.	%	No.	%	No.	%	No.	%
Yes	94	10.07	20	21.27	28	29.78	31	32.97
No	839	89.92	186	22.16	274	32.65	288	34.32
<b>Total</b>	<b>933</b>	<b>100</b>	<b>206</b>	<b>22.07</b>	<b>302</b>	<b>32.36</b>	<b>319</b>	<b>34.19</b>
			$\chi^2=0.039$ , DF=1 $p=0.843$		$\chi^2=0.318$ , DF=1 $p=0.573$		$\chi^2=0.068$ , DF=1 $p=0.794$	

Children who had complications after birth had a prevalence of 21.27%, 29.78% and 32.97% in wasting, underweight and stunting respectively. Whereas children who had no complications had 22.16%, 32.65% and 34.32% respectively for wasting, underweight and stunting. But none of the nutritional indices were statistically significant.

**Table No.41: Association between nutritional status of children and exclusive breast feeding**

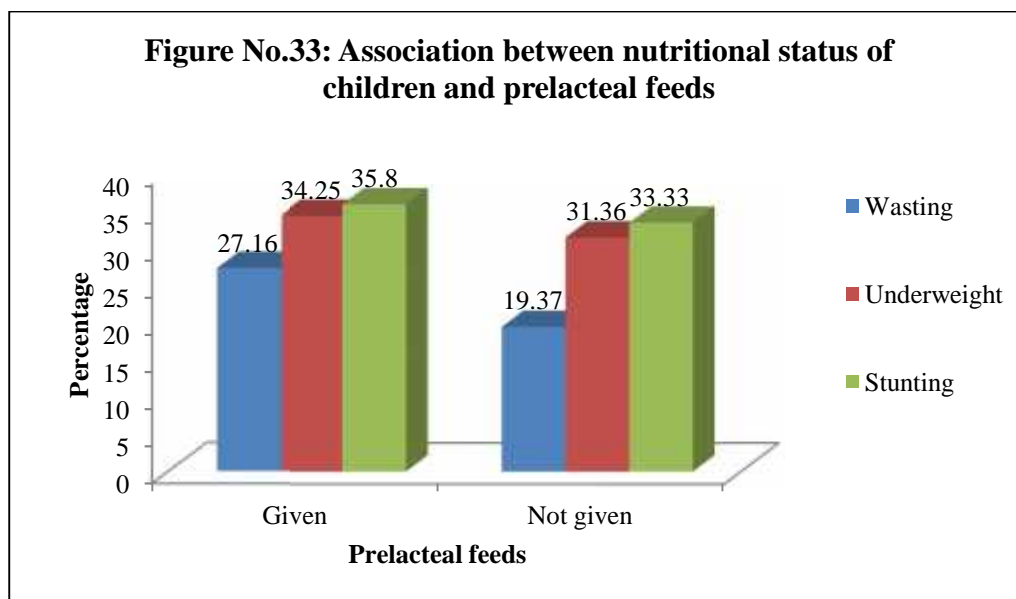
Exclusive breast feeding	Total		Wasting		Underweight		Stunting	
	No.	%	No.	%	No.	%	No.	%
Given	608	65.58	119	19.57	191	31.41	203	33.38
Not given	319	34.41	85	26.64	108	33.85	114	35.73
<b>Total</b>	<b>927*</b>	<b>100</b>	<b>204</b>	<b>22.00</b>	<b>299</b>	<b>32.25</b>	<b>317</b>	<b>34.19</b>
			$\chi^2=6.099$ , DF=1 p=0.014		$\chi^2=0.571$ , DF=1 p=0.450		$\chi^2=0.513$ , DF=1 p=0.474	

(\* 6 mothers did not breast feed due to complications after birth )

In our study, children who were exclusively breast fed were protected from wasting with the prevalence being 19.57% in whom exclusive breast feeding was given and 26.64% in whom it was not given. This association was statistically significant (p=0.014). Similarly stunting (33.38%) and underweight (31.41%) was less in EBF given group than the other group which was not given EBF (stunting 35.73% and underweight 33.85%), but not statistically significant with  $p > 0.4$ .

**Table No.42: Association between nutritional status of children and Pre-lacteal feeds**

Prelacteal feeds	Total		Wasting		Underweight		Stunting	
	No.	%	No.	%	No.	%	No.	%
Given	324	34.72	88	27.16	111	34.25	116	35.80
Not given	609	65.27	118	19.37	191	31.36	203	33.33
<b>Total</b>	<b>933</b>	<b>100</b>	<b>206</b>	<b>22.07</b>	<b>302</b>	<b>32.36</b>	<b>319</b>	<b>34.19</b>
			$\chi^2=7.449$ , DF=1 p=0.006		$\chi^2=0.810$ , DF=1 p=0.368		$\chi^2=0.573$ , DF=1 p=0.449	



27.16% of children who received prelacteal feeds suffered from wasting compared to 19.37% of those who did not receive with  $p=0.006$ . Though more children who received prelacteal feeds were underweight and stunted compared to those who did not receive, but the difference was not statistically significant.

## 5. KNOWLEDGE OF MOTHERS REGARDING INFANT FEEDING PRACTICES AND PERSONAL HYGIENE

**Table No.43: Knowledge of mothers regarding time of initiating breast  
feeding after birth**

Time of starting breast feeding	No.	Percent
< 1/2 hour	154	16.5
1/2 - 2 hour	542	58.1
3 - 24 hour	181	19.4
> 24 hour	56	6.0
<b>Total</b>	<b>933</b>	<b>100.0</b>

When mothers were asked regarding the time of initiation of breast feeding after normal birth, only 16.5% were aware of the correct time of initiation. 58.1% of the mothers were of the opinion that breast feeding should be started within first 2 hours and 19.4% within the first 24 hours. The reason given by most of the mothers was delayed secretion of breast milk. 6% of mothers still believed that breast feeding can be initiated after 24 hours.

**Table No.44: Knowledge of mothers regarding use of pre-lacteal feeds**

Prelacteal feeds	No.	Percent
To be Given	415	44.5
Not to be Given	518	55.5
<b>Total</b>	<b>933</b>	<b>100.0</b>

44.5% of mothers still believe that prelacteal feeds have to be given to compensate for delayed secretion of breast milk. Others (55.5%) are aware that prelacteal feeds have no role.

**Table No.45: Knowledge of mothers regarding duration of exclusive breast feeding**

<b>Duration of EBF</b>	<b>No.</b>	<b>Percent</b>
< 6 mts	145	15.5
6 - 12mts	610	65.4
13 - 18 mts	81	8.7
19 - 24 mts	85	9.1
> 24 mts	12	1.3
<b>Total</b>	<b>933</b>	<b>100.0</b>

Most of the mothers did not know the exact period of weaning i.e 6 months, but most of them (65.4%) were aware that the period of weaning ranged between 6 months to 12 months. 17.8% of mothers believed that exclusive breast feeding can be continued in the 2<sup>nd</sup> year of life. 15.5% of mothers preferred to wean their child early even before the 6<sup>th</sup> month. Rest 1.3% had absolutely no knowledge about exclusive breast feeding.

39% of mothers to initiate weaning with cereal based food, 1.9% with pulses based food and 27.2% preferred a combination of both. Others (31.9%) preferred to use a combination of multiple weaning foods to initiate weaning.

**Table.No.46: Knowledge of mothers regarding restriction of any type of food to the child**

Type of food	No.	Percent
No restriction	896	96.0
Pulses	7	.8
Non-veg	10	1.1
Cereals	9	1.0
Fruits	11	1.2
<b>Total</b>	<b>933</b>	<b>100.0</b>

96% of mothers believed in no restriction of foods to children, whereas 0.8% believed in restricting pulses, 1.1% non-vegetarian foods, 1% cereals and the rest 1.2% were of the opinion that certain fruits like banana and grapes were not good for children and hence have to be avoided.

#### **Hand washing practices:**

When mothers were asked about their hand washing practices using soap and water, 4.9% of mothers used soap only after using toilet and 21.6% did so after using toilet and washing child's soiled clothes. 11.1% did not use soap before feeding their child and 3.4% did not do so before cooking. Only 58.8% of mothers practiced correct hand washing practices using soap and water, i.e after using toilet, after washing child's soiled clothes, before cooking and before feeding the child.

# Chapter 6

## Discussion



## DISCUSSION

### 1. Socio-demographic profile

In our study, 933 children aged 1-5 years were included out of which, 453 were male children and 480 were female children (Table No.1). Almost all were Hindus by religion (99.9%). In our study, 87% fathers and 85.7% mothers were literates (Table No.2). The female literacy status was much higher in our study as compared to the national average of 65.46% and state average of 59.60%<sup>37</sup>. Similarly the male literacy was also higher than national (82.14%) and state average (77.92%). This may be due to wide inter and intra- state variation pertaining to literacy status as predicted by Census of India 2011<sup>37</sup>.

In our study, 422 (45.2%) of the fathers involved in farming, next common occupation was working in private jobs (20.5%). In our study area, male members were the main bread earners of the family. Majority i.e 522 (55.9%) of the mothers were housewives while 399 (42.8%) were involved in agriculture (Table No.3). Joint family system was still prevalent in our study area with 641 (68.7%) children belonged to joint families and 292 (31.3%) belonged to nuclear families (Table No.4). With respect to socio-economic status, majority of children belonged to Class IV 300 (32.2%) and Class V 280 (30%) according to modified B.G. Prasad Classification while only 23 (2.5%) children belonged to Class I (Table No.5).

The prevalence of low birth weight in our study was 29.8% which was much close to the national average of 28%<sup>38</sup>. This shows that inspite of Government programs to prevent LBW, the problem still persists. With regards to immunization, 95.9% of children had completed their primary immunization,

while 4.1% were partially immunized (Table No.8 & 10). Our findings were similar to the results observed in a multi-centric study in which 91.3% of children were fully immunized and 7.4% were partially immunized <sup>39</sup>.

## **2. Infant feeding practices**

In our study, almost all (99.4%) mothers breast fed their children except few who did not breastfeed (0.6%) due to complications following delivery (Table No.11) which was similar to another study done in Cambodia <sup>24</sup> where 98.5% mothers breast fed their children. However, only 608 (65.18%) mothers exclusively breast fed their children, among which 272 (29.1%) of mothers continued EBF for more than 6 months and some even more than a year (Table No.12). This shows that mothers were not aware of correct duration of EBF. Delayed weaning observed in the study was a harmful practice with regards to the growth of children as only breast milk will not be able to meet the energy and protein requirements of the child thus leading to under-nutrition. In contrast to our study, Allahabad study <sup>9</sup> showed that 23.5% of children were given exclusive breast feeding.

In our study, 319 (34.2%) gave pre-lacteal feeds. Most commonly given pre-lacteal feed was sugar water (29.5%) and honey (3%) (Table No.13). A similar finding was noticed in a study conducted in Nagpur <sup>10</sup>, where maximum children were given jaggery water (67.65%), followed by honey (23.53%) and 8.82% were given gutti as first feed.

Majority of children consumed mixed diet (85.7%) whereas 14.3 % were strict vegetarians. Calorie consumption was adequate in only 12.5% children whereas

protein was adequate in only 0.6 (Table No.15 & 16). On the whole both calorie and protein were grossly deficient but calorie consumption was better than protein intake. The calorie adequacy of 47.4% children was < 50% in Andhra Pradesh study <sup>14</sup>.

Adverse socio-demographic conditions and faulty feeding practices along with inadequate dietary intake seem to be responsible for malnutrition observed in our study.

### **3. Nutritional status profile**

When the mean height of males ( $88.72 \pm 9.8$ ) for all ages was compared with that of females ( $88.22 \pm 10.06$ ) males were slightly taller than females. Similarly the mean weight of males ( $11.54 \pm 2.29$ ) was marginally higher than females ( $11.48 \pm 4.9$ ) except in the 48– 60 months age, where females weighed more than males (Table No.19 & 20). However the difference was not statistically significant. Comparison with ICMR study showed that our study children weighed more than the ICMR standard for all ages (Table No.22 and 23) and even with regards to height, the mean height observed in our study were higher for both sexes and for all age groups than the ICMR study <sup>32</sup> but the results were in contrast to West Bengal study <sup>40</sup>. Similar findings were noted with Jabalpur study <sup>41</sup>.

In the present study, the overall prevalence of underweight, stunting and wasting was 32.36 %, 34.19 % and 22.07%, respectively (Table No.24a, 24b, 24c). The prevalence of underweight in the present study (32.36%) was less than the national prevalence as assessed during NFHS-3 survey (43%). A study done in West Bengal reported a similar prevalence of underweight and wasting of 33.9%, & 19.4%, but a lesser prevalence of stunting (26.1%) <sup>42</sup>. Wardha study reported a

much higher prevalence of underweight (47.4%)<sup>13</sup>. Tanzania study<sup>22</sup> reported a underweight prevalence of 31.2% but a low prevalence of wasting (17.2%) and stunting (17.2%). In our study, 8.3 %, 12.8 % and 7.4 % of children were found to be severely underweight, stunted and wasted, respectively. Our results were much higher compared to Tanzania study<sup>22</sup> where the proportion of severe underweight was 6% and severe wasting and stunting 3.2%. In contrast, Wardha study<sup>13</sup> reported a much higher percentage of underweight (16.9%).

The prevalence of underweight, stunting and wasting was higher in boys than in girls in our study. A study done in rural China and India showed that boys were more malnourished than girls because girls, given a less than adequate food supply, tend to cope with it better than boys<sup>43</sup>. It is well documented that boys are more likely to suffer from under-nutrition than girls due to increased nutritional needs in boys than in girls<sup>4</sup>. A contrast was seen in Varanasi study where PEM was less in male children (58.3%) as compared to females (68.6%)<sup>18</sup>.

By using NCHS reference the prevalence of wasting, underweight and stunting in our study was 23.6%, 46.6% and 33.1% respectively. In a study conducted in Kodaku, the prevalence of wasting was 35%, underweight 59.8% and stunting was 43% which was higher<sup>12</sup>. Similarly in a West Bengal study<sup>40</sup>, the prevalence of wasting, underweight and stunting was 22.7%, 52.9% and 49.6% respectively. Another study in Cambodia<sup>24</sup> reported a higher prevalence of stunting (58.5%) but a lower prevalence of underweight (43%) and wasting (14.5%). The prevalence of severe wasting, underweight and stunting by NCHS (< - 3SD) was 5.6%, 10.3% and 11.9% in our study. Wasting was higher than

West Bengal study <sup>40</sup> (1.7%) but less for underweight (16%) and stunting (24.4%). Bangladesh study reported a much lower prevalence of severe wasting, underweight and stunting ( 1%, 13.2% and 18.5% respectively) <sup>19</sup> .

By using WHO standards for developing countries, the prevalence of underweight was 32.36% which was lower compared to NCHS standards (46.6%). Similar difference was noted in Wardha study <sup>30</sup> where prevalence of underweight by WHO standards was 47.4% and that by NCHS was 53%.

NCHS reference has certain limitations; sample was limited to Caucasian infants predominantly from middle class families. Second, measurements were taken every 3 months rather than every month, which is not ideal for characterizing the shape of growth curve, particularly during the first 6 months of life. Third, most of the infants were bottle fed, of those who were breast fed, very few were breast fed for more than 3 months. However the newly introduced WHO standards are unique in that it is purposely designed to produce a standard rather than reference. Standard defines how children should grow, deviations from the pattern it describes are evidence of abnormal growth. The WHO standards are based on healthy children living under conditions likely to favour achievements of their full genetic potential and also of mothers of these children engaged in health promoting practices like breast feeding and not smoking. The anthropometric measurements were taken a total of 21 times on week 1,2,4 & 6 , monthly from 2 to 12 months, bimonthly in the second year and children between 18 – 71 months were measured once in 3 months. It also included samples from diverse set of countries (both developed and developing countries). All these

features make the new WHO standards more technically robust for assessing the nutritional status of the children, individually and also in surveys <sup>13</sup>.

Based on mid-upper arm circumference, 3.8% were found to be severely malnourished and 29.4% were moderately malnourished (Table No.25). Similar findings were noted in Tanzania study where severe malnourishment was 3.5% and 35% were moderately malnourished <sup>22</sup>.

According to IAP classification 39.2% of children in our study were in Grade I, 27.7% in Grade II, 7.3% in Grade III and 0.4% in Grade IV. (Table No.26) Results of a study conducted in Nagpur<sup>10</sup> in 2005-06 which used IAP classification showed 32.18%, 16.09%, 3.46% and 0.5% in Grade I, II, III and IV respectively.

Prevalence of overweight in our study as assessed by BMI for age was 4.7% as against 6.4% of Malaysia study <sup>31</sup>.

#### **4. Association between Nutritional status and other variables.**

In our study, the prevalence of underweight was maximum in the age group of 24 – 35 months (35.02%) and 36 – 47 months (36.86%) (Table No.27). But stunting showed higher trend in 24-60 months age group with prevalence ranging between 35-37%. This was in contrast to other studies <sup>9, 45</sup> where the prevalence of underweight and stunting was maximum in 12-23 months age group. However wasting was maximum in 24 -35 months age group (24.47%) in our study whereas similar studies showed wasting to be more common in 37 – 48 months age group <sup>9, 46</sup>. Hence in our study, age wise prevalence of malnutrition was not

found to be statistically significant. Breast feeding during 12 – 23 months was found to have a protective role against wasting, underweight and stunting.

It was observed in our study that all three types of malnutrition was higher in male children (Table No.28). Similar results were seen in Botswana study <sup>26</sup> and Libya study <sup>29</sup>.

Almost all children were Hindus (99.9%) in our study.

In our study, underweight was more in children of fathers with secondary education with a statistically significant difference ( $p=0.014$ ) (Table No.29). Stunting was more common (38.84%) in children whose fathers were illiterates and wasting more common in children whose fathers had primary education. But none of these were statistically significant. In Bangladesh study <sup>19</sup> risks of underweight were 0.98 and 0.70 times lower for children of fathers who attended primary and secondary level respectively, compared to the children of illiterate fathers as against Nigeria study <sup>28</sup> where there was no consistent trend in the pattern of wasting or stunting with respect to paternal educational level but there was a non- significant relationship between father's educational qualification and prevalence of underweight.

Mother's education status did not influence nutritional status of children in our study although stunting showed progressive decline with increase in mother's education. (Table No.30) However in contrast to other studies <sup>11, 30</sup>, our study showed a higher prevalence of wasting and underweight in mothers with higher education which could possibly be because of lesser representation of educated

mothers. Similar finding was seen with Nigeria study where no association was found<sup>28</sup> and mixed results were noted in Nepal study<sup>21</sup>.

Father's occupation was significantly associated ( $p < 0.05$ ) with wasting and stunting and only marginally for underweight ( $p = 0.055$ ) (Table No.31). Wasting was more common in skilled workers, underweight in fathers with private jobs and stunting in fathers working as farmers. The father's occupation played a major role in determining the nutritional status of children in our study.

Similarly children of mothers who were housewives showed a lesser prevalence of wasting and stunting as compared to mothers working outdoors (Table No.32). Proportion of underweight showed no much difference between the two groups. However nutritional status of children and occupation of mother were not statistically significant. Results showed the same trend in Kuwait<sup>27</sup> and Vietnam study<sup>30</sup>.

With respect to type of families, prevalence of wasting and stunting was observed to be more in joint families in our study whereas underweight was more in nuclear families (Table No.33). Association for wasting was statistically significant. Similar findings were observed in a study done in Kenya<sup>45</sup> where larger families appeared to be protective against underweight possibly because of care during mother's absence. In the present study, children of higher socio-economic status were less wasted and underweight than children of lower socio-economic class (Table No.34). Stunting showed mixed results within the different groups. Although association between socio-economic class and nutritional status was not statistically significant, the trend was consistent with other studies<sup>26, 27</sup>. Overcrowding was significantly associated with wasting ( $p = 0.034$ ) with no

association for underweight and stunting (Table No.35) which was similar to Nigeria<sup>28</sup> and Vietnam study<sup>30</sup>.

Common morbidities over the past 15 days did play a role with wasting ( $p=0.001$ ) and underweight ( $p=0.002$ ), being more in children with morbidities (wasting 29.25% and underweight 39.62%) (Table No.37). The most common morbidities were diarrhoeal episodes and upper respiratory infections which was same as Andhra Pradesh study<sup>14</sup>. Hence prevention of these morbidities does help in improving the nutritional status. No association was seen between stunting and present morbidities, as stunting is the result of chronic malnutrition.

In our study, prevalence of wasting was maximum among children with birth order 4 and above, which was statistically significant ( $p=0.022$ ). (Table No.38)

No association was seen for underweight though the proportion increased with increase in birth order. Mixed results were seen with stunting. Association was also seen in Kuwait<sup>27</sup> and Vietnam study<sup>30</sup>.

Low birth weight had a long term consequence of stunting which was statistically significant ( $p=0.014$ ) in our study (Table No.39). Wasting and underweight had no association with birth weight although low birth weight children showed greater proportions of underweight. Thus our study showed that nutritional makeup of child is reflected right from birth. Similar association was seen in Ludhiana study where low birth weight was identified as one of the risk factors for childhood malnutrition. Other studies also showed similar results<sup>19, 21, 30</sup>.

In our study, the prevalence of underweight, stunting and wasting was higher in children who were not exclusively breast fed and against those who were given exclusive breast feeding (Table No. 41). Statistical significance was noted with

only wasting. ( $p=0.014$ ). In a Kenyan study, lack of exclusive breast feeding for 6 months was associated significantly with underweight (OR=2.28, 95% CI: 0.13-4.61). Similar association were noted with other study<sup>30</sup>.

Children who received pre-lacteal feeds at birth showed a higher proportion of wasting which was statistically significant ( $p=0.006$ ) (Table No.42). Stunting and underweight were also higher in these children but the difference was not statistically significant. Repeated infections in these children could be one of the reasons for their poor nutritional status.

#### **5. Knowledge of mothers regarding infant feeding practices and personal hygiene.**

Knowledge of mothers regarding early initiation of feeding was very poor among 1/4<sup>th</sup> of total mothers who delayed initiation of breast feeding for the reason that no breast milk secretion occurs for few hours after delivery. So they preferred to use pre-lacteal feeds (Table No.43 & 44). This misconception among mothers has to be overcome and use of pre-lacteal feeds has to be discouraged. Mothers should also be educated regarding the exact duration of exclusive breast feeding which corresponds to the age of weaning which is very important to meet the increasing nutritional demands of the child. In our study, 19.1% were not aware of the exact duration of exclusive breast feeding which could be due to lack of awareness (Table No.45). Hence counseling of pregnant and lactating mothers is very important. Regarding weaning practices, 1/3<sup>rd</sup> of mothers preferred to use infant formula feeds to initiate weaning (Table No.46) thinking it to be much superior than home based foods and this was particularly more

common in literate mothers. Hence every mother has to be educated irrespective of their literacy status about use of home-based low cost weaning food.

In our study, most of the mothers (96%) did not believe in any type of food restriction or food taboos (Table No.47). Family pot feeding was practiced by most mothers and hence their knowledge was appropriate.

Hand washing with only water was practiced by majority of mothers but use of soap was limited. About 50% of mothers practiced correct hand washing with soap and water. Use of soap was only restricted to after using toilets. Proper hand washing practices have to be implemented among mothers and its role in child's nutrition has to be emphasized.

# Chapter 7

**Conclusion**



## **CONCLUSION**

In our study, more than one third of children were underweight and stunted and one fifth of children were wasted by WHO standards. When compared with NCHS standards, prevalence of wasting was almost similar, but stunting and underweight was more. But severe wasting and stunting was more by WHO standards. Kappa statistics showed a good agreement between WHO and NCHS standards with kappa > 0.6. NCHS reference gives a very high proportion of underweight and hence an over-estimation of malnutrition. Hence WHO standards would be more appropriate for Indian children since the commonly used index is weight for age i.e underweight.

The mean height and weight of the children were lesser than the NCHS and WHO reference population but comparison with ICMR study, showed that our study children weighed more and were taller than the children of ICMR study for all ages. In our study, few children were also found to be underweight and obese. This shows that the problem of obesity is emerging in rural areas. MUAC detected one third of children as malnourished.

Faulty feeding practices were commonly observed in this area and majority of the children's diet was not adequate for calories and proteins as per ICMR guidelines. However calorie consumption was better than protein consumption. Primary immunization was satisfactory in the study area with only a small percentage of children not being completely immunized.

Father's literacy and occupation had a much higher impact than mother's literacy and occupation on the nutritional status of children. Type of family, overcrowding, existing co-morbidities, birth order, birth weight, duration of

exclusive breast feeding and administration of prelacteal feeds were found to have an adverse effect on the nutritional status.

No doubt, the nutritional status of children is improving with decrease in prevalence of under-nutrition, still lot needs to be done, to further reduce the burden so that the children achieve full potential. Hence all existing efforts for combating malnutrition need to be continued in near future with full vigour and enthusiasm.

# Chapter 8

## Limitations



## **LIMITATIONS**

1. Dietary intake was assessed by 24 hour recall method and application of better and elaborate methods of dietary intake assessment were beyond the scope of the study.
2. In our study, there was unequal distribution of religion and hence the association between religion and nutritional status of children could not be assessed.
3. We have included 1-5 year age group children in our study, as pregnant women return back to their husband's place 6-8 months after delivery.

# Chapter 9

## Recommendations



## **RECOMMENDATIONS**

Based on our results following recommendations are made.

1. Antenatal check up using high risk approach to prevent the problem of low birth weight.
2. Exclusive breast feeding and avoiding use of pre-lacteal feeds through peer counseling by involving ASHA workers and Anganwadi workers.
3. Use of other criteria apart from weight for age for assessment of malnutrition by ICDS.
4. Education of mothers regarding home economics i.e. use of cheap, easily available nutritious food for the family.
5. Family size to be restricted to two with adequate spacing between children. This could be done by training health workers, ASHA, Anganwadi workers in counselling techniques and by involving men in family welfare programmes.

# Chapter 10

## Summary



## SUMMARY

The present cross –sectional study was conducted in Handignur primary health centre area. The study period was from January 2011 to December 2011. The objectives of the study were to assess the nutritional status and associated socio-demographic factors in children aged 1-5 years.

The sample size included 933 children selected by random sampling. Required data regarding each child was collected from the mothers after taking informed consent.

In our study, 453 (48.55%) were male children and 480(51.45%) were female children. Majority were Hindus (99.9%). 87% of fathers and 85.7% of mothers were literates. 45.2% fathers were involved in agriculture, while majority of mothers 55.9% were housewives. Nearly 62.2% of children belonged to socio-economic Class IV and Class V. Maximum children 401 (43%) belonged to birth order 1. Exclusive breast feeding was practiced by only 65.1% of mothers. Prelacteal feeds were given to 34.7% of children and the most preferred prelacteal feed was sugar water (29.5%), followed by honey (3%). 27.4% preferred to give a mixture of both cereals and pulses and the rest (30.2%) preferred a combination of cereals, pulses, vegetables and animal food. When the total calorie intake was assessed, only 12.5% of children were adequate in their calorie intake. Only 0.6% had adequate intake of proteins whereas 26.9% had a gross protein deficit of > 50%. However calorie consumption was better than protein consumption. 895 (95.9%) children had completed their primary immunization. Acute respiratory infections was the most commonly reported morbidity (15.9%) in the past 15 days, followed by fever (4.9%). Acute

Gastroenteritis was reported in 3.5% children and eye, ENT and skin together contributed 3.6%.

Common morbidities noted at the time of study by clinical examination were Anaemia (10.9%), Caries teeth (10.3%), URTI (8.6%) and pyoderma (6%). The prevalence of underweight, stunting and wasting by WHO reference was 32.36%, 34.19% and 22.07%, while severe degrees of underweight, stunting and wasting was observed in 8.3%, 12.8% and 7.4% respectively. The corresponding values with NCHS reference were 23.6%, 46.6% and 33.1% for wasting, underweight and stunting respectively. Similarly severe wasting, underweight and stunting by NCHS reference was 5.6%, 10.3% and 11.9% respectively. Although NCHS reference showed higher prevalence of underweight as compared to WHO standards, kappa statistics showed a good agreement between the two standards with a value of  $> 0.6$ . There was no age-wise and sex-wise difference in prevalence of under-nutrition statistically.

According to MUAC, 33.2% of children were malnourished. Nutritional status of children assessed by IAP classification showed that 39.2% belonged to Grade I, 27.7% belonged to Grade II, 7.3% and 0.4% belonged to Grade III and Grade IV malnutrition respectively. 2% of children were obese and 4.7% were overweight in the study area. Age of the child, sex of child, education and occupation of mother, socio-economic status and past morbidities showed no association with nutritional status in our study with  $p > 0.05$ . The factors associated with higher prevalence of malnutrition were education and occupation of father, type of family, overcrowding, presence of morbidities, birth order, birth weight, duration

of exclusive breast feeding and administration of prelacteal feeds with a level of significance  $< 0.05$ .

# Chapter 11

## Bibliography



## **BIBLIOGRAPHY**

1. Szajewska H, Warsaw. Malnutrition in Developing countries- A changing face. *Annals Nestle* 2009;67(2):73 – 80
2. Sengupta P, Philip N, Benjamin A I. Epidemiological correlates of undernutrition in Under-five years children in an urban slum of Ludhiana. *Health and population* 2010;33(1):1-9
3. WHO Health Statistics 2012 [Internet] cWHO 2012 [accessed on 2012 Jun 15] Available from:  
  
[http://www.who.int/gho/publications/world\\_health\\_statistics/2012/en/](http://www.who.int/gho/publications/world_health_statistics/2012/en/)
4. National Family Health Survey (NFHS-3) India 2005-06. Nutrition in India. Ministry of Health and Family Welfare. Government of India [Internet] [accessed on 2011 Jan 06] Available from:  
  
[www.measuredhs.com/pubs/pdf/FRIND3/FRIND3-Vol1\[Oct-17-2008\].pdf](http://www.measuredhs.com/pubs/pdf/FRIND3/FRIND3-Vol1[Oct-17-2008].pdf)
5. Kishore J. National Health programs of India, 9<sup>th</sup> Edition. New Delhi, Century Publications, 2011:402-09
6. Elizabeth KE. Nutrition and Child development, 3<sup>rd</sup> Edition. Hyderabad, Paras Medical Publisher, 2005: 133 – 187
7. Karnataka comprehensive nutrition mission [Internet] c2011[accessed on 2012 Jul13] Available from : <http://www.karnutmission.org/>
8. Gupta B.M, Bhandari B. Nutritional assessment of rural preschool children. *Indian journal of pediatrics* 1973;40:142 – 46

9. Kumar D, Goel NK, Mittal PC, Misra P. Influence of Infant-feeding practices on nutritional status of under-five children. *Indian Journal of Pediatrics* 2006; 73:417-22
10. Vinod N, Swarnakanta L, Smita P, Pushpa D. Nutritional status and dietary pattern of under-five children in Urban slum area. *National Journal of Community Medicine* 2011;2:143-48
11. Mittal A, Singh J, Ahluwalia. Effect of maternal factors on nutritional status of 1-5 years old children in urban slum population. *Indian Journal of Community Medicine* 2007;32:264-67
12. Dolla CK, Meshram P, Srivastava P, Karforma C, Das S, Uike M . National status of Kodaku pre-school children in central India. *Journal of Human Ecology* 2005;17(3):229-31
13. Deshmukh PR, Dongre AR, Gupta SS, Garg BS. Newly developed WHO Growth Standards: Implications for Demographic Surveys and Child Health programs. *Indian Journal of Pediatrics* 2007;74: 987-90
14. Yashoda Devi P, Geervani P. Determinants of nutritional status of rural pre-school children in Andhra Pradesh, India. *The Food and Nutrition Bulletin* [Internet] 1994 [accessed on 2011Aug 12]; 15:335-41. Available from: <http://archive.unu.edu/unupress/food/8F154e/8F154E09.htm>.
15. Farid-ul Hasain S, Sophie R. Prevalence and risk factors from stunting among children under 5 years: a community based study from Jhangara town, Dadu Sindh. *Journal of Pakistan Medical Association* 2010; 60(1):41-44.

16. Bisai S, Ghosh T, Bose K. Prevalence of underweight, stunting and wasting among urban poor children aged 1-5 years of West Bengal, India. *International Journal of Current Research* 2010;6:39-44
17. Kaur G, Kang HS, Singal P, Singh SP. Nutritional status: Anthropometric perspective of pre-school children. *Anthropologist* 2005;7(2):99-103
18. Baranwal K, Gupta VM, Mishra RN, Prakash S, Pandey ON. Factors influencing the nutritional status of under-five (1-5 years) children in urban-slum area of Varanasi. *Indian Journal of Community Health* 2010;21(2):13-17
19. Rayhan I, Khan SH. Factors causing malnutrition among under-five children in Bangladesh. *Pakistan Journal of nutrition* 2006;5(6):558-62
20. Sapkata VP, Gurung CK. Prevalence and predictors of underweight, stunting and wasting in under-five children. *Journal of Nepal Health Research Council* 2009;7(2):120-26
21. Pradha A. Factors associated with nutritional status of the under-five children. *Asian Journal of Medical Sciences* 2010;1:6-8
22. Nyaruhudra CNM, Mamiro PS, Kerengi AJ, Shayo NB. Nutritional status of under-five children in a pastoral community in Simanjiro District, Tanzania. *Tanzania Health Research Bulletin* 2006;8(1): 32-36

23. Lesiapeta MS, Smuta CM, Hanekom SM, Du Plessis J, Faber M. Risk factors of poor anthropometric status in children under-five years of age living in rural districts of the Eastern Cape and Kwazulu-Natal provinces, South Africa. *South African Journal of Clinical nutrition* 2010;23(4): 202-07
24. Saunders N. Maternal knowledge, attitudes and practices concerning child health among mothers of children younger than 60 months in Kep District, Kingdom of Cambodia. Centre for International Health , Final report 2005: 1-30
25. Ojiako AI, Manyong VM, Ikpi AE. Determinants of nutritional status of preschool children from Rural households in Kadura and Kano states, Nigeria. *Pakistan Journal of Nutrition* 2009;8(9): 1497-1505
26. Mahgoub SEO, Nnyepi M, Bandeke T. Factors affecting prevalence of malnutrition among children under three years of age in Botswana. *African Journal of food agriculture , nutrition and development* 2006;6(1): 1-15
27. Amine EK, Al-Awadi FA. Nutritional status survey of pre-school children in Kuwait. *Eastern Mediterranean Health Journal* 1996;2(3):386-395
28. Senbanjo IO, Adeodu OO, Adejuyigbe EA. Influence of socio-economic factors on nutritional status of children in a rural community of Osun state, Nigeria [Internet]. [accessed on 2011Jun06] Available from: <http://www.uib.es/congres/ecopub/ecineq/papers/235senbanjo.pdf>.

29. Adel ET, Rolland-Cachera MF, Salheddin MM, Najeeb E, Ahmed AM, Ibrahim B. Nutritional status of under-five children in Libya; A National Population-based Survey. *Libyan Journal of Medicine* 2008;3(1):13-19
30. Hein NN, Kam S. Nutritional status and the characteristics related to malnutrition in children under five years of age in Nghean, Vietnam. *Journal of preventive medicine and Public Health* 2008;41(4):232-40
31. Khor GL, Safiza MN, Jamalludin AB, Jamaiah H, Geeta A, Kee CC et al.. Nutritional status of children below five years in Malaysia: Anthropometric Analyses from the Third National Health and Morbidity Survey III (NHMS, 2006). *Malaysian Journal of Nutrition* 2009;15(2):121-136
32. Indian Council of Medical Research (ICMR). Growth and development of Indian infants and children. Technical Report Series No. 18. New Delhi: ICMR, 1972.
33. Labour Bureau Government of India [Internet].[accessed on 2012Aug17] Available from: <http://labourbureau.nic.in/indnum.htm>
34. Indian Council of Medical Research (ICMR). Nutrient Requirements and Recommended Dietary Allowances for Indians. National Institute of Nutrition, Hyderabad 2009.
35. World Health Organization. Physical Status: The Use and Interpretation of Anthropometry. Technical Report Series No.854. Geneva: WHO, 1995.

36. WHO child growth standards and the identification of severe acute malnutrition in infants and children WHO – UNICEF [Internet] c2011WHO [accessed on 2011 Oct 23] Available from:  
[www.who.int/nutrition/.../severemalnutrition/9789241598163\\_eng.pdf](http://www.who.int/nutrition/.../severemalnutrition/9789241598163_eng.pdf)
37. Census of India 2011: Provisional Population Totals – India – Data Sheet [Internet] [accessed on 2012 Aug 12] Available from: [www - educationforallinindia.com/india-data-sheet 2011-census.pdf](http://www-educationforallinindia.com/india-data-sheet-2011-census.pdf)
38. The state of the World’s children – UNICEF[Internet] c2012 UNICEF [accessed on 2012 Aug 06] Available from : <http://www.unicef.org/sowc/>
39. Singh P, Yadav RJ. Immunisation status of children of India. *Indian Pediatrics* 2000;37:1194-98
40. Bisai S, Mallick C. Prevalence of undernutrition among Kora-Mudi children aged 2-13 years in Paschim Medinipur District, West Bengal, India. *World J Pediatrics* 2011;7(1):31-36
41. Rao VG, Yadav R, Dolla CK, Kumar S, Bhandeley MK, Ukey M. Undernutrition and childhood morbidities among tribal preschool children. *Indian Journal of Medical Research* 2005;122:43-47
42. Bisai S, Bose K, Ghosh A. Nutritional status of Lodha children in a village of Paschim Medinipur district, West Bengal. *Indian J Public Health* 2008; 52:203- 206.
43. Marcoux A. Sex differentials in undernutrition: a look at survey evidence. *Popul Dev Rev* 2002; 28:275-284.

44. Sharma B, Mitra M, Chakrabarty S, Bharati P. Nutritional status of pre-school children of Raj-Gond – a tribal population in Madhya Pradesh, India. *Malays J Nutr* 2006; 12:147-155.
45. Bloss E, Wainaina F, Bailey RC. Prevalence and predictors of underweight, stunting and wasting among children aged 5 and under in Western Kenya. *Journal of Tropical Pediatrics* 2004;50(5):260-70
46. Mahapatra A, Geddam JJB, Marai N, Murmu B, Malick G, Bulliya G et al. Nutritional status of preschool children in the draught affected Kalahandi district of Orissa, India. *Journal of Medical Research* 2000;III(3):90-94

# Annexures

## Annexure I



## ANNEXURE I – ETHICAL CLEARANCE



K.L.E.SOCIETY'S  
**JAWAHARLAL NEHRU MEDICAL COLLEGE,**  
NEHRU NAGAR, BELGAUM-590010 (KARNATAKA-INDIA)  
(Affiliated to KLE University, Belgaum)

Website: <http://www.jnmc.edu>  
E-Mail : [dnmc@jnmc.sancharnet.in](mailto:dnmc@jnmc.sancharnet.in)  
: [jnmc@sancharnet.in](mailto:jnmc@sancharnet.in)

Phone: (+ 91-(0)831 Office : 2471350  
Principal: 2471791  
Fax No. +91 (0)831 – 2470759

Ref: MDC/PG/ 2544

Date: 8/10/2010

To,  
Dr.  
Postgraduate Student,  
Department of Community Medicine,  
J.N.Medical College,  
BELGAUM.

Sub: Institutional Ethical Clearance for the study.

Dear Dr.

With reference to the above, I wish to inform you that the research project "ASSESSMENT OF NUTRITIONAL STATUS OF UNDER FIVE CHILDREN RESIDING IN RURAL AREA-A CROSS SECTIONAL STUDY", is Ethical and justifiable and has been cleared by the departmental Ethical Committee and College Dissertation and Research Committee.

  
(Dr. V.D. Patil),  
Chairman  
College Ethical Dissertation  
And Research Committee,  
J.N.Medical College, Belgaum.

# Annexures

## Annexure II



## **ANNEXURE II – CONSENT FORM**

### **“ASSESSMENT OF NUTRITIONAL STATUS OF UNDER FIVE CHILDREN RESIDING IN RURAL AREA ”**

**Investigators :**        **Dr. \*\*\*\*\***, **Dr. \*\*\*\*\***

**Introduction :** You are being invited to participate in this study to assess the nutritional status of under five children residing in Handignur Primary Health Centre, Belgaum District.

**Explanation of procedure :** In the present study you will be asked some questions regarding your child’s age, immunization status, diet, any illness etc, also about your knowledge regarding child nutrition, personal hygiene etc. After collecting the information your child’s height, weight , Head circumference will be measured and examination of your child will be done. It takes about 25- 30 minutes.

**Possible benefits:** The investigator does not promise or guarantee that you will get direct benefit being in this study. It will benefit for the whole community because by this study we will know the various nutritional problems in rural area of Primary health centre .This study will surely help in the future for development of the community.

**Confidentiality :** You and your child’s identity will not be revealed. All information will be collected and coded so that no one will know your identity.

**Withdrawal:** 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.

**Cost of participation** The cost of the study will be borne by the researcher. There will be no additional cost to you for taking part in this study.

**Payment of participation :** No incentive will be paid to you for participating in this study.

**Risks involved in the study to the participants** This survey does not contain any intervention or major procedures hence has no adverse effects on the participants. However, if you have any questions about this study, you can contact Dr.\*\*\*\*\* , Post Graduate Student, Department of Community Medicine, J. N. Medical College, Belgaum – 590 010 at 9741580600 or Dr.\*\*\*\*\* , Associate Professor, Department of Community Medicine, J. N. Medical College, Belgaum – 590 010 at 08312473778 if you have any questions about your rights as a study participant you may contact Dr. V. D. Patil MD, DCH, Chairman, Jawaharlal Nehru Medical College Institutional Ethics Committee on human subjects research, at 0831-2741701.

**Legal rights :** By signing this consent form, you are not waiving any of your legal rights.

**Publication rights :**The results of the survey will be used for teaching and medical publications. However the participant's identity will be kept confidential.

**Consent statement** I volunteer and consent for the participation of my child in this study. I have read the consent or it has been read to me. The study has been fully explained to me and I was given sufficient time to clarify my doubts.

Name of the mother

Signature / thumb impression

Name of the investigator

Signature

Name of the witness:

Signature

Place \_\_\_\_\_

Date \_\_\_\_\_

# Annexures

## Annexure III



## **ANNEXURE III – PROFORMA**

**K.L.E. UNIVERSITY'S J.N.MEDICAL COLLEGE, BELGAUM.**

**DEPARTMENT OF COMMUNITY MEDICINE.**

### **PROFORMA**

**STUDY– ASSESSMENT OF NUTRITIONAL STATUS OF  
UNDER-FIVE CHILDREN RESIDING IN RURAL AREA.**

Sr. No. :

1. Name of child : Age :  
Sex :
2. Religion : Hindu / Christian / Muslim / Others
3. Caste : SC / ST / Others
4. Education :  
Father : Illiterate / Primary / Secondary / post SSLC / Graduate  
Mother : Illiterate / Primary / Secondary / post SSLC / Graduate
5. Occupation: Father : Mother :
6. **Family**
  - i. Total number of family members :
  - ii. Type of family : Nuclear / Joint
  - iii. Total income of family :
  - iv. Per capita Income :
  - v. **Total no. of children** :
  - vi. No. of children < 5 yrs. :
  - vii. Birth order :

**7 Housing :**

- Type of house : Kaccha / Pucca / Semi – Pucca
- Total no. of rooms : 1 / 2 / 3 / 4 / > 4
- Source of water supply : overhead tank with Tap / Borewell /  
Open well
- Toilet facility : Present / Absent
- Disposal of solid waste : Manure Pit / Backyard / others
- Disposal of sullage : Drain / Kitchen garden / Let free

**8 Immunisation status :** complete / incomplete / not immunised

**9. Does the child attend Anganwadi :** Yes / No

If Yes, Regularity : Regular / Irregular

10. Whether the child consumes food at Anganwadi : Yes / No

11. Whether child attained milestones normally : Yes / No

12. Diet History -

a) Breast feeding given - Yes / No

If Yes, Frequency -

b) Exclusive breast feeding -

c) Prelacteal feeds – Given / Not Given

d) Weaning foods given -

e) Type of Diet - Veg / Non Veg / Mixed

## 13 . Present Diet –

	Calories	Proteins
Breakfast	–	
Lunch	-	
Evening snacks	–	
Dinner	–	
Additional snacks between meals	-	
Total amount. of consumed	-	
Total amount of required	-	
Amount Deficit	-	

14. Any major illness the child had suffered requiring hospitalisation - Yes / No

If yes mention \_\_\_\_\_

15. In the past 15 days, did the child have any health problem - Yes / No

If Yes, mention -

16. Nutritional assessment of child –

Height (in cms ) -

Weight ( in kgs) –

Head circumference –

Chest circumference –

Mid arm circumference –

17. General physical examination – Head to toe examination –

Hair -

Eyes ----

Nose -

Ears -

Oral cavity –

Neck –

Chest –

Abdomen –

Upper limbs –

Lower limbs –

Genitalia -

Comments -

18. Systemic examination -

Per abdomen-

CVS -

CNS-

RS -

Comments -

### Questionnaire to assess the knowledge of mothers

#### Nutrition

1. Time of starting breast feeding -
2. Prelacteal feeds - to be given / not to be given
3. How long EBF should be continued -
4. What are the weaning foods you prefer to give to the child -
5. Do you give any special food to your child - Yes / No

If yes, mention ---

#### Personal Hygiene

1. Hand washing practices with soap and water -
  - i. After cleaning child's soiled - Yes / No
  - ii. After using toilet - Yes / No
  - iii. Before cooking - Yes / No
  - iv. Before feeding the child - Yes / No

Age	Sex	Address	Religion	Education Father	Education Mother	Occup. Father	Occup. Mother	Fam. Type	Socioeco.	Child <12	Child <5	Birthorder	housestype	overcrowd	watersupp	Toilet	solidwaste	sullage	Birthwt.	Complicat	Immunis.	Angan. Att	food cons.	Milestone	Breastfeed	EBF	Prelacteal	Weaning	Pres. Diet	Tot.calorie	%deficit	proteins	%deficit	pastillness	pres.illnes	Height	Weight	HC	CC	MAC	WHO z-scores W/H	WHO z-scores W/A	WHO z-scores H/A	BMI	BMI z-score	BMI percentile	HC/ AGE z-score	Mac/AGE z-score	Mac/AGE percent	NCHS z-score W/H	NCHS z-score W/A	NCHS z-score H/A	GPE	SYST		
22m	1	1	1	3	3	4	5	2	4	1	1	1	3	2	3	2	2	3	3.3	2	1	3	3	1	1	3	12	4	1	895	1	9.1	4	2	12	80	10	47.5	48.5	14.5	-0.53	-1.57	-2.32	15.6	-0.13	44.8	-0.46	-0.52	30.1	-1.06	-1.78	-1.92	3	1	1	
15m	2	1	1	1	3	3	1	2	2	2	2	1	1	2	2	1	1	3	2.5	2	1	3	3	1	1	3	11	3	1	896	9	9.5	4	2	11	73	7.2	45	42.5	12	-2.26	-2.44	-1.68	13.5	-2.01	2.2	-0.49	-2.2	1.4	-2.32	-2.77	-1.73	1	1	1	
17m	2	1	1	3	4	3	5	2	4	1	1	1	3	2	1	1	2	1	2.5	2	1	3	3	1	1	3	2	3	2	903	9	9.4	4	2	17	76	8	46	47	14	-1.77	-1.91	-1.34	13.9	-1.57	5.9	-0.06	-0.37	35.4	-2.1	-2.34	-1.41	1	1	1	
51m	2	1	1	3	3	3	5	2	4	4	2	3	1	1	1	1	2	3	2	2	1	11	1	1	1	3	2	3	2	906	3	8	6	13	16	95	10	47.5	48.5	14	-3.81	-3.83	-2.23	11.1	-3.65		-1.43	-1.81	3.5	-3.31	-3.66	-2.07	6	1	1	
31m	2	1	1	2	3	3	5	1	3	2	2	1	3	2	1	1	2	2	2.5	12	1	3	3	1	1	2	2	1	2	980	1	8.4	5	2	11	84	9.75	47	50	15	-1.6	-2.38	-2.11	13.7	-1.47	7.1	-0.75	-0.31	37.9	-1.81	-2.61	-1.83	5	1	1	
12m	2	1	1	2	3	3	3	1	3	2	2	1	3	2	1	1	2	2	2	2	2	1	3	3	1	1	3	2	1	2	895	9	7.8	5	2	2	70.5	7	44	44	13	-1.89	-2.25	-1.77	14.1	-1.67	4.8	-0.85	-1.12	13.2	-1.88	-2.48	-1.49	1	1	1
32m	1	1	1	3	4	2	5	2	3	1	1	1	3	2	1	1	1	3	2.7	2	1	3	3	1	1	2	2	1	2	874	3	9.4	5	13	2	91	10	50	50.5	14	-3.51	-2.71	-0.81	12.1	-3.46		0.58	-1.39	8.2	-2.95	-2.68	-0.34	1	1	1	
24m	2	1	1	4	4	3	5	2	5	2	2	1	2	1	1	1	2	1	2	2	2	1	3	3	1	1	4	2	1	2	895	9	10.5	3	2	2	84	9.5	48.5	50	14.5	-1.67	-1.58	-0.76	13.7	-1.67	4.7	0.94	-0.32	37.4	-2	-2.01	-0.25	5	1	1
46m	2	1	1	3	3	5	2	4	2	2	2	3	1	1	1	1	2	3	2.5	2	1	11	1	1	1	3	12	1	2	893	3	11	4	2	15	93	9.5	48.5	48	14.5	-3.98	-3.85	-2.03	11	-3.89		-0.51	-1.24	10.7	-3.45	-3.72	-1.91	1	1	1	
20m	2	1	1	3	3	3	5	2	4	2	2	2	3	1	3	2	2	1	2.6	2	1	3	3	1	1	2	11	3	2	872	9	10.5	3	2	12	78	7	45	44.5	14	-3.79	-3.66	-1.67	11.5	-3.73		-1.18	-0.54	29.5	-3.69	-3.55	-1.65	6	1	1	
32m	1	1	1	4	3	5	5	2	5	3	3	2	3	1	1	1	2	1	1	12	1	3	3	1	1	1	11	1	2	903	2	11.4	3	2	12	80.5	7.5	48.5	47	13	-4.35	-4.78	-3.73	11.6	-4		-0.48	-2.35	0.9	-3.5	-4.38	-3.23	1	1	1	
32m	1	1	1	4	3	5	5	2	5	3	3	2	3	1	1	1	2	1	1.25	12	1	3	3	1	1	1	11	1	2	910	2	12.8	2	2	12	84	8.5	49.5	48	13.5	-3.74	-3.95	-2.74	12	-3.5		0.24	-1.86	3.2	-3.16	-3.7	-2.26	1	1	1	
18m	1	1	1	4	4	3	5	2	5	2	2	2	3	2	1	1	2	1	2	2	1	3	3	1	1	3	2	3	2	924	9	13.2	2	2	2	78	8	48.5	48	13.5	-2.9	-2.93	-1.84	13.1	-2.7	0.3	0.75	-1.26	10.3	-2.98	-2.97	-1.54	1	1	1	
57m	2	1	1	4	3	5	5	2	5	3	3	3	3	1	1	1	2	1	2.5	12	1	11	1	1	1	3	11	3	2	893	3	7.6	6	2	2	94	9.5	48	48.5	15.5	-4.17	-4.39	-2.97	10.8	-3.89		-1.26	-0.82	20.7	-3.58	-4.15	-2.99	1	1	1	
48m	1	1	1	3	3	5	5	2	5	4	3	2	2	2	1	1	1	3	2.5	2	1	11	1	1	1	2	11	4	2	892	3	8.2	6	2	12	85	12.9	47.5	49	15.5	1.21	-1.91	-4.4	18.2	1.8	96.4	-1.86	-0.5	30.9	0.54	-2.02	-4.25	4	1	1	
38m	2	1	1	3	3	5	2	5	5	3	2	3	1	1	1	1	3	2.5	2	1	11	1	1	1	1	2	2	2	880	3	5.7	6	12	13	85	10	45.5	47	12.5	-1.5	-2.89	-2.97	13.8	-1.24	10.7	-2.26	-2.8	0.3	-1.72	-2.95	-2.78	10	1	1		
48m	2	1	1	3	3	3	5	2	5	2	2	1	2	1	1	1	1	3	2.5	2	1	11	1	1	1	4	2	3	2	875	3	6.9	6	2	2	85	12.5	47	51	14	1.02	-1.91	-4.15	17.3	1.32	90.7	-1.66	-1.71	4.3	0.49	-2.06	-4.16	1	1	1	
25m	2	1	1	3	3	5	1	5	1	3	1	1	3	2	1	1	1	3	2.5	2	1	3	3	1	1	2	2	4	2	784	3	6.8	6	2	2	87	12	46.5	49	14	0.1	-0.17	0.04	15.9	0.15	56.1	-0.62	-0.84	20.1	-0.24	-0.07	0.4	1	1	1	
48m	1	1	1	3	3	5	2	3	4	4	3	1	1	1	1	1	3	2.5	2	1	2	1	2	1	2	2	4	2	890	3	7.9	6	14	2	89	11.2	47.5	48	13	-1.55	-3.05	-3.45	14.1	-0.99	16	-1.86	-2.71	0.3	-1.59	-2.91	-3.32	9	5	1		
42m	1	1	1	3	3	1	5	2	4	2	2	1	2	1	1	1	1	3	2.5	2	1	11	2	1	1	2	12	4	2	945	3	11	4	2	2	90	12.2	48	50.5	14	-0.69	-1.89	-2.52	15.1	-0.3	38	-1.31	-1.64	5.1	-0.91	-2	-2.3	48	1	1	
22m	2	1	1	4	3	3	5	2	4	2	2	2	3	1	1	1	3	1.325	2	1	3	3	1	1	3	11	1	2	912	9	13	2	2	17	83.5	12.4	49	52	16.5	1.45	0.77	-0.62	17.8	1.58	94.3	1.41	1.33	90.8	1.24	0.63	-0.48	8	1	1		
19m	2	1	1	3	3	3	5	1	4	1	1	2	1	3	1	2	1	2	2	2	1	3	3	1	1	3	2	4	2	935	9	12.7	1	2	2	84	8.5	44.5	44.5	13.5	-3.02	-1.75	0.71	12	-3.22		-1.41	-0.93	17.7	-3.17	-2.17	0.55	1	1	1	
19m	1	1	1	3	3	3	5	2	5	4	2	2	3	1	1	1	1	4	2	1	3	3	1	1	2	11	1	2	985	9	12.2	2	14	2	83.5	11.5	48.5	49	15.5	0.37	0.12	-0.24	16.5	0.4	65.7	0.61	0.48	68.4	-0.14	-0.19	-0.06	1	1	1		
16m	2	1	1	3	3	5	5	2	5	2	2	2	1	1	1	1	2	1	2	2	1	3	3	1	1	2	11	1	2	901	9	13.5	1	2	2	76	8	45.5	44	13	-1.77	-1.85	-1.22	13.9	-1.59	5.6	-0.38	-1.28	10.1	-2.1	-2.2	-1.07	1	1	1	
30m	1	1	1	4	3	3	1	2	3	4	1	1	1	1	1	1	3	2	2.5	2	1	3	3	1	1	3	2	3	2	900	2	11.2	3	2	2	86.5	11.9	50.5	49.5	15	0.12	-0.64	-1.37	15.9	0.3	61.7	1.75	-0.3	38.3	-0.5	-1.2	-1.19	1	1	1	
17m	2	1	1	3	3	5	5	1	4	2	1	3	2	1	1	1	2	3	2	2	1	3	3	1	1	4	2	4	2	974	9	8.9	4	2	14	78	9.5	46.5	46	14	-0.24	-0.55	-0.82	15.6	-0.1	46	0.23	-0.4	34.5	-0.82	-1.05	-0.77	1	1	1	
30m	1	1	1	3	3	3	3	1	4	2	2	1	3	1	1	1	2	3.2	2	1	3	3	1	1	4	2	4	2	934	2	7.8	6	2	14	85.5	13.2	50	51.5	15.5	1.36	-0.12	-1.98	18.1	1.67	95.3	0.73	-0.01	49.8	0.67	-0.27	-1.47	1	1	1		
14m	1	1	1	3	3	3	3	2	4	2	2	2	3	1	3	1	1	3.5	2	1	3	3	1	1	2	2	4	2	876	1	9.4	4	2	13	76	10.3	46.5	46.5	14	0.71	0.03	-1.17	17.8	0.99	83.9	-0.2	-0.66	25.4	0.28	-0.41	-0.99	1	2	1		
17m	2	1	1	3	3	3	5	1	3	1	1	1	2	2	3	1	2	1	3.25	2	1	3	3	1	1	3	11	4	2	865	9	9.5	4	2	13	75.5	8.7	45.5	44.5	14.5	-0.68	-1.31	-1.72	15.3	-0.36	35.9	-0.51	0.03	51.1	-1.17	-1.73	-1.58	3	1	1	
30m	2	1	1	3	3	5	1	1	4	2	2	1	3	2	1	1	2	1	2.5	11	1	3	3	1	1	3	2	1	2	845	2	9.3	4	16	2	86.5	9.7	46	46.5	14	-2.26	-2.33	-1.33	13	-2.23	1.3	-1.43	-1.14	12.8	-2.26	-2.52	-0.92	1	1	1	
43m	1	1	1	3	3	3	5	2	5	2	2	1	3	1	1	1	1																																							

23m	2	1	1	4	2	3	5	1	3	3	1	3	2	1	1	1	2	1	3.5	2	1	3	3	1	1	2	11	1	2	910	9	8.2	5	2	2	82	10	45.5	47	15.5	-0.57	-1.09	-1.29	14.9	-0.42	33.6	-1.17	0.52	69.9	-1.11	-1.46	-1.21	4	1
31m	2	1	1	4	3	4	5	1	4	3	2	2	1	1	1	2	1	2.5	2	1	3	3	1	1	2	11	1	2	946	1	9.3	4	2	2	86	10	43.5	45	14.5	-1.76	-2.17	-1.63	13.5	-1.67	4.7	-3.27	-0.74	22.9	-1.9	-2.39	-1.27	1	1	
39m	1	1	1	3	3	3	5	1	3	1	1	2	2	1	1	2	1	2.5	2	1	12	1	1	1	2	11	1	1	934	3	9.5	5	14	2	87	11	48	47.5	14	-1.27	-2.49	-2.89	14.5	-0.82	20.6	-1.18	-1.57	5.9	-1.41	-2.49	-2.6	1	1	
37m	1	1	1	4	4	3	5	1	4	2	1	2	2	3	1	1	4	1.75	2	1	11	1	1	1	2	2	4	2	904	3	12	4	2	2	86.5	9.5	48	46	13	-1.73	-2.77	-2.85	14	-1.3	9.6	-1.12	-1.54	6.2	-2.67	-3.28	-2.43	4	1	
45m	2	1	1	3	3	3	5	2	4	1	1	1	3	2	1	1	1	3	2	1	11	1	1	1	2	2	1	2	925	2	11.5	4	2	12	100	13.5	48	53.5	16	-1.35	-1.07	-0.26	13.5	-1.42	7.7	-0.83	-0.08	46.8	-1.38	-1.26	-0.01	1	1	
47m	2	1	1	4	1	4	5	1	5	4	1	4	2	1	1	1	2	3	2.25	2	1	11	1	1	2	2	4	1	980	2	12.8	3	11	2	96.5	12	48	51.5	14.5	-1.99	-2.16	-1.37	12.9	-1.95	2.6	-0.91	-1.28	10	-1.94	-2.29	-1.18	1	1	
54m	1	1	1	4	3	4	5	1	4	2	1	2	3	2	1	1	2	3	2	11	1	1	1	1	3	2	4	2	980	3	10.4	5	2	2	91.5	10	48	47.5	13.5	-3.62	-4.17	-3.49	11.9	-3.06		-1.7	-1.45	7.9	-3.03	-3.84	-3.43	4	1	
15m	1	1	1	3	3	3	5	2	4	2	2	2	2	1	1	1	2	3	2	1	3	3	1	1	4	11	4	2	965	9	7.8	5	2	12	80.5	11	47	47.5	14	0.36	0.52	0.66	16.7	0.21	58.4	0.09	-0.68	25	-0.02	0.05	0.25	1	1	
16m	2	1	1	4	4	3	5	2	2	1	2	2	1	1	1	2	1	2.75	2	1	3	3	1	1	2	11	1	2	895	9	7.4	5	2	2	73.5	8	45.5	41.5	13.5	-1.33	-1.79	-1.74	14.5	-1.03	15.2	-0.33	-0.79	21.4	-1.5	-2.2	-1.91	1	1	
23m	2	1	1	4	3	3	5	2	5	3	1	3	2	1	1	2	3	3.25	2	1	3	3	1	1	2	11	1	1	887	9	8.2	5	2	12	79	9.5	45	45	13.5	-0.61	-1.51	-1.99	15	-0.36	36	-1.17	-1.18	11.8	-1.04	-1.87	-2.13	3	1	
29m	2	1	1	3	4	3	5	2	2	1	1	2	2	1	1	2	1	1.75	1	1	3	3	1	1	2	11	4	2	880	2	8.5	5	2	12	84.5	10.8	46.5	49	15	-0.48	-1.25	-1.63	15.1	-0.32	37.3	-0.97	-0.22	41.1	-0.87	-1.59	-1.29	1	1	
35m	1	1	1	3	1	3	5	1	4	3	2	2	2	1	1	3	3	3	1	1	3	3	1	1	1	2	4	2	869	3	8.5	5	12	2	100.5	12	50.5	51	14.5	-3.23	-1.39	1.38	11.9	-3.57		0.79	-1.01	15.6	-2.8	-1.59	1.6	4	1	
39m	1	1	1	3	3	2	5	2	4	2	2	1	2	1	1	1	2	3.5	2	1	11	1	1	1	3	11	4	2	968	3	8.9	5	2	2	92	11	47	49	14	-2.5	-2.48	-1.57	13	-2.27	1.2	-1.87	-1.56	5.9	-2.27	-2.49	-1.33	45	1	
41m	2	1	1	3	2	3	5	2	5	3	3	1	1	1	1	3	1	3.25	2	1	11	1	1	1	2	11	4	2	856	4	11.4	4	12	14	94.5	11	45	48.5	13.5	-2.61	-2.39	-1.06	12.3	-2.64	0.4	-2.78	-1.96	2.5	-2.43	-2.51	-0.78	9	1	
21m	1	1	1	3	2	2	5	2	2	3	3	2	1	1	1	3	1	2.25	2	1	3	3	1	1	2	11	4	2	884	1	11.2	3	2	2	79	8.5	43	43	13	-2.51	-2.85	-2.13	13.4	-2.28	1.1	-3.68	-1.89	3	-2.6	-2.84	-1.99	8	1	
54m	1	1	1	3	3	3	5	2	5	4	4	1	3	1	1	1	3	3	2	1	11	1	1	1	2	11	3	2	834	4	10	5	17	2	95	14.5	48	52.5	14.2	0.17	-1.38	-2.42	15.7	0.37	64.3	-1.69	-1.69	4.5	0.02	-1.61	-2.64	5	1	
30m	1	1	1	3	3	3	5	2	5	4	4	2	3	1	1	1	3	2.5	2	1	3	3	1	1	2	11	3	2	768	4	10.2	4	2	2	85	12.5	50	50	14	0.71	-0.53	-1.89	17.1	1	84	0.76	-1.3	9.7	0.26	-0.77	-1.61	1	1	
42m	2	1	1	2	3	3	5	2	5	4	4	2	3	1	1	1	3	3	2	1	11	1	1	1	2	11	4	2	758	4	14	2	2	2	85	13.5	46.5	50.5	14.5	1.5	-0.79	-3.09	18	1.78	96.2	-1.74	-1.12	13.2	1.22	-1.02	-3.37	1	1	
13m	1	1	1	3	3	5	5	2	5	6	2	2	3	1	1	1	3	2	2	1	3	3	1	1	3	11	3	2	776	2	9.8	4	2	2	75	10.1	46.5	46	14	0.55	0.01	-0.95	17.6	0.78	78.1	-0.06	-0.64	26.2	0.63	0.2	-0.34	8	1	
23m	1	1	1	3	3	3	5	2	4	1	1	1	3	1	1	1	3	1.5	12	1	3	3	1	1	2	2	4	2	792	2	9.8	4	2	2	81.5	11	47	48	14	0.14	-0.87	-1.83	16.3	0.43	66.7	-0.92	-1.02	15.3	-0.25	-1.12	-1.69	1	1	
48m	2	1	1	3	3	5	5	1	3	2	2	1	3	2	1	1	1	2	2	1	11	1	1	1	4	2	4	2	845	3	9.2	5	12	13	94.5	14	48	51	15.5	0.19	-1.02	-1.91	15.7	0.29	61.5	-1.64	-0.53	29.6	0.01	-1.18	-1.81	45	1	
35m	1	1	1	4	3	3	5	1	5	3	1	3	2	3	1	1	3	3	2	1	3	3	1	1	3	2	4	1	963	2	8.2	5	2	2	94.5	12.6	48.5	53.5	14	-1.28	-1.06	-0.4	14.1	-1.29	9.9	-0.67	-1.48	6.9	-1.39	-1.21	0.01	5	1	
37m	2	1	1	3	3	2	5	1	5	3	2	3	2	3	1	1	3	2.5	2	1	11	1	1	1	2	2	1	2	675	5	6.5	6	2	2	82	9.6	44.5	44	12.5	-1.09	-3.08	-3.66	14.4	-0.75	22.7	-0.93	-2.78	0.3	-1.53	-3.15	-3.42	1	1	
58m	2	1	1	2	3	3	5	1	5	3	3	1	3	1	1	1	3	2.5	2	1	11	1	1	1	3	2	3	2	745	4	7.6	6	2	2	102	13.1	46.5	49.5	16	-1.37	-1.78	-1.43	13.5	-1.35	8.9	-2.36	-0.52	30.2	-1.99	-2.29	-1.27	1	1	
37m	2	1	1	2	3	3	5	1	5	3	3	2	3	1	3	1	3	2.75	2	1	11	1	1	1	3	2	3	2	678	5	7.8	4	2	2	86	13	48	52	16	1.1	-0.65	-2.47	17.4	1.38	91.6	-0.45	0.21	58.2	0.69	-0.89	-2.36	1	1	
15m	1	1	1	3	3	3	5	2	5	2	2	2	3	1	3	1	3	1.75	2	1	3	3	1	1	2	11	1	2	689	3	7.6	5	2	12	69	7.6	45.5	45	12	-1.51	-2.88	-3.58	15.2	-0.95	17.2	-1.11	-2.67	0.4	-0.9	-3.04	-3.76	1	1	
36m	1	1	1	3	3	3	5	2	4	2	2	1	3	2	3	2	1	3	2.5	2	1	11	1	1	1	11	4	2	879	3	9.4	5	15	2	95	11.5	50	53	14.5	-2.58	-1.85	-0.32	12.7	-2.63	0.4	0.37	-1.04	14.9	-2.34	-1.99	-0.05	1	1	
28m	2	1	1	4	3	3	5	1	4	1	1	1	3	2	3	2	1	3	1.75	2	1	3	3	1	1	2	11	4	2	768	3	9.2	4	2	12	76	9	44.5	44	13	-0.06	-2.25	-3.79	16.2	0.5	69	-2.34	-1.96	2.5	-0.93	-2.86	-3.55	8	1
31m	1	1	1	3	3	3	5	2	5	3	1	3	2	1	3	1	2	3	2.25	2	1	3	3	1	1	2	11	4	2	875	3	5.8	6	2	14	87.5	9.6	46	48	12.5	-2.92	-2.77	-1.59	12.8	-2.74	0.3	-2.2	-2.83	0.2	-2.74	-2.9	-1.11	1	1
49m	1	1	1	4	3	3	5	1	3	1	4	2	3	2	3	2	1	3	2.25	2	1	1	1	1	3	11	4	2	894	4	7.9	6	2	18	96.5	11.1	45.5	47.5	13	-3.37	-3.16	-1.75	11.9	-3.17		-3.25	-2.72	0.3	-2.89	-3.02	-1.7	8	1	
17m	1	1	1	5	4	3	5	1	1	1	1	1	2	3	1	1	3	1.75	2	1	3	3	1	1	2	2	3	2	984	9	10.2	4	2	13	77	9.1	45.5	44	13.5	-1.19	-1.51	-1.4	15.1	-0.95	17.2	-1.3	-1.2	11.4	-1.06	-1.39	-1.08	1	1	
17m	1	1	1	3	3	3	5	1	5	2	2	2	2	3	1	1	3	1.5	12	1	3	3	1	2	N	2	4	2	765	2	12	3	13	2	66	6.5	43.5	42	11.5	-1.13	-3.89	-5.76	15.7	-0.33	37.2	-2.92	-3.29		-1.26	-4.18	-5.28	1	1	
30m	2	1	1	3	3	3	5	1	5	2	1	2	2	3	2	1	3	1	2	1</																																		

29m	1	1	1	2	3	3	5	1	4	3	2	2	3	2	1	1	1	3		2	1	3	3	1	1	3	13	1	2	1045	1	9.8	4	2	2	82	10.5	47	48	15	-0.54	-1.91	-2.74	15.6	-0.17	43.1	-1.32	-0.37	35.7	-0.91	-2.12	-2.27	5	1	
18m	1	1	1	3	1	5	5	1	3	2	1	2	3	1	1	1	1	3	2.3	2	1	3	3	1	1	4	2	1	2	903	1	7.9	5	2	2	75	9.1	47	47	13	-0.71	-1.65	-2.43	15.9	-0.21	41.8	-0.28	-1.72	4.2	-0.89	-2.04	-2.52	1	1	
43m	2	1	1	3	3	4	5	2	2	4	1	1	2	1	1	1	2	3	2.3	2	1	11	1	1	1	3	2	3	2	1045	1	7.7	6	2	2	98	13.1	47	49	14	-1.54	-1.37	-0.62	13.6	-1.54	6.1	-1.69	-1.65	4.9	-1.34	-1.34	-0.19	1	1	
28m	2	1	1	3	2	3	5	2	4	2	1	2	3	1	1	1	2	3	2.2	2	1	3	3	1	1	3	13	1	2	987	1	7.2	6	2	2	77	9.1	43.5	45.5	14.5	-0.66	-2.53	-3.53	15.3	-0.18	43	-2.29	-0.57	28.6	-1.04	-2.77	-3.24	4	1	
48m	2	1	1	5	3	3	1	2	5	2	1	1	2	1	1	1	2	3	3.5	2	1	11	1	1	1	2	2	4	2	986	2	12.8	3	2	2	96	12.4	47	48.5	16	-1.5	-1.95	-1.56	13.5	-1.42	7.7	-1.64	-0.17	43.1	-1.55	-2.11	-1.44	1	1	
57m	1	1	1	3	3	3	5	1	3	1	1	1	3	2	1	1	2	3	2	2	1	11	1	1	1	2	11	4	2	956	3	10.3	5	2	2	94	11.9	47.5	48.5	13	-1.91	-3.17	-3.26	13.5	-1.47	7.1	-2.12	-2.88	0.2	-1.86	-3.06	-3.19	6	1	
58m	1	1	1	1	2	1	1	1	4	1	1	1	3	1	1	1	2	1	1	1	1	1	1	1	1	2	2	4	1	902	4	12.7	4	2	2	98	13.6	48	51	13	-1.07	-2.2	-2.48	14.2	-0.84	20.1	-1.81	-2.9	0.2	-1.22	-2.3	-2.42	4	1	
30m	1	1	1	3	2	1	1	1	4	2	1	2	3	1	1	2	1	2	1	1	1	3	3	1	1	2	11	1	1	1110	1	8.9	5	2	16	84	11	48	50	16	-0.47	-1.72	-2.5	15.6	-0.14	44.4	-0.74	0.38	64.7	-0.83	-1.84	-1.88	1	1	
54m	1	1	1	4	3	3	3	1	5	2	1	1	3	2	1	1	1	3	2	2	1	11	1	1	1	2	2	4	2	1187	1	8.4	6	2	2	99	13.6	48	53	16	-1.29	-1.95	-1.84	13.9	-1.13	12.9	-1.71	-0.26	39.6	-1.39	-2.05	-1.74	1	1	
30m	2	1	1	3	2	3	5	1	4	2	1	2	1	1	1	1	1	3	2.5	2	1	3	3	1	1	3	2	2	1	1145	9	7.8	5	2	134	84	8	46	45.5	12.5	-1.85	-2.54	-2.08	13.5	-1.74	4.1	-1.45	-2.56	0.5	-3.42	-3.77	-1.62	3	1	
22m	2	1	1	3	3	5	1	2	5	3	1	3	2	1	1	1	1	3	2.5	2	1	3	3	1	1	3	2	3	2	1289	9	7.8	5	2	14	75.5	9.1	44	43	12.5	0.33	-1.78	-2.93	15.7	0.17	56.9	-2.18	-2.11	1.7	-0.7	-2.06	-2.95	1	1	
59m	2	1	1	4	3	3	5	2	5	2	1	2	3	1	1	1	1	3	2	2	1	11	1	1	1	3	11	3	2	1010	2	7.4	6	2	2	93	11.2	49	48	13.5	-2.07	-3.5	-3.45	12.9	-1.77	3.8	-0.65	-2.42	0.8	-2.03	3.32	-3.42	134	1	
14m	2	1	1	3	3	4	5	2	3	3	3	3	2	1	1	1	1	4	3.5	2	1	3	3	1	1	2	13	4	2	986	9	9	4	12	13	68	8.7	43	45	13	1.05	-0.63	-2.87	18.4	1.5	93.3	-1.78	-1.16	12.4	1.15	-1.28	-3.1	3	1	
32m	2	1	1	3	3	5	5	2	3	3	3	2	2	1	1	1	1	4	2	12	1	3	3	1	1	2	11	4	2	934	1	7.6	5	12	2	85	11.1	46	47.5	14.5	-0.29	-1.34	-1.98	15.4	-0.09	46.4	-1.52	-0.76	22.4	-0.69	-1.69	-1.73	1	1	
12m	1	1	1	3	3	5	5	2	3	3	3	2	1	1	1	1	4	3	2	1	1	3	3	1	1	2	11	4	2	945	9	9.4	4	2	2	69.5	8.7	45	45	14	0.33	1.15	-2.7	17.7	0.7	75.9	-1.03	0.61	27.1	0.35	-1.51	-2.58	1	1	
34m	1	1	1	3	3	2	5	1	5	3	1	3	2	1	1	1	4	3	2	1	1	3	3	1	1	3	13	4	2	984	2	9.3	5	2	2	88	11.2	48.5	47	13.5	-1.29	-1.87	-1.87	14.5	-1.02	15.4	-0.57	-1.9	2.9	-1.41	-2.02	-1.53	1	1	
13m	1	1	1	4	3	5	5	1	2	1	1	1	3	2	1	1	1	3	3	2	1	3	3	1	1	3	2	1	2	904	9	9.2	4	2	11	72.5	8.5	47	46	13	-0.87	-1.56	-1.96	15.9	-0.54	29.4	0.32	-1.59	5.6	-0.91	-1.91	-1.86	3	1	
30m	1	1	1	5	4	3	3	1	1	1	1	1	2	2	1	1	1	3	2.8	2	1	3	3	1	1	2	2	2	1	2	986	2	9.1	5	2	2	93	11.1	49	49	14	-2.61	-1.54	0.31	12.8	-2.77	0.3	0.04	-1.3	9.7	-2.11	-1.47	0.94	3	1
51m	2	1	1	3	3	2	5	1	4	2	1	1	2	2	1	1	1	3	2.5	2	1	11	1	1	1	2	2	1	2	956	3	9	5	2	2	103	14	46	52	16	-1.58	-1.25	-0.34	13.2	-1.61	5.3	-2.46	-0.28	39.2	-1.52	-1.38	-0.13	4	1	
59m	2	1	1	3	3	5	1	5	2	1	1	2	2	1	1	1	4	2.5	2	1	11	1	1	1	2	2	3	2	905	3	10.4	5	2	17	104	13.2	46.5	48	14	-2.49	-2.24	-1.04	12.2	-2.45	0.7	-2.38	-1.99	2.3	-2.24	-2.28	-0.92	14	1		
31m	2	1	1	4	3	5	5	1	3	3	1	2	2	1	1	1	4	2.5	2	1	3	3	1	1	2	11	1	2	910	2	11.5	3	2	2	86	12.8	47	48.5	14	1.04	-0.18	-1.7	17.3	1.28	89.9	-1.16	-1.19	11.7	0.55	-0.35	-1.26	1	1		
59m	2	1	1	4	3	5	5	1	3	3	1	2	2	1	1	1	3	3	2	1	11	1	1	1	2	11	1	2	687	5	12.6	3	2	2	108	14.5	46.5	53	15	-2.31	-1.6	-0.3	12.4	-2.23	1.3	-1.7	-1.26	10.4	-2.01	-1.6	0	5	1		
59m	2	1	1	3	3	5	5	1	5	3	2	2	2	1	1	1	3	3.5	2	1	11	1	1	1	2	2	4	2	786	4	12.3	4	2	2	100	14.9	47.5	52.5	15.5	-0.24	-1.41	-1.98	14.9	-0.26	39.9	-1.7	-0.9	18.4	-0.35	-1.39	-1.83	1	1		
35m	2	1	1	3	3	5	5	1	4	2	2	2	3	1	1	1	3	3	2	1	3	3	1	1	3	13	4	2	896	2	13.8	1	2	2	92	12.6	46	49	15	-0.47	-0.74	-0.8	14.9	-0.4	34.5	-1.78	-0.5	30.7	-0.67	-0.95	-0.39	1	1		
36m	2	1	1	3	2	3	1	3	2	1	3	2	1	1	1	1	2	2.5	1	1	1	1	1	1	2	2	1	2	578	5	9.5	4	2	2	92	11.6	47	49	14	-1.43	1.51	-0.96	13.7	-1.39	8.2	-1.12	-1.37	8.5	-1.52	-1.73	-0.58	4	2		
26m	1	1	1	3	3	5	5	2	4	1	1	1	1	2	1	1	3	2.3	2	1	3	3	1	1	3	2	1	2	904	2	9.2	5	11	2	80.5	10.5	47.5	47	14	-0.2	-1.65	-2.79	16.2	0.23	59.2	-0.8	-1.16	12.3	-0.6	-1.87	-2.12	1	1		
39m	2	1	1	3	3	5	5	2	5	2	2	1	3	2	2	1	1	3	1.5	2	1	11	1	1	1	4	2	1	2	897	3	8.8	5	2	2	90	11.5	47	48.5	14	-1.09	-1.87	-1.92	14.2	-0.91	18.2	-1.28	-1.47	7.1	-1.26	-2.04	-1.61	8	1	
18m	2	1	1	3	3	5	5	2	5	2	2	2	3	2	2	1	1	3	2	2	1	3	3	1	1	3	2	1	2	876	9	8.9	4	2	2	75.5	9	46	47	14	-0.45	-1.21	-1.83	15.5	-0.12	45.3	-0.29	-0.46	32.3	-0.82	-1.6	-1.86	8	1	
30m	2	1	1	3	3	5	5	2	5	6	2	2	3	1	2	1	1	3	2	2	1	3	3	1	1	2	2	4	2	890	2	8.6	5	2	2	86	10.5	46	49	14	-1.19	-1.67	-1.5	14.2	-1.07	14.2	-1.44	-1.14	12.6	-1.43	-1.92	-1.05	9	1	
47m	2	1	1	3	3	5	5	2	5	6	3	2	3	2	1	1	3	2.5	2	1	11	1	1	1	2	2	4	2	987	2	8.4	5	2	2	104	15.5	46.5	52	16	-0.65	-0.25	0.31	14.3	-0.7	24.2	-1.99	-0.17	43.3	-0.66	-0.21	0.69	6	1		
15m	1	1	1	3	3	3	5	2	5	3	2	3	2	1	1	3	3.5	2	1	3	3	1	1	4	2	3	2	2	678	3	7.6	5	12	13	84.5	13	47	50	15.5	1.54	1.96	1.82	18.1	1.26	89.7	0.02	0.63	73.6	1.14	1.75	1.68	3	1		
24m	2	1	1	4	2	2	5	2	4	3	1	2	3	1	3	1	1	2	2	2	1	3	3	1	1	3	2	1	2	764	1	10.4	3	2	13	83	8.5	45	46	12	-1.85	-1.69	-0.73	13.5	-1.87	3.1	-1.28	-1.73	4.2	-2.77	-2.85	-0.55	1	1	
36m	1	1	1	5																																																			

45m	2	1	1	1	3	3	3	3	3	3	2	2	3	1	2	1	1	1	3	2	2	1	11	1	1	1	1	3	2	1	2	785	4	7.3	6	2	2	78	13.8	49	50.5	14	-1.31	-0.95	-0.11	13.5	-1.39	8.2	-0.15	-1.65	5	2.65	-1.07	-5.53	48	1
58m	1	1	1	1	3	3	3	5	2	4	2	1	2	2	1	2	1	1	3	2.9	2	1	11	1	1	1	3	2	3	2	766	5	9.2	5	12	2	102	15.2	49.5	51.5	15.5	-0.57	-1.34	-1.6	14.6	-0.46	32.1	-0.8	-0.72	23.4	-0.77	-1.53	-1.54	48	1	
41m	1	1	1	1	4	2	4	1	1	5	3	1	3	3	2	2	1	1	4	1	2	1	11	1	1	1	4	11	3	2	899	3	9.4	5	2	11	90	11	47	47	13	-2.03	-2.71	-2.47	13.6	-1.63	5.2	-1.99	-2.58	0.5	-1.94	-2.61	-2.14	48	1	
18m	1	1	1	1	3	3	5	5	2	5	2	2	2	2	1	2	1	1	3	3.5	2	1	11	1	1	1	2	2	4	2	876	1	9.4	4	2	2	83	9.6	47.5	45	14.5	-1.92	-1.28	0.29	13.7	-2.13	1.7	0.01	-0.33	36.9	-2.15	-1.62	0.1	98	1	
41m	1	1	1	1	3	3	5	5	2	5	2	2	1	2	1	2	1	1	3	3.5	2	1	3	3	1	1	2	2	4	2	894	3	7.8	6	12	2	94	14	50	51	15	0.16	-0.69	-1.39	15.8	0.31	62.1	0.11	-0.75	22.8	-0.17	-0.89	-1.15	3	1	
24m	1	1	1	1	4	3	3	5	2	5	1	1	1	2	1	2	1	1	3	2.8	2	1	3	3	1	1	3	2	3	2	895	1	7.5	6	17	2	81	9.7	46	47	14	-1.29	-2.04	-2.12	14.8	-1.04	14.9	-1.7	-1.05	14.7	-1.47	-2.38	-1.52	1	1	
32m	1	1	1	1	3	3	5	5	2	5	2	1	2	3	2	2	1	2	3		2	1	3	3	1	1	3	12	1	2	834	3	7.2	6	2	2	93.5	12.5	48.5	50	14.5	-1.16	-0.76	0	14.3	-1.23	11	-0.46	-0.92	17.8	-1.29	-0.98	0.36	3	1	
37m	1	1	1	1	3	3	5	1	2	2	2	2	1	2	2	3	1	1	2	3.5	12	1	11	1	1	1	3	2	4	2	756	4	7.4	6	2	13	91.5	12.2	50.5	50	13.5	-1.03	-1.51	-1.53	14.6	-0.82	20.7	0.63	-2	2.3	-1.19	-1.63	-1.13	3	1	
29m	1	1	1	1	3	3	5	5	2	2	1	1	1	3	2	2	1	1	4	2.2	12	1	3	3	1	1	3	2	1	2	987	2	8	5	2	12	86.5	10.2	47.5	46.5	13.5	-2.11	-2.25	-1.56	13.6	-1.94	2.6	-1.02	-1.76	3.9	-2.04	-2.34	-0.97	3	1	
43m	1	1	1	1	2	2	3	5	1	5	2	2	1	3	2	1	1	4	2.5	2	1	11	2	1	1	3	2	1	1	904	3	8.9	5	2	2	90.5	11.5	48	51.5	15.5	-1.56	-2.51	-2.6	14	-1.16	12.4	-1.38	-0.4	34.5	-1.6	-2.45	-2.3	1	1		
13m	2	1	1	1	2	2	3	5	1	5	2	2	2	1	1	1	3	1	3.5	2	1	3	2	1	1	3	2	1	1	895	9	8.3	5	2	17	71	8.2	45.5	46.5	13.5	-0.41	-0.98	-1.47	16	-0.17	43.1	0.18	-0.67	25.3	-0.55	-1.55	-1.7	1	1		
51m	1	1	1	1	2	2	2	5	1	4	2	1	2	3	2	3	1	3	1	2.5	2	1	11	1	1	1	2	112	2	1	923	3	8.4	6	2	2	92	12.2	47.5	46.5	14	-1.14	-2.61	-3.11	14.4	-0.7	24.1	-1.97	-1.83	3.4	-1.27	-2.57	-2.97	4	1	
34m	2	1	1	1	3	4	4	5	2	5	3	1	2	1	3	1	3	1	2.5	11	1	11	1	1	1	1	2	3	2	904	2	9.4	4	2	2	84	11.1	44.5	44	13.5	-0.05	-1.58	-2.62	15.7	0.23	51.9	-2.73	-1.72	4.3	-0.49	-1.89	-2.38	1	1		
60m	2	1	1	1	3	3	3	5	1	3	1	1	1	3	1	3	1	2	1	1.75	2	1	11	1	1	1	2	11	4	2	982	2	9.4	5	2	13	87.5	11.2	46.5	48	14.5	-0.93	-1.78	-1.97	14.5	-0.73	23.1	-1.47	-0.94	17.4	-1.07	-3.36	-4.75	1	1	
48m	1	1	1	1	3	2	3	5	1	2	1	1	1	3	2	3	1	2	1	2	2	1	11	1	1	1	4	2	4	2	896	3	9.4	5	2	2	90.5	11.8	48	50	14.5	-0.9	-2.35	-2.84	14.4	-0.64	26.2	-0.94	-1.3	9.7	-1.34	-2.6	-2.96	6	1	
36m	2	1	1	1	5	5	3	5	2	2	1	1	1	2	2	3	1	2	1	3	2	1	11	1	1	1	2	2	4	2	902	2	10.5	4	2	2	88.5	10.2	44.5	47	13.5	-2.15	-2.51	-1.75	13	-2.05	2	-2.85	-1.79	3.7	-2.15	-2.67	-1.51	1	1	
37m	1	1	1	1	4	3	3	5	1	3	2	1	2	2	3	1	3	1	3.5	2	1	11	1	1	1	1	2	2	1	1	975	3	7.4	6	2	2	94.5	12.7	50	54	16.5	-1.18	-1.13	-0.64	14.2	-1.15	12.6	0.31	0.55	71	-1.31	-1.32	-0.35	1	1	
60m	2	1	1	1	3	3	4	5	2	3	4	2	1	2	1	3	1	3	1	2.5	2	1	11	1	1	1	2	2	1	2	975	2	6.8	6	2	2	100	12.6	46.5	48.5	14.5	-2.18	-2.67	-1.98	12.6	-2.1	4.8	-2.41	-1.64	5.1	-2.04	-2.64	-1.93	1	1	
49m	1	1	1	1	3	3	3	5	2	3	4	2	1	2	1	3	1	3	1	3	2	1	11	1	1	1	2	2	1	2	957	3	7.5	6	2	2	100.5	12.8	48.5	52	16	-2.2	-1.94	-0.88	12.9	-2.16	1.5	-1.22	-0.14	44.3	-2.22	2.14	-0.76	8	1	
40m	1	1	1	1	4	3	1	1	2	5	2	1	2	2	2	1	1	3	1	2.5	2	1	2	1	2	1	1	11	4	2	945	3	7.9	6	17	2	86	11	44.5	47.5	14	-1	-2.6	-3.32	14.9	-0.5	30.9	-3.67	-1.6	5.5	-1.22	-2.55	-2.99	3	4	
45m	1	1	1	1	2	3	5	5	1	2	4	1	4	2	2	2	1	1		2	1	12	1	1	1	1	2	2	4	2	1034	2	7.6	6	2	2	94	11.5	46.5	46.5	13	-2.36	-2.6	-1.88	13	-2.11	1.8	-2.45	-2.65	0.4	-2.19	-2.62	-1.83	5	1	
57m	1	1	1	1	2	3	2	2	5	1	3	3	1	4	2	1	3	1	3	1	2.5	2	1	11	1	1	1	2	11	1	2	1165	1	6.2	6	2	14	100.5	13	49.5	51.5	15	-2.2	-2.46	-1.78	12.9	-2.05	2	-0.76	-1.09	13.8	-2.08	-2.53	-1.76	4	1
60m	1	1	1	1	2	2	3	5	1	5	2	1	2	3	2	2	1	1	1	2.5	2	1	11	1	1	1	2	2	1	1	1067	2	7.3	6	2	12	98.5	12.4	46.5	48.5	14.5	-2.36	-3	-2.52	12.8	-2.11	1.8	-2.84	-1.56	5.9	-2.2	-2.98	-2.52	3	1	
28m	2	1	1	1	3	3	3	5	1	1	2	2	2	2	2	1	1	2	1	2.25	11	1	11	1	1	3	11	3	2	1190	9	7	6	2	12	87	12	45.5	47.5	13	0.1	-0.21	-0.62	15.9	0.21	58.2	-1.57	-1.92	2.7	-0.24	-0.53	-0.31	1	1		
39m	1	1	1	1	3	1	5	5	2	5	3	3	1	2	1	1	1	1	1	3	2	1	11	1	1	1	3	11	3	2	904	3	8.2	6	2	2	99.5	13.8	48.5	49.5	15	-1.21	-0.62	0.35	13.9	-1.35	8.8	-0.83	-0.69	24.4	-1.33	-0.83	0.58	1	1	
16m	2	1	1	1	4	3	2	1	2	4	2	2	3	2	1	1	2	1	2.5	2	1	3	1	1	1	1	2	2	1	2	887	9	9	4	2	2	72	7.8	44	46.5	13	-1.43	-1.97	-1.92	14.5	-1.08	13.9	-1.4	-1.25	10.5	-1.33	-2.36	-2.38	18	1	
43m	2	1	1	1	3	3	3	5	2	4	3	2	2	2	1	3	1	3	1	2	1	11	1	1	1	3	2	4	2	887	3	9.4	5	2	13	95.5	11.5	49	49.5	15	-2.29	-2.22	-1.13	12.6	-2.29	1.1	-0.06	-0.78	21.8	-2.18	-2.33	-0.83	1	1		
12m	1	1	1	1	3	3	3	5	2	4	3	2	3	2	1	3	1	3	1	3	2	1	3	1	1	1	2	2	4	2	880	9	10.2	4	2	13	72	8.4	45.5	47.5	13.5	-0.88	-1.38	-1.54	15.9	-0.65	25.8	-0.56	-1.07	14.3	-0.88	-1.1	-1.65	1	1	
36m	1	1	1	1	5	4	4	5	2	2	1	1	1	3	2	3	1	3	1	2.6	2	1	11	1	1	1	2	2	14	2	810	3	7.8	6	2	13	92	13	49	51	14.5	-0.34	-0.81	-1.1	15.4	-0.2	42.2	-0.33	-1.04	15	-0.61	-1.05	-0.82	1	1	
24m	2	1	1	1	4	3	3	5	2	3	3	3	1	2	1	1	1	2	1	3.5	2	2	1	1	1	1	2	2	1	2	810	1	7.5	5	2	13	83	11	48	49.5	15.5	0.1	-0.43	-1	16	0.22	58.7	0.52	0.46	67.8	-0.39	-0.73	-0.55	1	1	
20m	1	1	1	1	4	2	3	5	2	3	3	2	2	1	1	1	2	1	3	11	1	3	1	1	1	1	2	2	1	2	825	1	8	5	13	13	84	10	47.5	48.5	13.5	-1.67	-1.19	0.03	13.9	-1.79	3.7	-0.19	-1.33	9.2	-1.9	-1.53	-0.15	1	1	
48m	1	1	1	1	3	3	3	5	2	4	1	1	1	2	1	1	1	3	1	2	1	12	1																																	

39m	2	1	1	3	3	5	5	1	3	2	1	2	2	2	2	1	1	1	2	1	3	2	1	11	1	1	1	3	2	4	2	590	5	12	3	2	2	92	13.6	47	48.5	15.5	0.38	-0.5	-1.38	16.1	0.53	70.1	-1.26	-0.25	40.3	0.14	-0.67	-1.08	1	1
32m	2	1	1	3	3	3	5	1	4	3	2	2	2	1	1	1	2	1		2	1	11	1	1	1	3	2	1	1	895	2	11.5	3	17	2	92	11.1	47.5	48.5	15	-1.95	-1.35	-0.07	13.1	-2.05	2	-0.46	-0.35	36.3	-1.95	-1.69	0.22	5	1		
12m	2	1	1	2	2	3	5	2	3	3	2	2	3	1	1	1	2	1	3	2	1	11	1	1	1	3	11	1	2	784	1	10.4	3	2	2	72	7.1	47	47.5	13	-2.18	-1.91	-0.73	13.6	-2.11	1.7	1.44	-1.1	13.6	-2.18	-2.38	-0.95	1	1		
25m	2	1	1	3	3	3	5	2	4	1	1	1	2	2	1	1	2	1		2	1	11	1	1	1	4	2	4	1	685	4	9.8	4	2	11	90	11.6	47	48.5	15.5	-0.99	-0.12	0.93	14.3	-1.08	14.1	-0.27	0.41	66	-1.17	-0.39	1.33	1	1		
30m	2	1	1	3	1	2	5	2	5	1	1	1	3	2	1	1	2	1	2.75	2	1	11	1	1	1	4	2	4	1	785	3	9.6	4	18	2	92.5	12.8	47	50.5	16	-0.4	0.01	0.42	15	-0.44	33.1	-0.7	0.51	69.4	-0.6	-0.2	0.83	1	1		
12m	1	1	1	1	3	3	5	1	3	1	1	1	2	2	1	1	1	1		2	1	12	1	1	1	2	11	3	1	784	2	9.8	4	2	12	79.5	9	47.5	49.5	14	-1.89	-0.82	1.41	14	-2.29	1.1	0.92	-0.61	27.2	-2.12	-1.21	1.12	1	1		
46m	1	1	1	2	1	3	5	2	4	2	1	1	2	1	1	1	2	1	2	2	1	11	1	1	1	3	2	1	2	784	4	10.4	4	2	2	95.5	13.4	49.5	51	14.5	-0.71	-1.45	-1.66	14.7	-0.55	29.2	-0.43	-1.28	10	-0.93	-1.61	-1.52	1	1		
31m	1	1	1	5	3	3	5	2	3	1	1	1	3	2	1	1	2	1	2.9	2	1	12	1	1	1	3	2	4	2	685	4	8.5	5	2	12	91	11	49	51	13.5	-2.27	-1.75	-0.54	13.3	-2.24	1.2	-0.04	-1.82	3.5	-2.11	-1.92	-0.12	1	1		
47m	2	1	1	1	1	2	5	1	5	5	2	5	2	1	1	1	2	1	3	2	1	11	1	1	1	4	2	3	2	982	2	8.2	6	2	13	94	13.4	48	51.5	14.5	-0.2	-1.28	-1.93	15.2	-0.07	47.1	-0.91	-1.28	10.1	-0.38	-1.46	-1.79	8	1		
29m	1	1	1	1	1	2	5	1	5	5	2	4	2	1	1	1	2	1	2	2	1	11	1	1	1	4	2	3	2	910	2	7.6	6	13	13	86	10.6	47	49	15	-1.47	-1.92	-1.72	14.3	-1.27	10.2	-1.38	-0.4	34.4	-1.58	-2.05	-1.11	1	1		
30m	2	1	1	4	3	3	5	2	3	2	1	2	2	1	1	1	1	2.5	12	1	12	1	1	1	4	2	2	2	945	1	7.6	5	2	11	88.5	10	47.5	47	14	-2.27	-1.96	-0.74	12.9	-2.31	1.1	-0.35	-1.13	12.9	-2.33	-2.09	-0.33	1	1			
29m	1	1	1	3	3	2	5	1	3	2	1	2	2	1	1	1	1	2.5	2	2	3	3	1	1	3	2	1	2	1034	1	8.2	5	2	2	91	10.1	46.5	46	13.5	-3.39	-2.34	-0.26	12.2	-3.45		-1.74	-1.77	3.9	-2.87	-2.41	0.33	1	1			
16m	1	1	1	4	4	3	5	2	3	2	1	2	3	2	1	1	2	1	2.5	2	1	3	3	1	1	3	2	4	2	1012	9	9.8	4	2	12	77.5	8.8	46.5	48	14	-1.72	-1.67	-0.89	14.4	-1.63	5.2	-0.43	-0.71	24	-1.9	-2.07	-1.1	1	1		
22m	1	1	1	4	2	3	5	1	2	2	1	1	3	2	1	1	1	2.5	2	1	11	1	1	1	2	2	1	1	1278	9	9	5	2	2	78	10	46	51	15	-0.25	-1.53	-2.68	16.1	0.27	60.8	-1.54	-0.07	47.3	-0.58	-1.76	-2.5	5	1			
32m	1	1	1	3	3	3	5	1	2	1	1	1	3	2	1	1	3	1	2.5	2	1	11	1	1	1	3	2	1	1	1290	9	9.3	5	1	1	94	12	48	52	14	-1.8	-1.18	0	13.6	-1.89	3	-0.86	-1.4	8.1	-1.78	-1.32	0.51	1	1		
24m	1	1	1	3	3	5	5	1	2	1	1	1	1	2	3	1	3	2	3	2	1	3	1	1	3	2	2	1	1145	9	7.8	5	11	2	84.5	10	51	52	13	-1.81	-1.83	-1.09	14	-1.76	3.9	1.93	-2.03	2.1	-1.86	-2.11	-0.42	1	1			
12m	2	1	1	2	2	5	5	1	2	2	1	1	3	1	3	2	3	4	2.6	2	1	11	1	1	1	2	2	3	2	1065	9	8.4	5	2	2	70.5	6	48	50	13	-3.87	-3.53	-1.49	11.8	-3.76		-0.84	-1.11	13.3	-3.12	-3.42	-1.47	3	1		
50m	2	1	1	2	1	5	5	2	3	1	1	1	1	2	3	2	3	4		2	2	12	2	2	N	2	3	2	1078	2	8.3	6	2	12	105	14	47	51	14	-2.07	-1.29	0.14	12.7	-2.07	1.9	-1.75	-1.7	3.7	-1.85	-1.31	0.49	3	1			
20m	1	1	1	1	4	1	1	2	3	1	1	2	1	1	3	1	3	3	2.5	2	1	3	3	1	1	3	11	4	2	764	2	8.2	5	2	2	78.5	8.5	46	48	12.5	-2.39	-2.71	-2.04	13.6	-2.16	1.6	-1.36	-2.35	0.9	-2.49	-2.74	-1.88	1	1		
15m	2	1	1	2	1	5	5	1	3	2	2	2	3	1	2	2	3	1	2.5	2	1	11	1	1	1	2	2	1	2	873	9	9.3	4	2	2	75	11.5	42	43	14	2.29	1.29	-0.99	20.1	2.53	99.4	-1.34	-0.32	37.5	2.36	1.11	-1.03	1	1		
26m	2	1	1	4	2	1	1	2	3	2	1	2	2	1	3	1	3	4	3	2	1	3	3	1	1	3	12	1	2	902	2	9.4	4	11	2	86.5	11	46	46	12.5	-0.77	-0.75	-0.49	14.7	-0.72	23.6	-1.12	-2.35	0.9	-1.06	-1.04	0.01	5	1		
12m	1	1	1	2	2	3	5	2	2	1	1	3	2	1	1	1	1	2.5	2	1	11	1	1	1	2	2	3	2	893	1	10.3	4	2	2	74	10.7	47	47	13	1.48	0.76	-0.86	19.2	1.69	95.4	0.54	-1.56	5.9	1.26	0.41	-0.91	1	1			
30m	1	1	1	4	3	1	5	1	2	2	2	1	2	2	1	1	3	1	2	2	1	11	1	1	1	2	2	1	2	780	4	10.2	4	2	11	83	14	48	50	15	2.68	0.66	-2.33	20.3	2.97	99.8	-0.02	-0.3	38.4	1.61	0.25	-2.16	1	1		
54m	1	1	1	4	3	1	5	2	3	1	1	1	2	2	1	1	3	1	2.5	2	1	11	1	1	1	2	12	3	2	916	3	10.4	5	2	2	99	14.9	50	50	16	-0.15	-0.8	-1.14	15.2	-0.09	46.3	-0.17	-0.13	45	-0.43	-1.4	-1.73	8	1		
54m	2	1	1	4	2	1	5	1	2	1	1	1	3	1	1	1	3	1	2.5	2	1	11	1	1	1	3	2	4	1	896	3	10.4	5	14	2	97	11.7	49	50	16	-2.4	-2.91	-2.11	12.4	-2.27	1.2	-0.48	-0.4	34.4	-2.26	-2.84	-1.95	5	1		
52m	2	1	1	4	3	2	5	2	2	2	1	1	3	2	1	1	3	1	2.8	2	1	11	1	1	1	4	2	4	2	786	4	12.8	4	2	2	96	12.6	48	50	16	-1.08	-1.94	-1.99	13.9	-0.98	16.3	-1.12	-0.34	36.5	-1.39	-2.23	-1.95	5	3		
46m	2	1	1	4	3	4	5	2	3	1	2	1	3	1	1	1	3	1	2	2	1	11	1	1	1	3	2	4	2	714	4	12.6	3	2	18	89	10.7	45	46	15	-1.7	-3.05	-3.06	13.5	-1.39	8.2	-3.01	-0.87	19.1	-1.79	-3	-2.9	9	1		
36m	1	1	1	4	4	2	5	1	3	1	1	1	3	2	1	1	3	1	2.5	2	1	11	1	1	1	3	11	1	2	836	3	12.6	3	2	2	89	12	45	47	13	-0.71	-1.56	-1.99	15.1	-0.41	34.3	-2.83	-2.47	0.7	-0.9	-1.07	-1.61	1	1		
50m	2	1	1	4	3	3	5	2	2	1	1	1	3	2	1	1	1	1	2	11	1	11	1	1	1	2	2	1	1	846	3	10.4	5	13	2	90	10.9	45	47	15	-1.04	-1.86	-1.9	14	-0.94	17.3	-1.05	-1	16	-1.78	-3.09	-3.16	5	1		
36m	1	1	1	2	2	1	5	1	2	2	1	1	2	2	1	1	1	1	2.3	2	1	11	1	1	1	3	11	14	2	683	4	11.2	3	2	12	86	11.1	49	48	15	-0.44	-1.92	-2.84	15.5	-0.02	49.2	-0.37	-0.63	26.4	-1.13	-2.23	-2.39	1	1		
41m	1	1	1	2	2	2	5	2	2	2	1	2	1	1	1	1	2	1	3	2	1	11	1	1	1	3	11	1	2	902	3	6.8	6	2	2	85	13.2	53	54	15	-0.79	21.4	-1.21	14.6	-0.68	24.7	1.48	-0.76	22.5	0.74	-1.35	-3.38	3	1		
29m	2	1	1	3	3	5	5	1	4	2	1	2	1	2	1	1	3	1	2	2	1	12	1	1	1	2	2	4	2	894	2	7	6	2	11	87	8.9	45	43	14	-3.41	-2.97	-1.01	11.8	-3.52		-1.93	-1.09	13.7	-3.08	-3.02	-0.54	1	1		
19m	1	1	1	3	3	3																																																		

41m	2	2	1	2	2	1	5	2	1	1	1	1	1	1	1	2	1	1	3	2.5	2	1	11	1	1	1	3	11	1	2	786	4	6.9	6	2	2	85	11	45	48	14	-0.4	-2.38	-3.39	15.2	-0.07	47.2	-2.77	-1.52	6.4	-0.78	-2.51	-3.22	4	1
21m	1	2	1	2	3	1	5	2	3	2	2	3	1	3	1	1	1	2	2	1	3	3	1	1	2	11	1	2	987	2	6.9	6	2	2	78	8.5	45	49	14	-1.4	-1.91	-1.73	14	-1.18	11.8	-1.29	-0.6	27.6	-2.38	-2.83	-2.27	1	1		
49m	2	2	1	3	3	1	5	1	4	2	1	1	3	2	3	1	1	3	2.8	2	1	11	1	1	1	3	11	3	2	980	2	6.4	6	2	12	93	14	47	54	15	0.49	-1.17	-2.48	16.2	0.63	73.6	-1.72	-0.97	16.6	0.25	-1.24	-2.3	1	1	
33m	2	2	1	3	3	1	5	2	1	2	2	1	2	3	1	1	1	2.4	2	1	11	1	1	1	4	11	1	2	875	2	6.4	6	2	2	94	14	48	54	14	0.29	0.32	0.13	15.8	0.3	61.9	-0.23	-1.26	10.4	0.09	0.2	0.56	34	1		
47m	1	2	1	1	3	1	5	1	1	2	1	1	3	2	3	1	1	3	2	1	11	1	1	1	3	11	1	2	679	5	6.2	6	2	2	96	14	48	50	15	-0.27	-1.19	-1.68	15.2	-0.12	45.2	-1.5	-0.88	18.8	-0.55	-1.37	-1.53	5	1		
41m	2	2	1	1	1	1	5	2	3	3	2	3	1	2	1	1	2	2	11	1	11	1	1	1	4	2	3	2	745	4	8.1	6	2	2	86	10.7	47	49	13.5	-0.97	-2.63	-3.17	14.5	-0.66	25.5	-1.37	-1.96	2.5	-1.25	-2.7	-2.96	1	1		
58m	2	2	1	2	2	1	5	2	2	3	3	2	1	1	2	1	1	3	3	2	1	11	1	1	1	3	11	4	1	1000	2	8.4	6	2	2	97	14.9	50	50	14.5	0.37	-1.32	-2.49	15.8	0.37	64.5	0.09	-1.6	5.5	0.19	-1.33	-2.4	1	1	
26m	2	2	1	2	2	1	5	2	2	3	3	3	1	1	2	1	1	2.2	2	1	11	1	1	1	4	11	3	1	960	1	8.5	5	2	2	84	9.8	49	49	13.5	-1.48	-1.62	-1.06	13.9	-1.44	7.4	1.1	-1.34	9.1	-1.72	-2.01	-0.74	4	1		
57m	1	2	1	3	3	1	5	2	3	1	1	1	3	2	2	1	1	2.6	2	1	12	1	1	1	3	2	1	2	754	5	8.3	6	11	2	96	13	46	49	14	-1.2	-2.43	-2.73	14.1	-0.9	18.3	-2.43	-1.93	2.7	-1.33	-2.53	-2.75	4	1		
48m	1	2	1	3	2	1	5	2	2	2	2	3	1	2	1	1	2.2	2	1	11	1	1	1	4	2	3	2	780	4	5.7	6	2	2	100	15.6	47.5	49	15	0.19	-0.44	-0.91	15.6	0.22	58.7	-1.88	-0.92	18	-0.11	-0.6	-0.73	1	1			
41m	1	2	1	3	3	1	1	1	2	2	1	3	2	2	1	2	2.5	12	1	11	1	1	1	4	2	3	2	730	4	5.9	6	2	11	85	10.3	46	46	13	-1.16	-2.92	-3.38	14.3	-0.84	20.2	-2.06	-2.4	0.8	-1.67	-3.01	-3.38	5	1			
53m	2	2	1	2	3	1	5	2	3	4	4	3	3	1	2	1	1	3	2	1	12	1	1	1	2	2	3	2	810	4	6.2	6	2	2	95	14.3	49	50	14	0.32	-1.26	-2.4	15.8	0.4	65.5	-0.43	-1.85	3.2	0.13	-1.34	-2.31	3	1		
31m	2	2	1	2	3	1	5	2	3	3	3	2	3	1	2	1	2	2	1	11	1	1	1	3	2	3	2	548	5	5	6	2	2	89	11.9	46	49	14	-0.46	-0.69	-0.75	15	-0.37	35.6	-1.48	-1.16	12.2	-0.72	-1	-0.41	1	1			
37m	2	2	1	1	2	1	5	2	3	5	2	2	3	1	2	2	1	3	2	2	1	11	1	1	2	2	1	1	1100	1	5.8	6	2	2	92	13	48	51	14	-0.12	-0.64	-1.04	15.4	-0.01	49.6	-0.44	-1.39	8.3	-0.33	-0.88	-0.75	4	1		
28m	2	2	1	1	2	1	5	2	3	4	2	3	3	1	2	1	1	3.1	2	1	11	1	1	1	2	11	3	1	675	4	7.1	6	2	2	91	11.6	47	52	14	-1.21	-0.52	0.48	14	-1.29	9.9	-0.53	-1.02	15.5	-1.35	-0.84	0.85	6	1		
39m	1	2	1	3	3	1	5	2	1	2	2	1	1	2	2	1	2	3	2	1	11	1	1	1	3	2	3	2	870	3	7.2	6	11	2	94	14.7	49	52	15	0.76	-0.11	-1.09	16.6	0.87	80.8	-0.49	-0.69	24.4	0.33	-0.29	-0.81	1	1		
28m	2	2	1	3	3	1	5	1	1	2	2	2	1	2	2	1	2.6	2	1	3	3	1	1	3	2	4	2	890	2	9.7	4	2	2	93	14.9	49	53	14	1.17	1.46	1.08	17.2	1.16	87.8	0.9	-1.01	15.6	0.85	1.36	1.43	3	1			
52m	1	2	1	4	3	1	5	2	2	2	2	1	3	2	2	1	1	3	2	1	11	1	1	1	3	2	4	2	880	4	8.9	6	2	2	93	15.6	49	53	14	1.68	-0.69	-2.92	18	1.91	97.2	-0.96	-1.84	3.3	1.11	-0.91	-2.86	8	1		
37m	1	2	1	3	2	1	5	2	5	3	2	2	3	1	2	1	1	2.3	11	1	11	1	1	1	3	2	4	2	850	4	6	6	13	12	97	13.7	50	50	15	-0.75	-0.5	0.02	14.6	-0.84	19.9	0.31	-0.64	26	-0.97	-0.71	0.3	4	1		
33m	1	2	1	1	2	1	5	2	3	2	2	2	1	1	2	1	2	2.1	2	1	3	3	1	1	2	2	3	2	760	4	5.8	6	11	2	92	12.5	48	50	15	-0.83	-0.91	-0.69	14.8	-0.76	22.3	-0.9	-0.53	29.7	-1.03	-1.08	-0.25	45	1		
13m	1	2	1	2	2	1	5	2	2	3	3	3	2	1	2	1	2	2.2	11	1	3	3	1	1	3	11	4	2	920	9	7.1	6	2	2	68	8.7	45	44	14	0.82	-1.27	-3.61	18.4	1.28	90	-1.14	-0.63	26.6	0.88	-1.71	-3.48	1	1		
53m	1	2	1	3	1	1	5	1	2	2	1	2	1	1	2	1	1	3	2	1	11	1	1	1	4	2	3	2	940	3	7.4	6	2	2	106	14	47	51	13	-2.47	-1.63	-0.1	12.5	-2.52	0.6	-2.35	-1.86	3.1	-2.27	-1.78	-0.03	34	1		
60m	1	2	1	3	3	1	5	2	1	3	2	2	3	1	2	1	1	3	2.2	2	1	11	1	1	1	4	11	4	2	945	3	8.3	6	2	2	98	15.2	50	51	13.5	0.31	-1.45	-2.64	15.8	0.47	67.9	-0.51	-2.45	0.7	-0.02	-1.66	-2.63	1	1	
51m	1	2	1	2	1	1	5	1	1	1	1	1	3	1	2	1	1	3	2.6	2	1	11	1	1	1	3	11	3	2	958	3	6.7	6	2	2	100	14.6	50	50	14	-0.62	-1.16	-1.24	14.6	-0.55	29.1	-0.26	-1.83	3.4	-0.84	-1.34	-1.13	4	1	
29m	1	2	1	2	2	1	5	2	2	3	2	3	2	1	2	1	1	3	3.2	2	1	3	3	1	1	3	11	1	1	1015	1	6.5	6	2	2	88	12.5	49	48	14	0.41	-0.02	-0.68	16.3	0.54	70.5	0.79	-1.08	13.9	-0.26	-0.65	-0.54	8	1	
40m	1	2	1	3	3	1	5	1	1	2	2	1	1	2	2	1	2	3	2	1	11	1	1	1	4	11	1	1	786	4	6	6	2	2	96	15.9	49	14	14.5	1.27	0.6	-0.49	17.3	1.31	90.5	0.11	-1.06	14.4	0.8	0.28	-0.48	4	1		
36m	1	2	1	2	3	1	5	2	2	2	2	1	1	2	1	1	3	3.1	2	1	11	1	1	1	4	2	1	2	870	3	8.3	5	2	2	90	12	47	50	14	-0.4	-1.52	-1.7	14.8	-0.65	25.9	-1.75	-1.5	6.7	-1.08	-1.67	-1.34	1	1		
25m	1	2	1	2	2	1	5	2	5	3	2	2	1	1	1	1	3	2.2	2	1	11	1	1	1	4	11	3	1	850	3	8.1	5	2	2	89	13.4	50	53	14	0.87	0.7	0.09	17.2	0.92	82	1.18	-1.08	14.1	0.25	0.47	0.71	4	1		
35m	1	2	1	3	2	1	5	2	2	3	1	2	2	1	1	1	3	2.2	2	1	11	1	1	1	4	11	4	1	890	3	7.9	5	2	2	100	14.5	46	47	14	-0.71	0.1	1.07	14.5	-0.93	17.5	-2.43	-1.49	6.9	-0.91	0	1.48	1	1		
35m	1	2	1	3	2	1	5	2	3	3	1	3	1	1	1	1	2.8	2	1	11	1	1	1	3	11	1	1	880	3	6	6	11	12	99	15	49	53	15	-0.07	0.41	0.86	15.3	-0.25	40.1	-0.3	-0.6	27.6	-0.36	0.28	1.22	1	1			
56m	1	2	1	3	2	1	5	2	2	2	2	1	3	1	1	1	2	3	1	2	1	1	1	1	4	11	1	2	750	5	9.1	5	2	2	97	15	49	51	15	0.37	-1.29	-2.46	15.9	0.53	70.3	-1.08	-1.07	14.2	0.02	-1.49	-2.41	1	1		
58m	2	2	1	3	2	1	5	2	2	2	1	2	1	1	1	1	3	2	2	1	11	1	1	1	2	11	3	1	742	4	9.1	6	2	2	102	16.6	49	54	14	0.52	-0.55	-1.42	16	0.45	67.2	-0.61	-1.98	2.4	0.41	-0.43	-1.25	3	1		
47m	2	2	1	4	2	1	5	1	2	2	2	1	1	3	2	1	1	3	2.9	2	1	11	1	1	1	3	2	3	2	730	5	9	5	2	2</																				

34m	1	2	1	2	3	1	5	2	4	4	4	2	1	1	2	1	1	1	1.5	2	1	11	1	1	1	1	3	11	1	2	775	4	6.6	6	11	2	85	10.2	48	51	14	-1.69	-2.66	-2.7	14.1	-1.34	9.1	-0.92	-1.43	7.6	-1.77	-2.67	-2.33	1	1
29m	2	2	1	3	3	1	5	1	1	2	2	2	3	2	2	1	2	1	2.5	2	1	11	1	1	1	3	11	1	1	862	3	7	6	2	2	83.5	9.7	47	49	13	-1.47	-2.2	-1.98	13.9	-1.35	8.9	-0.64	-1.91	2.8	-1.72	-2.41	-1.55	1	1	
55m	2	2	1	2	2	2	1	1	2	2	2	1	1	2	3	2	2	1	2	2	1	11	1	1	1	2	2	1	2	865	3	7.9	6	2	2	91	14.5	46	50	15	1.29	-1.28	-3.44	17.5	1.39	91.7	-2.6	-1.12	13.1	0.92	-1.36	-3.48	4	1	
36m	2	2	1	2	2	1	1	2	2	2	1	2	1	1	3	1	3	4	2.1	2	1	11	1	1	1	3	2	4	2	860	2	7	6	2	2	86	10	46	45	14	-1.76	-2.66	-2.38	13.5	-1.58	5.7	-1.78	-1.34	9	-1.9	-2.81	-2.18	5	1	
29m	1	2	1	2	3	1	1	2	3	2	2	1	3	2	3	1	3	3	2	2	1	11	1	1	1	3	2	1	2	782	4	5.9	6	2	2	84	10	49	50	14	-1.67	-2.44	-2.33	14.2	-1.42	7.8	0.05	-1.3	9.8	-1.77	-2.49	-1.68	1	1	
12m	2	2	1	4	4	1	1	2	2	1	1	1	1	2	3	1	3	1	2	2	1	3	3	1	1	2	2	4	2	690	2	7	5	2	2	67	6	45	45	13	-2.85	-3.37	-2.48	13.1	-2.63	0.4	0.06	-1.08	14	-2.06	-3.42	-2.7	1	1	
24m	1	2	1	2	3	1	1	1	2	2	1	1	2	3	2	3	1	2	11	1	3	3	1	1	3	11	3	2	870	1	6.9	6	12	2	79	10.5	48	49	14	0.12	-1.29	-2.67	16.8	0.62	73.3	-0.19	-1.03	15.2	-0.29	-1.67	-2.14	5	1		
16m	2	2	1	3	3	1	1	2	3	5	4	2	1	1	3	1	3	1	2.3	2	1	3	3	1	1	4	2	1	2	880	9	09-Jan	4	2	2	76	8.5	45	45	13.5	-1.22	-1.2	-0.71	14.4	-1.12	13.1	-0.64	-0.78	21.9	-1.52	-1.75	-1.05	1	1	
53m	2	2	1	2	2	1	1	2	2	2	2	1	1	3	2	3	1	2.1	2	1	11	1	1	1	4	2	1	2	885	3	5.9	6	2	2	103	14.5	49	55	14	-1.18	-1.13	-0.58	13.7	-1.19	11.6	-0.92	-1.84	3.3	-1.17	-1.23	-0.4	5	1		
41m	2	2	1	1	3	1	1	2	2	2	2	1	3	1	3	2	3	1	2	2	1	11	1	1	1	4	2	1	2	845	3	12	4	2	2	84	12	47	49	14	0.82	-1.63	-3.58	17	1.16	87.6	-1.34	-1.5	6.6	0.28	-1.87	-3.48	1	1	
51m	2	2	1	4	3	2	1	2	3	1	1	1	1	2	3	1	2	1	2.5	1	1	12	1	1	1	4	2	4	2	768	4	8.8	6	2	2	103	15.2	49	52	15	-0.58	-0.6	-0.34	14.4	-0.61	27.2	-0.35	-1	15.8	-0.68	-0.7	-0.13	3	1	
27m	2	2	1	3	4	1	1	2	3	2	2	1	3	1	3	1	3	4	2	2	1	3	3	1	1	4	2	1	2	757	3	8.6	5	2	2	79	10.5	46	45	14	0.12	-1.68	-3.29	16.8	0.71	76.2	-1.9	-1.17	12.1	-0.08	-1.56	-2.44	1	1	
36m	2	2	1	3	3	1	1	2	3	4	2	2	3	1	3	2	3	1	2	2	1	11	1	1	1	2	2	1	2	480	6	8.5	5	12	12	89	12.5	47	50	15	0.09	-0.81	-1.6	15.8	0.29	61.3	-1.07	-0.51	30.6	-0.18	-1.12	-1.37	6	1	
41m	1	2	1	4	4	2	1	2	3	2	2	2	1	1	3	1	2	1	2.3	2	2	12	1	1	1	2	2	1	2	890	3	9.4	5	2	2	87	12	46	49	14	0.1	-1.63	-2.83	15.9	0.39	65	-2.04	-1.5	6.6	-0.51	-2.03	-2.88	5	1	
45m	1	2	1	3	4	2	1	2	3	2	2	1	1	3	1	1	1	2.2	2	1	11	1	1	1	3	2	1	2	990	2	9.4	5	2	2	93	12.8	47	51	15	-0.51	-1.47	-1.9	14.8	-0.36	36	-1.52	-0.82	20.7	-0.96	-1.87	-1.97	3	2		
24m	2	2	1	4	4	2	1	2	3	1	1	1	2	1	3	1	3	4	2	2	1	3	3	1	1	4	2	3	2	780	1	9.6	4	2	2	88	11.5	47	46	14	-0.96	-0.49	-0.28	14.9	-1	16	-0.92	-1.03	15.2	-0.89	-0.31	1	1	1	
33m	1	2	1	3	3	2	1	2	2	2	2	1	2	1	3	2	2	1	2.7	2	1	11	1	1	1	2	2	1	2	896	2	10.1	4	2	2	79	10	48	50	13	-0.47	-2.74	-4.23	16	-0.26	60.4	-0.86	-2.36	0.9	-0.77	-2.74	-3.78	1	1	
12m	1	2	1	1	3	1	1	2	4	1	1	1	3	1	3	1	3	1	2	2	1	3	3	1	1	2	2	1	2	854	1	10.5	4	2	2	76	8	49	49	14	-2.58	-1.72	-3.57	13.6	-2.75	0.3	1.49	-0.59	27.9	-2.52	-1.29	-0.17	8	1	
28m	1	2	1	3	3	2	1	2	3	2	2	2	3	1	3	1	1	1	2	2	1	11	1	1	1	3	2	3	2	892	3	11.7	3	2	2	89	9.5	47	53	14	-3.68	-2.66	-0.44	12	-3.75		-1.25	-1.22	11.2	-3.07	-2.8	-0.02	3	1	
40m	1	2	1	4	3	2	1	2	2	2	2	2	3	1	3	1	3	1	2.1	2	1	11	1	1	1	2	2	1	2	792	4	13.1	3	2	2	93	13	52	52	14	-0.55	-1.18	-1.46	15	-0.38	35.4	0.87	-1.59	5.6	-0.8	-1.38	-1.23	1	1	
31m	1	2	1	4	4	1	1	2	3	3	2	1	3	2	3	1	1	1	2.5	2	1	11	1	1	1	2	2	3	2	790	3	13.8	1	2	2	93	11	52	54	14	-2.73	-1.73	0.09	12.3	0.91	-2.43	9.1	-2.43	-1.92	0.44	14	1			
52m	2	2	1	3	3	1	1	2	3	2	2	2	3	2	3	1	2	1	2	2	1	11	1	1	1	2	2	3	2	894	3	15	2	2	2	92	14.5	48	46	14	1.01	-1.31	-3.22	17.1	1.33	90.9	-1.66	-1.85	3.2	0.75	-1.16	-2.91	3	1	
50m	1	2	1	4	3	1	1	2	3	2	1	1	3	1	3	1	1	1	3	2	1	11	1	1	1	2	2	3	2	840	4	16	2	2	2	97	14.2	49	53	16	-0.31	-1.27	-1.75	15.1	-0.17	43.4	-0.89	-0.15	43.9	-0.59	-1.48	-1.7	1	1	
24m	2	2	1	3	3	2	1	2	3	1	1	1	3	1	3	1	3	1	2	2	1	3	3	1	1	2	2	3	2	910	9	13.6	1	2	2	93	14	51	51	14	0.7	1.55	1.93	16.5	0.62	73.2	0.73	-0.76	22.5	0.25	1.5	2.53	4	1	
41m	2	2	1	3	3	2	1	2	3	2	2	1	3	1	3	1	3	1	2	2	1	11	1	1	1	3	11	2	2	945	2	13.4	2	13	2	94	13	49	47	14	-0.54	-0.99	-1.09	14.7	-0.47	31.9	0.07	-1.5	6.6	-0.71	-1.24	-0.89	4	1	
52m	1	2	1	4	4	1	1	2	2	2	2	1	3	1	3	1	3	1	2.7	2	1	11	1	1	1	2	2	1	1	865	4	14.6	2	2	2	98	14	48	51	14	-0.52	-1.39	-1.69	14.6	-0.48	31.4	-1.12	-1.84	3.3	-0.92	-1.72	-1.72	4	1	
36m	1	2	1	2	2	1	1	2	3	4	2	2	1	1	3	1	3	1	2	2	1	11	1	1	1	2	2	2	2	465	6	9.5	5	2	2	82	8	49	45	11	-1.19	-1.17	-0.65	14	-1.19	11.6	-0.73	-1.7	4.5	-3.29	-1.46	-3.44	5	1	
33m	2	2	1	2	3	2	1	1	2	2	2	3	2	3	1	3	1	2	2	2	1	11	1	1	1	2	2	1	2	865	2	9.6	4	2	2	84	11.8	45	52	14	-1.68	-2.85	-2.77	13.3	-1.48	6.9	-1.98	-1.95	2.6	0.13	-4.19	-2.19	1	1	
25m	1	2	1	3	2	2	1	1	3	2	2	2	1	2	3	1	3	1	1.4	2	1	11	1	1	1	3	2	1	2	920	2	9.7	4	2	2	76	9.7	46	47	14	-1.37	-1.99	-1.96	14.4	-1.11	13.4	-0.8	-1.37	8.5	-0.43	-2.45	-3.47	3	1	
13m	1	2	1	4	2	2	1	2	2	2	2	1	3	2	3	1	3	4	2	12	1	11	1	1	1	2	2	3	2	935	9	9	5	2	2	68	8	45	45	15	-0.77	-1.35	-1.48	14.7	-0.6	27.3	0.78	0.04	51.6	0.02	-2.38	-3.48	1	1	
12m	2	2	1	4	2	2	1	2	2	2	2	1	1	3	1	3	4	2	2	2	1	11	1	1	1	2	2	1	2	957	9	12.7	1	2	13	70.5	8.2	45	45	15	-0.72	-1.52	-1.75	14.6	-0.56	28.8	-1.22	-0.89	16.5	-0.39	-1.34	-1.47	1	1	
16m	1	2	1	1	3	2	1	1	2	2	2	2	1	1	3	1	3	1	2.5	2	1	11	1	1	1	2	2	3	2	750	2	14.2	1	2	11	75	7.7	45	45	13	-1.14	-1.59	-1.4	14	-1.05	14.7	-2.34	-1	15.9	-2.64	-3.04	-1.96	1	1	
13m	2	2	1	4	3	2	1	2	2	1	1	1	2	1	3	1	3	1	1.5	2	1																																		

60m	1	2	1	3	3	1	1	2	4	1	1	1	3	1	2	1	1	1	3.2	2	1	11	1	1	1	1	2	2	3	2	684	5	9.6	5	2	2	110	17	50	55	15	-0.99	-0.63	-0.11	14	-0.91	18	-0.52	-1.16	12.3	-1.03	-0.81	-0.02	4	1	
36m	1	2	1	4	2	1	1	2	5	4	2	2	3	1	2	1	3	2	3	2	1	11	1	1	1	1	2	2	3	2	1	735	4	10.6	4	2	2	89	11.3	47	49	13.5	-1.28	-1.92	-1.97	14.4	-0.98	16.5	-1.78	-1.98	2.4	-1.51	-2.1	-1.61	3	1
38m	2	2	1	2	2	1	1	2	4	2	2	2	3	1	2	1	2	2	2.5	11	1	11	1	1	1	1	2	2	3	1	758	4	13.4	3	2	13	93	11.5	46	48	14	-1.75	-1.78	-1.03	13.3	-1.73	4.2	-1.94	-1.44	7.5	-1.78	-1.96	-0.66	34	1	
32m	1	2	1	4	3	1	1	2	5	1	1	1	3	2	2	1	3	1	3	11	1	11	1	1	1	1	3	2	3	1	574	5	12.8	2	2	2	84	11	46	48	16	-0.47	-1.92	-2.82	15.6	-0.09	46.6	-2.28	0.31	62	-0.83	-2	-2.25	5	1	
56m	2	2	1	4	3	1	1	1	2	2	1	1	3	2	2	1	2	2	2	2	1	12	1	1	1	1	2	2	3	2	581	6	14	3	2	2	101	14.1	48	55	16	-2.24	-1.51	-0.17	12.5	-2.2	1.4	-1.26	-0.47	32	-1.11	-1.64	-1.25	1	1	
54m	2	2	1	4	3	1	1	1	2	1	1	1	3	2	2	1	1	1	2.5	2	1	11	1	1	1	1	2	2	3	2	580	6	12.6	3	2	2	100	14.5	49	52	15	-0.54	-1.27	-1.47	14.5	-0.54	29.5	-0.49	-1.12	13.1	-0.64	-1.3	-1.24	8	1	
53m	1	2	1	2	2	1	1	2	3	2	2	1	3	2	2	1	2	2	2.6	2	1	11	1	1	1	1	2	11	3	1	784	4	11	4	2	2	101	13	48	49	14	-1.92	-1.96	-1.13	12.8	-1.9	2.9	-1.16	-1.87	3.1	-2.16	-2.28	-1.16	4	1	
52m	1	2	1	4	2	1	1	2	4	1	1	1	2	2	1	2	2	2	2.9	11	1	12	1	1	1	1	2	2	3	2	732	5	12	4	2	2	99	13	50	53	14	-1.86	-2.17	-1.62	13.3	-1.73	4.2	-0.3	-1.85	3.2	-1.84	-2.22	-1.49	7	1	
14m	1	2	1	4	2	3	1	2	3	2	2	2	3	2	3	1	1	4	2.8	2	1	3	3	1	1	3	2	2	2	741	2	9.4	4	2	2	64	5.5	48	46	11	-1.26	-4.02	-5.7	15.5	-0.73	23.2	-1.38	-3.71		-1.9	-4.87	-5.24	1	1		
50m	1	2	1	3	2	1	1	1	5	1	1	1	3	2	2	1	3	1	2.6	2	1	11	1	1	1	1	1	1	1	2	784	4	9.1	6	2	2	102	13	51	54	15	-2.43	-1.97	-0.7	12.6	-2.43	0.8	-0.24	-0.96	16.9	-2.32	-2.1	-0.54	4	1	
43m	1	2	1	2	2	1	1	2	4	2	2	2	3	1	2	1	2	2	2.7	2	1	11	1	1	1	1	2	2	3	2	794	4	7.8	6	2	2	92	12.4	50	54	14	-0.94	-1.89	-2.23	14.7	-0.62	26.7	0.01	-1.67	4.7	-1.11	-1.95	-1.93	43	1	
53m	1	2	1	4	3	3	5	2	5	3	2	2	3	1	2	1	1	2	2.3	2	1	12	1	1	1	1	3	2	3	2	590	6	7.2	6	2	2	100	14.3	49	52	14	-0.88	-1.49	-1.5	14.3	-0.77	21.9	-1.01	-1.87	3.1	-1.05	-1.63	-1.39	1	1	
41m	1	2	1	4	2	5	5	2	4	2	2	1	1	1	2	1	1	2	3	2	1	11	1	1	1	1	2	2	2	549	6	7.4	6	2	2	98	13.6	47	51	15	-1.07	-0.98	-0.46	14.2	-1.09	13.8	-1.98	-0.76	22.4	-1.22	-1.12	-0.15	4	1		
25m	1	2	1	4	4	5	5	2	3	2	2	2	3	1	2	1	2	2	3.2	2	1	3	3	1	1	2	2	3	2	502	6	7.9	6	2	2	87	11.4	48	52	15	-0.81	-0.83	-0.57	15.1	-0.74	23	-0.36	-0.23	41	-1.05	-1.01	0.1	8	1		
27m	1	2	1	3	3	5	1	2	4	2	2	2	1	1	1	1	2	3	3	2	1	3	3	1	1	2	2	3	2	542	6	7.4	6	2	2	80	10	48	49	15	-0.26	-1.71	-2.65	15.6	0.04	51.4	0.21	-0.15	44.2	-0.98	-2.34	-2.45	5	1		
52m	2	2	1	2	2	1	1	2	4	1	1	1	1	1	2	1	2	3	2.5	2	1	11	1	1	1	1	2	11	3	2	876	3	8.3	6	2	2	107	14.2	47	52	14	-2.32	-1.22	0.44	12.4	-2.33	1	-1.79	-1.81	3.5	-2.04	-1.33	0.7	34	1	
37m	2	2	1	4	2	5	5	2	3	2	2	1	1	1	2	1	1	1	2.5	2	1	11	1	1	1	1	2	11	3	2	890	3	8.1	6	2	2	95	13	50	53	14	-0.75	-0.7	-0.36	14.4	-0.76	22.3	0.94	-1.41	8	-0.89	-0.88	0.05	48	1	
32m	2	2	1	2	2	1	1	2	4	1	1	1	1	1	2	1	2	2	2.7	11	1	11	1	1	1	1	2	2	3	2	893	2	9.3	4	2	2	91	11.4	48	49	13.5	-1.41	-1.65	-1.22	13.8	-1.34	9.1	0.42	-1.81	3.5	-1.52	-1.86	-0.84	1	1	
60m	1	2	1	2	2	1	1	2	4	2	2	1	3	1	2	1	2	3	2	2	1	11	1	1	1	2	11	2	2	894	4	9.1	5	2	2	109	17	50	54	16	-0.77	-0.63	-0.32	14.3	-0.69	24.4	-0.52	-0.39	34.7	-0.85	-0.81	-0.24	1	1		
49m	1	2	1	4	2	1	5	2	4	2	2	1	3	1	2	1	2	3	2.5	2	1	11	1	1	1	3	11	2	2	782	3	8.2	6	2	2	93	13	48	51	14	-0.55	-1.89	-2.58	15	-0.23	40.9	-1.54	-1.78	3.8	-0.8	-2.03	-2.5	4	1		
47m	1	2	1	4	2	1	1	2	3	1	1	1	2	2	2	1	2	4	2.8	2	1	12	1	1	1	1	2	2	3	2	892	3	10.4	4	2	2	105	15.2	50	53	16	-1.23	-0.5	0.54	13.8	-1.33	9.1	-0.11	-0.08	46.7	-1.3	-0.73	0.59	4	1	
27m	2	2	1	4	2	1	1	2	4	2	2	2	2	1	2	1	2	2	2.7	2	1	3	3	1	1	2	2	3	1	904	2	10.8	3	2	2	79	10.4	47	49	14	0.4	-1.37	-2.93	16.7	0.78	78.3	-0.5	-0.99	1.6	-1.18	-1.64	-2.44	3	1		
23m	1	2	1	2	2	1	5	2	3	2	2	2	3	2	2	1	2	2	3	2	1	3	3	1	1	1	2	1	2	1	568	4	11.6	3	2	2	79	9.7	47	48	13	-0.84	-1.97	-2.65	15.3	-0.39	34.8	-0.92	-1.99	2.3	-0.18	-2.1	-2.42	1	1	
34m	1	2	1	3	3	5	5	2	3	1	1	1	3	2	2	1	2	2	2.2	2	1	11	1	1	1	2	11	1	2	458	6	11	4	2	14	86	10.2	46	57	13	-1.97	-2.76	-2.57	13.8	-1.61	5.3	-2.39	-2.42	0.8	-1.95	-2.67	-2.06	1	1		
34m	2	2	1	4	3	5	5	2	3	2	2	2	1	1	2	1	3	3	3.2	2	1	11	1	1	1	2	2	1	2	589	5	12	3	2	2	95	14	47	52	13	-0.05	-0.03	0.01	15.5	-0.11	45.5	-1.65	-1.82	3.5	-0.08	0.1	0.63	5	1		
31m	2	2	1	2	3	1	1	2	3	2	2	2	3	1	2	1	2	3	2.9	2	1	11	1	1	1	4	2	3	2	430	6	13.6	1	2	2	82	9.3	47	46	13.5	-1.59	-2.76	-2.69	13.8	-1.39	8.2	-0.76	-1.52	4.4	-1.82	-2.9	-2.38	45	1		
31m	2	2	1	3	3	5	5	2	5	2	1	1	3	1	2	1	2	2	2.8	2	1	3	3	1	1	2	2	3	2	890	2	14.7	1	2	2	75	8.4	47	47	12.5	-0.47	-3.14	-4.64	15.8	0.24	59.7	-0.76	-2.57	0.5	-1.31	-3.55	-4.35	5	1		
17m	2	2	1	4	2	1	1	1	3	1	1	1	1	2	2	1	2	4	3	2	1	3	3	1	1	2	2	3	2	874	9	13.7	1	2	2	75	9.2	47	47	14	-0.09	-0.75	-1.49	16.1	0.19	57.7	0.64	-0.38	35.2	-0.46	-1.39	-2.59	-1.71	3	1	
40m	1	2	1	2	3	1	5	1	3	2	2	2	3	2	1	1	2	2	3	2	1	11	1	1	1	2	2	1	2	734	5	14	2	2	2	90	11.8	49	49	14	-1.32	-1.98	-1.99	14.3	-1.02	15.3	-0.52	-1.59	5.6	-1.25	-2.08	-1.98	8	1		
48m	2	2	1	2	2	5	1	4	1	1	1	3	1	1	1	1	2	2.8	2	1	11	1	1	1	1	2	2	4	2	823	3	15.3	1	2	2	96	11.7	47	47	14	-2.19	-2.41	-1.56	12.7	-2.12	1.7	-1.64	-1.7	4.4	-2.1	-2.52	-1.43	1	1		
36m	2	2	1	3	2	5	5	1	3	2	2	2	3	2	1	1	2	2	2	2	2	11	1	1	1	3	2	4	2	903	2	13.7	1	14	2	92	11	46	51	15	-2.06	-1.95	-0.97	13	-2.06	2	-1.83	-0.54	29.4	-2.03	-2.13	-0.57	8	1		
59m	1	2	1	3	3	5	5	2	4	2	2	1	3	1	3	1	1	2	3	2	1	11	1	1	1	2	2	3	2	905	3	15	2	2	12	100	13	50	51	16	-2.31	-2.61	-1.93	12.7	-2.15	1.6	-0.49	-0.37								

30m	1	2	1	2	3	1	5	2	5	4	1	3	3	1	2	1	2	3	2	2	1	11	1	1	1	2	2	4	2	796	3	14.8	1	2	2	90	11.5	46	48	13	-1.47	-1.25	-0.55	14.2	-1.42	7.8	-2.11	-0.41	34.1	-1.51	-1.48	-0.17	4	1	
23m	2	2	1	2	3	1	5	2	3	4	3	1	2	1	2	1	1	3	2.5	2	1	3	3	1	1	2	2	4	2	754	1	12.8	1	2	11	73	9.3	44	45	11	0.09	-2.21	-4.43	17.1	1.02	84.6	-2.75	-2.99	0.1	0.2	-2.01	-3.94	1	1	
21m	2	2	1	3	2	3	1	2	3	4	2	4	3	1	2	1	1	3	2	2	1	3	3	1	1	2	2	3	2	790	1	10.7	3	2	2	81	7.7	44	45	12	-3.57	-2.96	-0.72	11.5	-3.68		-2	-2.53	0.6	-3.49	-3.07	-0.95	8	1	
28m	1	2	1	2	3	3	3	2	5	4	2	4	1	1	2	1	2	3	2	2	1	3	3	1	1	2	2	4	2	843	3	10.4	4	2	2	86	9.2	45.5	45.5	13.5	-3.18	-2.91	-1.48	12.6	-3.11		-2.38	-1.71	4.3	-2.86	-3.02	-0.89	1	1	
21m	2	2	1	3	3	1	1	2	5	1	1	1	1	1	2	1	2	3	2	2	1	3	3	1	1	3	2	4	2	675	2	12.6	2	2	2	79	8.25	44.5	43.5	12.5	-2.19	-2.37	-1.49	13.1	-2.08	1.9	-1.69	-2.03	2.1	-2.46	-2.62	-1.58	1	1	
29m	2	2	1	4	2	1	1	2	4	6	4	1	1	1	2	1	1	1		2	1	3	3	1	1	3	2	4	2	876	2	7.9	5	2	2	79	8	46	46	13.5	-2.64	-3.79	-3.25	12.8	-2.41	0.8	-1.35	-1.54	6.2	-2.49	-3.7	-2.84	1	1	
44m	2	2	1	1	1	1	1	2	5	5	1	4	1	1	3	1	2	3	2	1	12	1	1	1	3	2	1	2	985	2	7.8	6	2	14	88.5	10	44.5	45	13.5	-2.39	-3.4	-2.93	12.8	-2.11	1.7	-3.27	-2.04	2.1	-2.33	-3.31	-2.74	8	1		
42m	2	2	1	4	3	1	1	2	4	1	1	1	1	2	3	1	1	3	2	2	1	12	1	1	1	3	11	2	1	904	3	6.7	6	2	17	86	9	47	47	16	-3.04	-4.01	-3.3	12.2	-2.76	0.3	-1.42	0.01	50.4	-2.82	-3.82	-3.1	8	1	
22m	2	2	1	3	3	2	5	2	4	2	2	2	1	1	3	1	1	1	2	11	1	3	3	1	1	2	11	4	2	965	9	6.3	6	14	2	76	7	46	46	12	-3.51	-3.93	-2.71	11.9	-3.27		-0.71	-2.62	0.4	-3.27	-3.77	-2.78	1	1	
13m	2	2	1	4	3	1	1	2	3	2	2	2	3	1	3	1	3	1	2.5	2	1	3	3	2	1	1	11	1	2	934	9	7.3	5	2	2	75	8	46	46	12	-1.7	-1.13	0.18	14	-1.77	3.8	0.6	-2.11	1.7	-1.87	-1.72	-0.28	1	1	
16m	2	2	1	3	2	5	5	2	3	1	1	1	2	2	2	1	2	4	2.5	2	1	3	3	1	1	2	11	3	2	912	9	7.8	5	2	2	73	8	46	49	13.5	-1.21	-1.71	-1.77	14.7	-0.9	18.5	0.09	-0.77	22	-1.37	-2.19	-2.05	1	1	
14m	2	2	1	3	2	1	1	2	3	2	2	2	1	1	2	1	3	3	3	2	1	3	3	1	1	2	11	4	2	934	9	7.9	5	2	2	77	6	46	47	13	-5.28	-3.74	0.48	9.9	-5.5		0.41	-1.16	12.4	-4.63	-3.71	0	1	1	
13m	1	2	1	2	2	2	5	2	3	1	1	1	1	1	2	1	2	3	2	2	1	3	3	1	1	3	11	4	2	956	9	8.3	5	2	12	75.5	8	46.5	47	13	-2.46	-1.91	-0.3	13.8	-2.49	0.6	0.12	-1.57	5.9	-2.39	-2.37	-0.74	1	1	
49m	2	2	1	3	3	1	1	2	4	2	2	4	2	1	3	1	3	1	2.5	2	1	11	1	1	1	2	2	3	1	364	6	9.4	5	2	2	99	15	49	50	16	-0.07	-0.76	-1.16	15.3	-0.01	49.6	-0.86	-0.13	44.9	-0.08	-0.66	-0.82	1	1	
13m	1	2	1	3	3	1	1	2	2	2	2	2	2	2	1	3	1	3	1	2.4	2	1	3	3	1	1	2	2	4	1	923	9	8.9	5	2	2	76.5	10	47	48	13	0.08	0.11	0.11	16.8	0.08	53.2	0.51	-1.57	5.9	-0.19	-0.46	-0.38	1	1
13m	2	2	1	1	1	1	1	2	4	2	1	3	2	1	3	1	3	1	2.5	2	1	3	3	1	1	2	11	4	2	567	4	9.8	4	2	2	77	9	47	48	13	-1.32	-0.85	0.32	14.9	-1.44	7.5	0.51	-1.57	5.9	-1.17	-0.8	0.41	1	1	
49m	2	2	1	1	2	1	1	2	4	2	2	2	2	1	3	1	3	1	3	2	1	3	3	1	1	2	11	4	2	798	4	9	5	2	14	95	16	49	49	16	1.57	-0.25	-2.1	17.7	1.72	95.7	-0.86	-0.13	44.9	1.24	-0.08	-1.81	1	1	
48m	2	2	1	3	3	1	1	2	2	2	2	2	2	2	3	1	2	3	1	2	11	1	1	1	1	2	2	4	1	890	3	7.9	6	2	2	94	14.8	49	48.5	17	0.84	-0.78	-2.22	16.7	1.06	85.5	-0.83	0.62	73.3	0.62	-0.7	-1.92	1	1	
23m	1	2	1	2	4	1	5	2	3	2	2	2	2	1	2	1	3	1	3	2	1	3	3	1	1	2	2	3	1	818	2	9.4	4	2	2	76	8	48	46	12	-2.58	-3.61	-3.63	13.6	-1.97	2.4	-0.18	-3.03		-2.52	-3.39	-3.31	1	1	
25m	1	2	1	4	5	1	1	2	3	1	1	1	1	1	2	1	2	3	3	2	1	3	3	1	1	3	11	4	1	846	3	9.2	5	11	12	87	10.6	49	47.5	14	-1.74	-1.46	-0.57	14	-1.72	4.3	0.37	-1.12	13.1	-1.77	-1.68	0.11	1	1	
25m	1	2	1	3	2	1	1	2	3	2	2	2	3	1	2	1	3	3	3	2	1	3	3	1	1	2	11	4	2	678	4	8.4	5	2	11	90	10	44	45	13.5	-3.28	-1.97	0.38	12.3	-3.48		-3.28	-1.59	5.5	-2.8	-2.19	1.03	1	1	
30m	1	2	1	4	4	5	2	3	3	1	1	1	1	2	1	1	3	2	2.8	2	2	3	3	1	1	2	2	1	1	915	2	12.5	3	11	2	88	11.2	48	50	13.5	-1.29	-1.47	-1.16	14.5	-1.14	12.6	-0.67	-1.77	3.8	-1.41	-1.69	-0.74	1	1	
48m	1	2	1	2	2	1	1	2	3	2	1	1	2	1	2	1	2	3	3.5	2	1	11	1	1	1	2	2	2	1	1015	2	13.6	2	2	2	98	11.5	46	46.5	13.5	-3.24	-2.81	-1.27	12	-3.13		-2.88	-2.22	1.3	-2.8	-2.75	-1.2	3	1	
35m	2	2	1	2	3	1	1	1	3	3	2	2	2	1	3	1	3	1	2	2	2	11	1	1	1	2	2	4	2	1027	1	11.6	3	2	2	92	12	48	49	13.5	-1.36	-1.48	-1.1	14.2	-1.22	11.1	-1.03	-1.96	2.5	-1.18	-1.35	-0.37	1	1	
48m	1	2	1	3	3	1	1	1	3	2	1	1	2	2	3	1	3	1	3	2	1	11	1	1	1	2	2	3	2	478	6	10.3	4	2	2	93	15	49	49	17	1.21	-0.68	-2.46	17.3	1.46	92.8	-0.83	0.62	73.3	0.7	-0.91	-2.37	1	1	
48m	2	2	1	3	4	1	5	2	3	2	2	1	2	2	1	3	1	2.5	11	1	11	1	1	1	2	2	4	1	596	5	9.6	5	2	2	90	12	46	48	17	-0.59	-2.21	-2.96	14.8	-0.33	37.2	-0.23	0.51	69.5	-0.82	-2.35	-2.91	1	1		
36m	2	2	1	4	3	1	1	2	3	2	2	2	2	2	3	1	3	1	2.5	2	1	11	1	1	1	2	2	4	2	786	3	12.6	2	2	2	90	15	47.5	47	18	1.85	0.51	1.49	18.5	2.06	98.6	11.7	1.61	94.6	1.44	0.43	-1.1	1	1	
13m	2	2	1	4	1	2	5	2	4	3	3	3	3	1	1	1	1	3	2	1	3	3	1	1	2	2	1	2	897	9	13.7	1	2	2	75	6.7	45.5	45	11.5	-3.77	-2.84	-0.24	11.7	-3.83		0.06	-2.69	0.4	-3.4	-2.93	-0.28	1	1		
34m	1	2	1	1	1	2	5	2	4	2	2	3	3	1	1	1	1	1	2.2	2	1	11	1	1	1	2	2	1	2	654	5	12.5	3	2	11	85	9.4	45	45.5	12	-2.76	-3.33	-2.7	13	-2.42	0.8	-3.05	-3.42		-2.5	-3.19	-2.32	2	1	
54m	2	2	1	2	3	2	5	1	3	3	1	3	3	1	1	1	1	2.5	2	1	11	1	1	1	1	2	14	2	690	5	14	3	2	13	102	13.6	44.5	48.5	13.5	-1.7	-1.75	-1.03	13.1	-1.69	4.6	-2.6	-2.3	1.1	-1.64	-1.79	-0.76	35	1		
30m	2	2	1	2	3	2	5	2	3	3	1	1	1	1	2	1	1	1	2.8	11	1	11	1	1	2	2	4	2	796	3	13.7	1	2	13	87	10.7	45	48	14.8	13.5	-1.22	-1.52	-1.24	14.1	-1.12	13.1	-1.45	-1.6	5.5	-1.43	-1.76	-0.75	3	1	
12m	1	2	1	1	1	2	5	1	3	3	3	3	3	1	1	1	2	2	3	2	1	3	3	1	1	3	2	4	2	984	9	14.7	1	2	2	69	7.2	44	45	12.5	-1.86	-2.85	-2.95	14.8	-1.52	6.4	-1.8	-2.07	1.9	-1.44	-2.97	-2.74	1	1	
27m	2	2	1	1	1	2	1	3	3	3	2	1	1	1	1	1																																							

39m	1	3	1	3	3	3	1	2	5	3	3	3	3	1	1	2	1	3	3.5	2	1	11	1	1	1	2	2	4	2	786	4	12.2	3	2	2	100	14.9	49.5	51.5	15.5	-0.37	-0.02	0.43	14.9	-0.5	31	-0.15	-0.29	38.6	-0.62	-0.18	0.71	1	1
48m	2	3	1	1	3	1	1	2	4	6	2	5	1	1	1	1	3	3	2.5	2	1	11	1	1	1	2	2	4	2	984	2	11.1	4	2	2	96.5	13.7	48.5	50.5	14	-0.65	-1.4	-1.63	14.7	-0.51	30.7	-1.17	-1.76	4	-0.61	-1.35	-1.3	1	1
39m	2	3	1	3	3	1	1	2	3	2	2	1	2	1	1	1	4	2.3	2	1	11	1	1	1	2	2	1	2	895	3	7.8	6	2	12	88	10.7	46.5	46	13.5	-1.46	-2.45	-2.41	13.8	-1.24	10.8	-1.62	-1.9	2.9	-1.61	-2.56	-2.13	9	1	
58m	1	3	1	5	3	1	1	2	4	2	2	1	3	2	1	1	3	2.5	2	1	11	1	1	1	3	13	1	2	834	4	7.3	6	2	2	98.5	14.5	48	48.5	14.5	-0.37	-1.69	-2.34	14.9	-0.2	42.1	-1.8	-1.53	6.3	-0.64	-1.86	-2.3	1	1	
59m	2	3	1	3	2	1	1	2	4	3	2	2	1	1	1	1	3	2.5	2	1	11	1	1	1	3	2	1	2	932	3	8.2	6	12	2	100.5	13	47.5	51.5	13.5	-1.9	-2.39	-1.83	12.9	-1.84	3.3	-1.69	-2.41	0.8	-1.83	-2.38	-1.7	3	1	
48m	1	3	1	3	3	3	5	1	3	2	1	2	2	1	1	1	3	3	2	1	11	1	1	1	3	2	1	2	965	3	9.2	5	2	2	100	14.8	48.5	51	15	-0.45	-0.78	-0.79	14.8	-0.43	33.3	-1.17	-0.89	28.5	-0.69	-1.02	-0.73	48	1	
18m	1	3	1	4	2	1	1	1	5	4	2	4	1	1	3	2	3	3	3	2	1	3	3	1	1	3	2	1	2	987	9	9	5	12	2	75	9	46	47	13.5	-0.66	-1.86	-2.9	16	-0.06	47.5	-1.12	-1.26	10.4	-1.02	-2.12	-2.5	5	1
34m	1	3	1	1	3	1	1	2	4	3	2	6	1	1	1	2	3	4	3	2	1	3	3	1	1	3	2	4	2	989	2	10	4	2	12	82.5	11.2	45.5	47	14	-0.12	-1.87	-3.39	16.5	0.62	73.3	-2.69	-1.43	7.6	-0.34	-2.02	-2.99	3	1
45m	2	3	1	5	5	1	1	2	2	1	1	1	1	2	3	1	3	4	3	2	1	11	1	1	1	3	11	1	2	987	2	8.8	5	2	2	94.5	12.7	48	46.5	14.5	-0.91	-1.6	-1.66	14.2	-0.8	21	-0.86	-1.24	10.8	-1.04	-1.73	-1.37	1	1
44m	2	3	1	3	2	4	5	2	3	2	1	1	2	1	1	1	2	4	3.5	2	1	11	1	1	1	3	2	3	2	912	3	7.6	6	2	2	100.5	13.4	47	49	14	-1.55	-1.1	-0.09	13.3	-1.64	5.1	-1.52	-1.62	5.3	-1.53	-1.23	0.3	1	1
42m	1	3	1	3	2	4	5	2	3	2	1	2	2	1	1	1	2	4	2.5	2	1	11	1	1	1	3	2	3	2	906	3	8.2	6	2	2	99.5	14.3	46.5	51.5	14	-0.77	-0.64	-0.2	14.4	-0.82	20.6	-2.37	-1.65	5	-0.97	-0.8	0.07	1	1
43m	1	3	1	3	2	3	1	1	5	2	2	1	3	1	1	2	1	2	2	2	1	11	1	1	1	2	11	3	2	900	3	8.1	6	2	13	102	14.4	49	51.5	15	-1.24	-0.68	0.24	13.8	-1.34	9	-0.69	-0.81	21	-1.33	-0.83	0.51	1	3
42m	1	3	1	2	3	5	5	1	4	2	2	1	1	1	1	2	1	2	2.5	2	1	12	1	1	1	2	11	3	2	956	3	8	6	2	2	94	11.8	48	49	14	-2.02	-2.21	-1.59	13.4	-1.82	3.4	-1.33	-1.65	4.9	-1.94	-2.21	-1.29	1	1
49m	2	3	1	3	3	1	1	2	5	2	2	1	1	1	1	1	3	3	2	1	11	1	1	1	2	2	1	2	786	4	6.9	6	2	12	104.5	15.6	47.5	51.5	15.5	-0.69	-0.33	0.22	14.3	-0.72	23.5	-1.35	-0.58	28.1	-0.68	-0.31	0.52	45	1	
40m	1	3	1	5	4	1	1	2	2	2	2	1	2	3	1	3	4	3	2	1	11	1	1	1	3	2	1	2	876	3	10.3	5	2	2	94.5	13.1	48.5	50.5	14.5	-0.78	-1.13	-1.09	14.7	-0.68	24.8	-0.87	-1.14	12.6	-0.99	-1.32	-0.85	5	1	
12m	1	3	1	3	3	1	1	2	3	2	2	2	2	1	1	2	4	2	2	1	3	3	1	1	2	13	4	1	786	2	10.8	3	2	2	70.5	7.5	43.5	43	11.5	-1.96	-2.14	-1.52	14.6	-1.75	4	-1.81	-2.07	1.9	-1.56	-2.67	-2.19	1	1	
59m	2	3	1	3	3	4	1	2	2	2	2	1	2	1	1	1	2	2	2	1	11	1	1	1	3	2	1	2	745	4	11	4	2	2	108	18.3	49.5	54.5	16.5	0.27	0.03	-0.29	15.7	0.27	60.7	-0.63	-0.23	41.1	0.36	0.27	0	4	1	
23m	1	3	1	5	3	3	5	2	4	5	4	2	1	1	1	2	3	4	3	2	1	3	3	1	1	3	2	1	2	734	2	12.4	2	13	2	88.5	11.3	46	48.5	15	-1.13	-0.63	0.23	14.4	-1.15	12.5	-1.65	-0.13	44.8	-1.41	-0.88	0.44	1	1
12m	2	3	1	4	3	1	1	2	3	5	4	5	2	1	1	2	2	3	2	1	3	3	1	1	3	11	1	2	714	2	15.6	9	13	2	73.5	8.8	43	43.5	14	-0.08	-0.3	-0.57	16.3	0.02	51	-1.56	-0.2	41.9	-0.54	-0.77	-0.4	1	1	
17m	1	3	1	2	2	1	1	2	3	4	2	2	2	1	1	1	2	4	3	2	1	3	1	1	1	3	11	4	2	858	1	13.5	2	14	1	83.5	10.5	46.5	47.5	15.5	-0.38	0.29	1.15	15.1	-0.54	29.6	0.25	0.85	80.3	-1.25	-0.72	0.6	1	1
45m	1	3	1	4	3	3	1	2	4	2	2	2	1	1	1	2	3	4	3	2	1	11	1	1	1	3	12	1	1	845	4	12.6	3	12	1	93.5	12.9	48.5	51	14	-0.76	-1.73	-2.1	14.8	-0.5	30.9	-1.1	-1.72	4.3	-0.97	-1.81	-1.85	1	1
52m	2	3	1	3	3	4	1	2	5	4	2	2	1	1	1	1	3	2	2	1	11	1	1	1	2	11	1	2	892	3	12.3	4	2	2	96	12.8	48.5	50.5	14.5	-1.13	-2.04	-2.08	13.9	-1.02	15.4	-0.75	-1.43	7.7	-1.23	-2.12	-1.94	1	1	
16m	2	3	1	4	3	3	1	5	2	2	1	3	1	2	1	2	3	2.5	2	1	3	3	1	1	2	13	1	2	1192	9	11.5	2	2	2	69.5	6.5	43	41	11	-2.47	-3.63	-3.55	13.5	-1.94	2.6	-2.21	-3.37	-2.21	-3.5	-3.21	1	1		
46m	1	3	1	2	3	3	1	1	4	2	1	2	1	1	1	1	2	3	2	1	11	1	1	1	2	13	4	2	1092	2	10.4	4	2	17	104.5	16.2	49	53.5	15.5	-0.35	0.06	0.5	14.8	-0.43	33.5	-0.77	-0.46	32.4	-0.54	-0.11	0.63	4	1	
31m	2	3	1	3	3	3	1	2	4	1	1	1	2	1	1	1	3	2	2	1	3	3	1	1	3	2	4	2	782	3	10.2	4	2	13	84	11.5	48	48	15	0.35	-1.04	-2.25	16.3	0.6	72.6	-0.1	-0.34	36.5	-0.12	-1.29	-1.81	3	1	
18m	2	3	1	2	2	1	1	1	4	1	1	1	1	1	1	1	3	2	2	1	3	3	1	1	2	2	1	2	835	9	9.3	4	2	2	80	11.2	45.5	46.5	15.5	1.15	0.58	-0.56	17.5	1.25	89.5	-0.65	0.79	78.5	0.68	0.29	-0.38	1	1	
54m	1	3	1	3	2	3	5	2	5	3	3	1	1	1	1	1	3	2	2	1	11	1	1	1	3	2	1	2	846	4	8.4	6	18	19	102	15.5	49.5	52	15.5	-0.33	-0.93	-1.16	14.9	-0.27	39.4	-0.7	-0.64	26.1	-0.56	-1.1	-1.06	12	1	
58m	1	3	1	3	3	1	1	1	5	3	1	3	2	2	1	1	1	3	2.5	2	1	11	1	1	1	2	2	1	2	893	4	8.5	6	14	2	105.5	16.1	49	54	15.5	-0.65	-0.9	-0.84	14.5	-0.58	28	-1.14	-0.73	23.4	-0.79	-1.1	-0.77	45	1
23m	2	3	1	1	2	1	1	2	4	2	1	1	2	1	3	1	3	4	3	2	1	3	3	1	1	3	2	4	2	982	9	8	5	2	2	88	10.5	45	45.5	12.5	-1.51	-0.7	0.54	13.6	-1.56	6	-1.55	-2.17	1.5	-1.77	-1.04	0.67	1	1
22m	2	3	1	4	3	4	5	2	4	2	1	1	1	1	1	1	3	3.5	2	1	3	3	1	1	2	11	4	2	891	9	8.2	5	15	13	78	10.6	48	49	16	0.97	-0.38	-2.18	17.4	1.34	91	0.77	0.99	84	0.45	-0.82	-2.16	3	1	
40m	1	3	1	2	1	1	1	1	5	3	1	3	1	2	1	1	3	3	2	1	12	1	1	1	3	2	4	2	890	3	9.4	5	2	13	94	14.6	49	53.5	15	0.67	-0.26	-1.24	16.5	0.81	79	-0.54	-0.72	23.6	0.26	0.45	-0.98	48	1	
60m	2	3	1	2	1	1	1	1	4	1	1	4	3	1	1	1	3	1.5	2	1	11	1	1	1	2	2	4	2	890	3	9.2	5	2	2	102	15.5	49	53.5	15	-0.22	-1.17	-1.63	14.9	-0.26	39.8	-0.67	-1.28	10	-0.29	-1.14	-1.48	5	1	
37m	1	3	1	3</																																																		

40m	2	3	1	3	3	3	1	2	5	4	3	2	2	1	1	1	1	1	2	2.5	2	1	11	1	1	1	1	2	2	1	2	904	3	7.8	6	2	2	91	10	49	47	14	-2.87	-2.97	-1.7	12.2	-2.81	0.2	0.12	-1.47	7	-2.73	-3.08	-1.51	1	1
27m	1	3	1	3	3	3	1	2	5	4	3	2	2	1	1	1	1	3	2.5	2	1	3	3	1	1	3	2	3	1	877	3	6.8	6	2	2	84	9.5	49	49	14	-2.33	-2.54	-1.74	13.5	-2.23	1.3	0.28	-1.17	12.1	-2.23	-2.74	-1.26	1	1		
57m	2	3	1	2	3	1	1	2	5	1	1	1	3	2	1	1	2	1	2.6	2	1	11	1	1	1	3	2	3	1	845	3	6.5	6	2	2	100	14	48	49	13	-0.94	-1.67	-1.69	14	-0.91	18	-1.26	-2.78	0.3	-1.01	-1.75	-1.6	7	1		
34m	2	3	1	3	1	1	1	4	2	2	2	3	1	1	1	1	4		2	1	11	1	1	1	2	2	1	1	946	1	8.7	5	2	12	87	11	48	49	14	-0.89	-1.74	-1.95	14.5	-0.7	24	-0.3	-1.3	9.6	-1.16	-1.95	-1.55	1	1			
26m	2	3	1	1	2	2	5	2	2	2	1	1	1	2	2	1	1	1		2	1	3	3	1	1	3	11	4	1	823	3	8.6	5	2	17	77	8	46	51	16	-2.16	-3.35	-3.14	13.5	-1.82	3.5	-1.04	-0.03	48.9	-2.1	-3.45	-2.84	8	1		
48m	2	3	1	4	2	6	1	2	2	1	1	1	2	1	1	1	3	1	2.5	2	1	11	1	1	1	2	2	3	2	820	4	6.8	6	2	2	83	9.9	49	49	16	-3.53	-3.74	-2.37	11.4	-3.35		-0.27	-0.21	41.8	-1.4	-3.58	-4.63	1	1		
29m	1	3	1	3	3	1	1	2	3	1	1	1	2	1	1	2	3	4	2.5	2	1	3	3	1	1	3	12	4	2	678	4	6	6	2	2	84	11.8	48	49	15	0.13	-0.91	-1.85	16.3	0.4	65.4	-0.6	-0.37	35.7	-0.09	-1.16	-1.68	1	1		
44m	1	3	1	2	2	1	1	2	2	2	1	3	2	1	1	1	3	4	3	2	1	11	1	1	1	2	2	1	2	749	4	7.4	6	2	2	94	16	49	46	16	1.77	0.16	-1.74	18.1	1.95	97.4	-0.69	-0.01	49.6	1.21	-0.03	-1.58	1	1		
50m	1	3	1	1	2	2	5	2	5	4	2	2	2	1	1	1	3	1	2.5	2	1	11	1	1	1	2	2	3	2	739	5	8.1	6	11	12	95	16	49	52	15	1.57	-0.4	-2.32	17.7	1.72	95.7	-0.92	-0.96	16.9	1.04	-0.55	-2.16	1	1		
12m	2	3	1	4	2	1	1	2	5	2	3	2	3	1	3	1	2	2	2	2	1	11	1	1	1	2	2	3	2	689	2	8.2	5	1	12	78	8.5	47	49	16	-2.28	-1.16	1.23	13.7	-2.63	0.4	0.72	1.16	87.6	-1.97	-1.05	1.18	1	1		
18m	2	3	1	1	1	1	1	2	3	1	1	1	3	2	1	1	1	3	2.5	2	1	11	1	1	1	2	2	4	2	895	9	9	4	2	2	78	11	49	49	15	1.22	0.58	-0.7	17.8	1.37	91.4	1.99	0.43	66.7	0.93	0.12	-1.03	9	1		
40m	1	3	1	3	3	3	1	1	4	3	2	1	2	1	1	1	3	3	2	1	11	1	1	1	2	2	1	2	984	2	10	5	15	2	97	13.9	50	51	14.5	-0.57	-0.63	-0.42	14.8	-0.59	27.6	0.18	-1.14	12.7	-0.82	-0.86	-0.22	1	1			
48m	2	3	1	2	2	1	1	2	4	4	3	2	3	1	1	1	3	3	2	1	11	1	1	1	2	2	14	2	893	3	11	4	2	2	91.5	12.2	46	48	14.5	-0.55	-1.95	-2.61	14.8	-0.33	37.1	-2.35	-1.3	9.7	-0.92	-2.23	-2.54	1	1			
23m	1	3	1	3	3	1	5	2	2	2	1	1	1	2	1	2	3	3	2	1	3	3	1	1	2	2	4	2	758	2	12.2	2	12	2	88	12.2	47	47	16	-0.21	0.04	0.29	15.5	-0.19	42.5	-0.92	0.7	75.8	-0.37	-0.2	0.29	1	1			
48m	2	3	1	3	3	1	5	2	2	2	2	3	1	2	2	3	3	2.5	12	1	11	1	1	1	1	2	2	4	2	857	3	11	4	2	2	91	12.4	48	45	15	-0.44	-1.95	-2.72	15	-0.21	41.8	-0.94	-0.91	18.2	-0.66	-2.11	-2.66	1	1		
28m	2	3	1	3	3	1	1	2	2	2	2	3	1	2	1	3	3	2.5	2	1	3	3	1	1	2	2	1	2	985	1	12	3	2	2	85	9.6	45	46	13	-1.87	-1.98	-1.2	13.4	-1.84	3.3	-1.93	-1.92	2.7	-2.09	-2.38	-0.9	5	1			
50m	2	3	1	3	2	1	1	2	5	3	2	2	3	1	1	2	1	3	2.5	2	1	11	1	1	1	4	2	1	1	689	5	14.2	3	12	2	99	13	47.5	49	13.5	-1.58	-1.74	-1.12	13.3	-1.56	5.9	1.37	-2.18	1.5	-1.58	-1.89	-0.96	1	1		
21m	1	3	1	1	1	1	5	1	3	1	1	1	1	3	1	3	1	2	2	2	3	3	1	1	1	1	1	1	1	2	578	4	8.5	5	2	2	79	11.4	48	48	15	1.4	0.39	-1.31	17.9	1.62	94.8	0.9	-0.28	60.8	0.73	-0.54	-1.98	2	1	
33m	2	3	1	2	1	1	1	2	2	4	4	3	2	1	3	1	3	4	2.5	2	1	11	1	1	1	3	11	1	2	867	2	8.2	5	2	2	82	10	49	49	13	-0.74	-2.34	-2.98	14.9	-0.46	32.3	0.54	-2.15	1.6	-1.15	-2.56	-2.74	1	1		
55m	1	3	1	4	2	1	1	2	4	3	2	1	2	1	3	1	3	4	3	2	1	11	1	1	1	4	2	3	2	476	6	9.4	5	2	2	96	12	49	49	14	-2.24	-2.94	-2.53	13	-1.93	2.7	-1.04	-1.89	2.9	-2.11	-2.9	-2.52	9	1		
13m	1	3	1	1	1	1	1	2	2	2	2	3	2	3	2	3	4	2.5	2	1	11	1	1	1	1	1	1	1	2	2	967	9	9.1	4	2	2	78	10	48	48	13.5	-0.25	0.11	0.73	16.1	-0.41	34.2	1.28	-1.08	14	-0.58	-0.46	0.17	8	1	
36m	2	3	1	2	1	2	1	2	3	1	1	1	1	1	1	2	4	2.5	2	1	11	1	1	1	3	12	4	2	746	3	9.4	4	2	2	94	14.3	48	49	13.5	0.52	0.14	-0.45	16.2	0.59	72.1	-0.42	-1.81	3.5	0.29	0.08	-0.03	1	1			
16m	2	3	1	4	2	1	1	1	2	2	1	1	1	2	1	1	2	1	2.5	2	1	3	3	1	1	2	11	3	2	568	4	10.3	3	2	2	79	10.6	48.5	46	13	0.5	-0.65	-1.92	16.5	0.77	78	0.95	-1.68	4.6	0.22	0.09	-0.05	3	1		
29m	2	3	1	2	2	1	1	1	3	2	2	1	3	2	1	1	2	4	2.5	2	1	3	3	1	1	3	11	4	2	598	5	10.2	4	2	2	85	10.5	47	45	13	-0.93	-1.43	-1.41	14.5	-0.82	20.7	0.48	-1.98	2.4	-1.25	-1.8	-1.11	1	1		
44m	1	3	1	1	1	1	1	2	3	2	1	2	1	2	2	3	3	2	1	11	1	1	1	1	2	1	1	2	687	5	11.2	4	11	2	92	12	47	49	15	-1.58	-2.17	-1.99	13.9	-1.31	9.6	-2.07	-0.81	21	-1.44	-2.23	-2.07	1	1			
41m	2	3	1	1	1	2	1	1	2	3	1	1	1	2	1	2	2	3	2.5	2	1	11	1	1	1	3	11	3	2	905	3	14.2	2	2	2	89	12.4	47	52	14.5	-0.25	-1.65	-2.61	15.7	0.15	56	-1.95	-1.16	12.2	-0.27	-1.62	-2.18	1	1		
12m	1	3	1	1	1	2	1	1	2	3	1	3	1	2	1	1	3	1	3	2	1	3	3	1	1	2	11	1	2	904	1	15.9	9	2	2	73	10	43	46	14	0.95	0.33	-0.86	18.4	1.12	86.9	-0.05	-0.58	28	0.76	-0.22	-1.26	1	1		
48m	2	3	1	4	2	4	5	1	3	4	2	2	2	3	2	3	4		2	1	11	1	1	1	3	11	1	2	1023	2	8.2	6	2	2	95	13	49	49	15	-0.99	-1.82	-1.99	14.4	-0.77	22.2	-0.83	-0.89	18.5	-0.89	-1.76	-1.67	7	1			
46m	1	3	1	5	3	1	1	2	3	1	1	2	1	1	3	1	3	4	3	2	1	11	1	1	1	3	2	3	2	1102	2	8	6	2	2	97	15	48	49	19	0.37	-0.52	-1.26	15.9	0.45	67.3	-1.45	-0.85	19.7	0.02	-0.75	-1.15	5	3		
44m	2	3	1	4	3	1	5	1	2	1	1	2	3	2	2	1	3	4	3	2	1	11	1	1	1	2	4	2	689	5	9.3	5	2	2	83	10	48	48	15	-1.92	0.31	-1.76	18.5	2.02	97.8	-0.77	-0.79	21.6	-1.34	-3.31	-4.14	8	1			
36m	2	3	1	3	3	1	1	2	3	3	1	3	2	1	3	2	3	1	3	2	1	11	1	1	1	3	2	1	1	894	2	9.8	4	2	2	93	12	49	48.5	16	-1.25	-1.24	-0.71	13.9	-1.24	10.8	0.29	0.23	59	-1.36	-1.45	-0.3	6	1		
41m	1	3	1	4	1	2	1	2	3	1	1	1	1	1	1	1	2	1	2.5	2	1	11	1	1	1	3	2	3	2	980	3	10.2	5	2	2	92	12	47.5	49	14	-1.36	-1.92	-1.85	14.2	-1.09	13.7	-1.61	-1.61	5.4	-1.44	-2.03	-1.63	1	1		
27m	1	3	1	3	3	1	1	2	5	1	1	1	3	1	1	1																																								

59m	2	3	1	3	2	2	5	1	3	2	2	1	3	1	1	1	1	1	2	11	1	11	1	1	1	2	2	3	2	956	3	8.1	6	11	2	104	14	46	48	14	-1.81	-1.8	-1.04	12.9	-1.78	3.8	-2.73	-2	2.3	-1.69	-1.86	-0.91	1	1
50m	2	3	1	3	3	1	1	1	4	1	1	1	3	2	2	1	1	3	2.2	2	1	11	1	1	1	2	2	1	2	954	3	8.8	6	2	11	98	11.9	47	50	14	-2.41	-2.43	-1.35	12.4	-2.37	0.9	-1.72	-1.76	3.9	-2.25	-2.52	-1.21	8	1
52m	2	3	1	3	3	1	1	1	3	1	1	1	3	2	1	2	1	2		2	1	12	1	1	1	4	2	4	2	923	3	9.1	5	2	2	92	11.8	49	49	13	-1.23	-2.64	-2.93	13.9	-0.98	16.4	-0.39	-2.67	0.4	-1.35	-2.68	-2.9	4	1
45m	1	3	1	2	1	1	5	2	1	2	5	1	3	2	1	2	1	2		2	1	11	1	1	1	2	11	4	2	914	3	9.4	5	2	13	99	13.7	49	51	14	-1.19	-1.17	-0.65	14	-1.19	11.6	-0.73	-1.7	4.5	-1.32	-1.37	-0.33	3	1
57m	2	3	1	3	3	5	5	2	4	2	2	1	3	1	1	1	1	2	2	2	1	11	1	1	3	2	1	2	910	3	9.2	5	2	13	95	12	47	45	14	-1.68	-2.85	-2.77	13.3	-1.48	6.9	-0.96	-1.95	2.6	-1.7	-2.81	-2.75	4	1	
32m	1	3	1	2	2	1	1	1	5	3	2	2	3	1	2	1	1	3	3	2	1	11	1	1	1	3	11	3	2	854	3	9	5	2	2	86	10.8	48	49	14	-1.37	-1.99	-1.96	14.4	-1.11	13.4	-0.8	-1.37	8.5	-1.4	-2.13	-1.69	5	1
42m	1	3	1	3	2	5	5	1	3	2	2	1	3	2	1	1	1	4	2.5	11	1	11	1	1	1	3	11	4	2	734	5	9	5	18	2	94	13	51	50	16	-0.77	-1.35	-1.48	14.7	-0.6	27.3	0.78	0.04	51.6	-0.98	-1.53	-1.29	5	1
48m	1	3	1	2	2	2	5	2	5	1	1	1	3	1	1	1	1	3	3	2	1	11	1	1	1	2	2	3	2	642	5	10.2	5	2	12	96	13.5	52	52	15	-0.72	-1.52	-1.75	14.6	-0.56	28.8	-1.22	-0.89	16.5	-0.94	-1.7	-1.67	1	1
52m	1	3	1	3	3	5	5	2	4	2	2	1	3	1	1	1	2	3	2.2	2	1	11	1	1	1	3	2	3	2	692	5	10.2	5	2	2	100	14	47	53	15	-1.14	-1.59	-1.4	14	-1.05	14.7	-2.34	-1	15.9	-1.27	-1.71	-1.26	4	1
50m	1	3	1	3	3	1	5	2	5	3	2	2	3	1	1	1	1	2.5	2	1	11	1	1	1	3	2	3	2	684	5	14.1	4	2	2	95	14	51	54	15	-0.05	-1.45	-2.32	15.5	0.17	56.9	0.44	-0.96	16.9	-0.37	-1.58	-2.16	4	1	
59m	1	3	1	3	3	5	5	1	3	2	2	1	3	2	3	1	1	1	3	2	1	11	1	1	1	3	2	1	2	792	4	12.7	4	2	17	102	15.5	51	56	15	-0.33	-1.2	-1.61	14.9	-0.23	40.8	0.2	-1.12	13.1	-0.56	-1.45	-1.64	5	1
32m	1	3	1	4	3	1	1	2	5	2	2	2	3	1	1	1	1	2.5	11	1	11	1	1	1	2	2	3	2	765	4	10.4	4	2	2	86	10.5	48	48	14	-1.34	-1.98	-1.99	14.5	-1.08	14.1	-0.8	-1.37	8.6	-1.67	-2.34	-1.69	9	1	
56m	2	3	1	2	2	2	5	2	5	3	2	2	3	1	1	1	1	2.5	2	1	11	1	1	1	2	2	3	2	704	5	11	4	2	12	100	13.8	48	51	15	-1.02	-1.66	-1.58	13.9	-1	16	-1.23	-1.15	12.5	-1.16	-1.8	-1.48	5	1	
53m	1	3	1	2	2	1	5	1	5	2	2	1	3	1	1	1	1	2	2.3	2	1	11	1	1	1	4	2	3	2	794	4	12.7	4	2	12	104	16	52	54	15.5	-0.39	-0.62	-0.6	14.8	-0.36	35.8	1.02	-0.62	26.7	-0.58	-0.78	-0.48	1	1
56m	2	3	1	3	3	2	5	1	4	2	2	1	3	2	1	1	1	1	3.2	2	1	11	1	1	1	3	2	4	2	876	3	12.6	3	2	11	106	15.3	47	47	14.5	-1.37	-1.1	-0.4	13.6	-1.35	8.8	-2.41	-1.47	7	-1.15	-0.99	-0.08	7	1
37m	1	3	1	3	2	1	5	2	4	1	1	1	1	1	3	1	1	2.5	2	1	12	1	1	1	3	11	3	2	940	3	11	4	2	2	84	11	48	48	14	-0.47	-2.38	-3.52	15.6	0.04	51.5	-1.12	-1.54	6.2	-0.83	-2.35	-3.06	1	1	
50m	2	3	1	4	4	1	1	2	5	2	2	1	3	1	1	1	1	3	2	1	11	1	1	1	2	2	1	2	906	3	7.8	6	2	2	104	13.8	49	52	14	-1.77	-1.56	-0.7	13.3	-1.76	4	-0.92	-1.81	3.5	-1.82	-1.43	0.25	4	1	
36m	1	3	1	2	2	1	1	1	5	2	2	2	1	1	1	1	2	3	2	2	1	11	1	1	3	11	1	2	928	2	6.7	6	2	2	87	11	48	47	13	-1.27	-2.29	-2.58	14.5	-0.88	19	-1.08	-2.47	0.7	-1.41	-2.29	-2.12	245	1	
37m	2	3	1	4	3	5	5	2	3	2	2	2	3	1	3	1	1	3	3	2	1	11	1	1	1	2	2	3	1	946	2	7.4	6	2	2	91	10	47	49	14	-2.99	-2.85	-1.38	12.1	-3	0.1	-1.18	-1.4	8	-2.73	-2.38	-1.01	45	1
49m	1	3	1	2	3	5	5	1	2	1	1	3	2	1	1	1	2	3	2	1	11	1	1	1	2	2	1	2	978	3	8.2	6	2	2	101	14	48	50	15	-1.37	-1.37	-0.8	13.7	-1.34	9	-1.57	-0.94	17.5	-1.44	-1.51	-0.63	45	1	
53m	2	3	1	4	4	5	5	2	3	2	2	1	3	1	3	1	2	3	2.5	2	1	11	1	1	1	2	2	1	2	852	3	9.4	5	2	13	102	14	47	47	13	-1.28	-1.41	-0.92	13.6	-1.28	10	-1.86	-1.09	13.8	-1.35	-1.51	-0.64	5	1
38m	2	3	1	4	3	5	5	1	3	2	2	2	3	2	1	1	1	3	2.3	2	1	11	1	1	1	4	2	3	2	760	5	9.3	5	2	2	96	10	47	46	13.5	-3.89	-2.87	-0.27	11	-4.13		-1.23	-1.88	3	-3.45	-2.95	0.14	5	1
26m	1	3	1	4	3	5	5	1	3	1	1	1	3	2	3	1	1	1	2	2	1	11	1	1	1	2	11	4	2	610	4	10.2	4	2	2	86	10	46	43	13	-1.76	-1.57	-0.67	13.5	-1.17	3.9	-1.13	-1.86	3.1	-2.13	-2.27	-0.45	5	1
28m	2	3	1	3	3	1	5	2	5	2	2	1	3	1	1	1	1	2	3	2	1	11	1	1	1	3	2	3	2	750	3	11.9	3	15	2	91	10	47	49	14	-2.99	-1.84	0.32	12.1	-3.21		-0.58	-1.05	14.7	-2.73	-2.07	0.85	45	1
40m	2	3	1	2	2	1	1	5	2	2	2	3	1	1	1	2	3	2	2	1	11	1	1	1	3	12	1	2	783	4	12.3	3	2	2	98	11	47	47	13	-2.62	-1.83	-0.09	12.2	-2.8	0.3	-1.34	-1.5	6.6	-2.94	-2.44	0.31	3	1	
41m	2	3	1	3	2	3	5	2	4	2	2	2	3	1	1	1	1	3	2.3	2	1	11	1	1	1	4	2	4	2	794	4	14.6	2	2	2	98	16	46	47	13	0.94	0.49	-0.25	16.7	0.93	82.5	-1.38	-1.53	6.3	0.72	0.49	0.14	1	1
53m	1	3	1	3	2	1	1	2	5	2	2	1	3	1	1	1	1	3	2	1	11	1	1	1	4	2	1	2	896	4	9.6	5	2	2	102	14	49	53	15	-1.59	-1.65	-1.05	13.5	-1.53	6.3	-1.01	-1.02	15.4	-1.61	-1.78	-0.93	45	1	
36m	2	3	1	3	3	1	5	1	3	1	1	1	3	2	1	1	2	3.2	2	1	11	1	1	1	4	2	1	2	784	3	8.4	5	2	2	93	12	48	48	14	-1.25	-1.14	-0.54	13.9	-1.26	10.4	-0.36	-1.34	9	-1.36	-1.45	-0.3	5	1	
24m	1	3	1	4	4	5	5	2	4	2	2	2	3	1	1	1	2	2.3	2	1	3	3	1	1	2	2	1	2	734	2	8.2	5	2	18	86	9	46	50	14.5	-3.58	-2.64	-0.37	12.2	-3.77		-1.66	-0.57	28.4	-3.04	-2.99	0.05	2	1	
12m	2	3	1	4	3	1	5	2	5	1	1	1	3	1	1	1	2	3	2	1	3	3	1	1	2	2	1	2	902	9	9.1	4	2	2	72	9	45	48	12	0.36	0.04	-0.52	17	0.46	67.6	0.07	-1.97	2.5	0.13	-0.58	-0.93	2	1	
12m	2	3	1	3	3	1	1	2	4	1	1	1	3	1	1	1	1	2	2.5	2	1	3	3	1	1	2	2	4	2	900	9	10.2	3	2	2	68	8	47	47	12.5	1.33	0.04	-1.96	18.9	1.6	94.6	1.54	-1.56	5.9	0.23	-1.52	-2.34	1	1
38m	1	3	1	4	3	5	5	1	4	2	2	1	3	1	3	1	2	2.8	2	1	11	1	1	1	2	2	4	2	856	4	12.8	3	2	2	92	14	48	52	15	0.58	-0.48	-1.56	16.5	0.79	78.6	-1.17	-0.69	24.6	0.18	-0.62	-1.16	345	1	
36m	1	3	1	4	3	1	5	1	3	1	1	1	3	2	1	1	1	2	3	2	1	11	1	1	1	2	11	4</																										

55m	2	3	1	2	1	1	1	2	4	6	4	2	3	1	1	1	1	3	3	11	1	1	1	1	1	2	2	4	2	890	3	11.7	4	2	2	99	13.4	48	50	14	-1.31	-1.96	-1.75	13.6	-1.26	10.3	-1.21	-1.91	2.8	-1.28	-1.96	-1.59	5	1
27m	2	3	1	2	1	1	1	2	4	6	4	3	3	1	1	1	1	3.2	2	1	3	3	1	1	3	2	4	2	689	4	12.4	2	2	2	82	10.5	45.5	48	14	-0.18	-1.19	-1.9	15.6	0.01	50.5	-1.5	-0.95	17.1	-0.67	-1.56	-1.55	1	1	
26m	1	3	1	2	3	1	1	1	4	2	2	2	3	2	1	1	1	3	2.5	2	1	3	3	1	1	2	2	3	2	702	4	10.4	4	2	2	79	9.5	47.5	48	14	-1.1	-2.48	-3.2	15.2	-0.58	28	-0.77	-1.15	12.6	-1.26	-2.68	-2.55	1	1
60m	1	3	1	2	3	1	1	1	4	2	2	1	3	1	1	1	2	2.5	2	1	1	1	1	1	2	2	1	2	745	5	12.6	4	2	2	102	14	48	53	14	-1.5	-1.99	-1.74	13.6	-1.36	8.6	-1.84	-1.99	2.3	-1.61	-2.22	-1.75	8	1	
60m	1	3	1	3	1	3	1	1	4	3	2	3	3	2	1	1	1	3	3	11	1	1	1	1	2	2	1	1	796	4	14.1	3	2	2	105	15	49.5	52	15	-1.39	-1.52	-1.09	13.6	-1.31	9.4	-0.83	-1.14	12.6	-1.44	-1.75	-1.1	1	1	
45m	2	3	1	3	3	1	1	2	3	3	3	2	3	1	1	1	1	2.3	2	1	1	1	1	1	2	2	1	2	984	2	9.4	5	2	2	97	12	48	48	14	-2	-1.94	-0.99	12.9	-2.01	2.2	-0.83	-1.63	5.1	-2.02	-2.15	-0.74	1	1	
49m	1	3	1	3	3	3	5	2	5	2	2	1	3	2	3	1	1	3	2	1	1	1	1	1	2	2	1	2	792	4	7.9	6	2	2	89	13	50	52	16	0.34	-1.93	-3.57	16.4	0.83	79.6	-0.2	-0.14	44.7	-0.03	-2.03	-3.42	48	1	
51m	1	3	1	2	1	1	1	1	4	3	1	3	3	1	1	1	1	3	2.8	2	1	1	1	1	2	2	14	2	765	5	9.2	5	2	2	99	13.5	49	51	14	-1.38	-1.77	-1.45	13.8	-1.27	10.2	-0.94	-1.82	3.4	-1.47	-1.9	-1.36	4	1	
58m	2	3	1	3	2	1	1	2	4	2	1	2	3	1	1	1	2	3	2.8	2	1	1	1	1	3	2	1	1	904	3	9	5	2	2	102	14.5	49	49	13	-1.15	-1.68	-1.56	13.9	-1.04	15	-1.13	-2.89	0.2	-1	-1.54	-1.25	1	1	
40m	1	3	1	3	2	1	1	2	5	2	2	3	1	1	1	1	2.5	2	1	1	1	1	1	2	2	4	2	785	4	10.2	5	2	2	84.5	9.5	46	46	13	-2.47	-3.72	-3.66	13.3	-1.93	2.7	-2.62	-2.55	0.5	-2.32	-3.42	-3.36	1	1		
59m	2	3	1	3	2	1	1	2	5	2	2	1	3	1	1	1	1	2	2	1	1	1	1	1	2	2	3	2	734	4	10.2	5	2	14	93	11.2	48.5	48	12.5	-2.07	-3.47	-3.39	12.9	-1.77	3.8	-0.98	-3.25		-2.03	-3.32	-3.41	1	1	
27m	2	3	1	3	3	1	1	2	5	3	2	2	3	1	1	1	1	3	2	1	1	1	1	2	2	1	2	812	3	7.2	6	2	2	92	12.5	49	49	14	-0.57	0.2	1	14.8	-0.65	25.7	0.98	-0.96	16.8	-0.76	0.01	1.4	1	1		
38m	1	3	1	3	3	3	1	2	4	2	2	1	3	2	1	1	1	3	2	1	1	1	1	2	2	1	2	902	3	9	5	2	2	91	12	46	49	15	-1.13	-1.53	-1.46	14.5	-0.92	17.8	-2.46	-0.62	26.7	-1.26	-1.82	-1.41	1	1		
16m	2	3	1	3	3	3	1	2	4	2	2	2	3	2	1	1	2	3	2	1	1	1	1	2	2	4	2	945	9	10.2	3	2	2	70.5	8	43	44	13	-0.55	-1.73	-2.69	15.8	-0.08	46.9	-1.96	-1.25	10.6	-0.64	-2.19	-2.88	1	1		
22m	1	3	1	3	1	3	1	2	5	7	5	2	3	1	1	1	2	3.5	2	1	3	3	1	1	2	2	4	2	804	2	8.5	5	2	11	72	8	44	45	13	-2.58	-3.45	-3.34	13.6	-2.02	2.2	-3.01	-1.92	2.7	-1.4	-3.31	-4.31	1	1	
19m	1	3	1	2	3	1	1	2	5	3	3	3	3	1	1	1	2	2.5	2	1	3	3	1	1	2	2	1	2	914	9	8.5	5	2	2	75	9.2	46.5	45	13	-0.57	-1.79	-2.89	16.1	0.03	51.4	-0.84	-1.78	3.7	-0.77	-2.06	-2.74	5	1	
25m	1	3	1	3	2	3	1	2	4	6	6	2	3	1	1	1	2	3	2	1	3	3	1	1	2	2	1	2	915	2	9.6	4	2	2	79	8	45	45	14	-2.51	-3.25	-2.88	13.6	-2.15	1.6	-2.47	-1.07	14.1	-2.73	-3.88	-2.34	1	1	
38m	1	3	1	3	3	1	1	2	5	2	2	2	3	1	1	1	2	2.5	2	2	3	3	1	1	2	2	3	2	1010	2	9.8	5	2	2	90	12	50	50	15	-0.9	-1.66	-1.94	14.8	-0.6	27.3	0.27	-0.66	25.4	-1.08	-1.82	-1.67	1	1	
18m	2	3	1	3	2	1	1	2	5	3	3	3	3	1	1	1	2	2	2	1	3	3	1	1	2	2	3	2	914	9	11.3	5	2	2	77	9	46	43	13	-0.78	-1.23	-1.36	14.9	-0.57	28.4	-0.3	-1.39	8.3	-1.17	-1.59	-1.34	5	1	
33m	1	4	1	1	2	2	5	1	5	3	3	2	1	1	2	2	1	2.7	2	1	12	1	1	1	2	1	2	2	895	3	9.8	4	2	2	87.5	11.6	47	47	14.5	-0.72	-1.48	-1.85	15.2	-0.45	32.7	-1.58	-0.95	17.1	-0.96	-1.67	-1.46	38	1	
51m	2	4	1	2	3	2	5	2	5	3	3	1	1	1	2	2	3	1	2.7	2	2	1	1	1	4	2	1	2	876	3	9.8	5	2	12	100	14.9	48	54	15.5	-0.24	-0.84	-1.1	14.9	-0.25	40.2	-1.08	-0.85	25.6	-0.35	-0.86	-0.85	1	1	
25m	1	4	1	2	3	2	5	2	5	2	2	2	1	1	2	2	3	1	3.1	2	2	3	3	1	4	2	1	2	782	4	9.2	5	2	12	80.5	11.2	46	50.5	16	0.58	-0.9	-2.47	17.3	0.99	84	-1.77	0.63	73.7	0.05	-1.17	-1.88	3	1	
49m	2	4	1	2	1	3	1	2	5	2	2	1	3	1	3	1	2	1	2.5	2	1	1	1	1	3	2	3	2	768	4	8.2	6	2	2	80.5	10	46.5	46.5	14	-0.38	-3.69	-5.28	15.4	0.12	55	-2.05	-1.74	4.1	-0.86	-3.56	-5.36	1	1	
33m	2	4	1	4	3	1	5	2	5	2	1	2	3	1	3	1	1	3.1	2	1	1	1	1	4	2	3	2	783	3	6.5	6	2	12	88	11.2	47.5	49	14	-0.93	-1.45	-1.46	14.5	-0.79	21.5	-0.57	-1.26	10.5	-1.16	-1.71	-1.08	1	1		
60m	2	4	1	4	3	1	1	2	4	2	1	2	3	1	3	1	1	3.2	2	1	1	1	1	4	2	3	2	823	4	7.6	6	2	2	105	17.5	47.5	55.5	17.5	0.45	-0.32	-1.01	15.9	0.38	65	-1.73	0.38	64.7	0.42	-0.1	-0.79	1	1		
50m	2	4	1	1	2	1	5	2	4	4	2	3	1	1	3	2	1	3	2	1	1	1	1	4	2	1	2	931	3	7.8	6	2	2	93.5	12.2	43.5	48	14	-1.17	-2.3	-2.47	14	-0.97	16.5	-4.22	0.85	25.6	-1.28	-2.34	-2.3	1	1		
34m	1	4	1	2	1	2	5	1	3	2	2	3	2	3	2	2	1	2.1	2	1	12	1	1	1	3	1	1	2	890	3	7.6	3	2	2	87	11.4	45.5	48	15	-0.48	-1.42	-1.91	15.1	-0.28	39	-2.05	-0.46	32.4	-1.05	-1.89	-1.78	8	1	
25m	2	4	1	1	3	2	5	2	5	3	2	3	1	1	3	2	3	1	2.8	2	1	3	3	1	3	2	1	2	902	2	9.4	4	2	12	80.5	9.9	46	48.5	13	-0.51	-1.47	-1.98	15.2	-0.31	37.8	-1.01	-1.78	3.7	-0.96	-1.79	-1.54	8	1	
41m	2	4	1	3	2	4	1	1	4	2	2	2	1	1	3	2	1	2.3	2	1	1	1	1	4	2	1	2	920	2	9.2	5	2	2	88	11.8	47.5	49.5	14.5	-0.33	-1.82	-2.68	15.2	-0.06	47.7	-1.02	-1.11	13.4	-0.62	-2	-2.43	1	1		
45m	1	4	1	2	1	2	5	2	4	3	3	2	3	1	3	2	2	1	2	2	1	1	1	3	1	2	2	2	895	3	5.8	6	2	2	93.5	12.5	49	51	15	-1.27	-1.98	-1.98	14.1	-1.03	15.3	-0.76	-0.85	19.7	-1.29	-2.02	-1.84	8	1	
43m	2	4	1	1	5	1	2	4	3	3	1	3	1	1	3	2	2	3	3.1	2	1	1	1	1	4	2	1	2	765	4	7.9	6	2	2	96.5	14.5	49	54.5	16	0.17	-0.4	-0.88	15.6	0.2	58	-0.05	-0.03	48.9	0.02	-0.47	-0.56	0	1	
44m	2	4	1	2	1	5	2	2	4	3	2	3	1	1	3	2	1	3	2	1	1	1	1	4	2	1	2	730	4	10.2	4	2	2	90.5	13.5	47	54	16	0.62	-0.99	-2.4	16.5	0.82	79.5	-1.49	-0.05	48.1	0.31	-1.17	-2.23	1	1		
24m	2	4	1	2	1	3	1	2	5	2	2	1	1	3	2	2	1	3.1	2	1	1	1	1	4	2	1	2	745	2	12	2	2	2	94.5	12.5	48	51	14.5	-1.1	0														

35m	2	4	1	1	2	2	5	2	3	3	1	3	3	1	3	2	2	2	3	2	2	11	1	1	1	4	2	2	2	853	2	10.4	4	2	2	90	11	50	52	14	-1.5	-1.73	-1.25	13.7	-1.42	7.8	1.08	-1.32	9.3	-1.7	-2.04	-0.91	5	1
12m	2	4	1	2	1	1	1	2	4	3	2	3	1	2	3	2	2	1	2.6	2	2	3	3	1	1	3	11	3	2	731	2	7.8	5	2	2	72	7	48	47	14	-2.52	-2.18	-0.78	13.2	-2.45	0.7	-3.72	-1.59	5.6	-2.3	-2.46	-0.92	1	1
14m	2	4	1	1	2	2	5	2	4	3	1	2	1	1	2	1	2	1	3	2	2	3	3	1	1	2	2	3	2	835	9	7.5	5	2	2	78	8.5	45	48	13.5	-1.67	-1	0.46	13.7	-1.83	3.4	-0.47	-0.73	23.3	-1.97	-1.44	0.36	1	1
25m	1	4	1	1	2	2	1	2	3	2	1	2	1	1	3	2	2	1	3	2	2	3	3	1	1	3	2	14	2	745	4	7.2	6	2	2	94	11	50	53	15	-2.96	-1.08	1.78	12.4	-3.39		1.14	-0.2	41.9	-2.59	-1.34	2.27	1	1
25m	1	4	1	2	1	5	5	2	4	2	1	2	1	1	3	2	1	1	2.5	2	1	3	3	1	1	3	2	14	2	790	3	8.9	5	2	2	81	9.8	51	52	14	-1.16	-2.13	-2.43	14.9	-0.85	19.6	1.84	-1.11	13.2	-1.38	-2.36	-1.72	1	1
35m	1	4	1	1	2	1	1	1	4	2	1	2	1	1	2	2	2	1	1.2	12	2	3	3	1	1	2	11	14	2	834	3	10.4	4	2	2	98	13	50	50	15	-1.64	-0.8	0.55	13.5	-1.83	3.3	0.39	-0.6	27.4	-1.67	-0.94	0.97	1	1
12m	1	4	1	2	1	1	5	2	3	2	1	2	3	1	3	2	1	1	2	2	1	3	3	1	1	3	12	3	2	928	9	9.8	4	2	2	81	8.1	46	47	14	-3.57	-1.55	2.6	12.1	-4.2		-0.01	-0.58	28.1	-3.46	-2.08	1.71	1	1
12m	2	4	1	3	2	2	5	2	4	1	1	1	1	1	3	2	1	3	2.7	2	1	12	1	1	1	3	2	3	2	1016	9	10.4	3	2	2	80	7.2	48	50	13	-4.69	-2.62	2.18	11.1	-5.25		1.55	-1.53	6.3	-3.86	-2.27	1.9	5	1
31m	2	4	1	1	1	3	1	2	5	4	2	3	1	1	3	2	1	1	2.8	2	1	3	3	1	1	3	2	4	2	783	3	11.2	3	2	14	100	10.3	48	50	14	-4.41	-1.91	2.26	10.3	-5.01		-0.07	-1.17	12.1	-3.73	-2.16	2.7	1	1
17m	2	4	1	3	1	5	5	2	4	3	2	3	1	1	3	2	1	1	2.5	2	1	3	3	1	1	1	2	14	2	752	1	12.6	2	12	17	91	7.9	46	48	14	-5.45	-2.17	3.8	9.4	-5.93		-0.17	-0.41	34	-5.1	-2.4	3.58	1	1
22m	2	4	1	4	3	3	5	2	4	2	1	2	1	1	3	2	1	1	2.6	2	2	3	3	1	1	3	2	4	2	483	5	12.9	1	2	2	90	10.6	47	49	16	-2.05	-0.39	1.86	12.9	-2.25	1.2	0.05	0.99	84	-2.08	-0.81	1.57	1	1
12m	1	4	1	2	2	5	5	2	4	3	1	3	1	1	3	2	2	1	2.3	11	1	3	3	1	1	3	2	14	2	635	4	10.3	4	2	2	80	9.9	48	51	13.5	-0.81	0.19	1.96	15.2	-1.25	10.5	1.45	-1.06	14.5	-1.18	-0.31	1.34	1	1
16m	1	4	1	1	1	5	1	2	3	1	1	1	3	1	3	2	1	1	3	2	1	3	3	1	1	3	11	14	2	846	1	10.1	4	2	11	78	8.5	43.5	45	14	-2.28	-2.08	-0.92	13.7	-2.23	1.3	-2.79	-0.72	23.4	-2.38	-2.33	-0.93	1	1
33m	1	4	1	1	1	1	1	2	4	2	2	2	1	1	2	2	2	1	2.5	2	1	12	1	1	1	4	2	3	2	735	4	9.4	5	2	2	100	10.2	48	48	14.5	-4.99	-2.66	1.46	10.2	-5.37		-0.92	-0.98	16.4	-4.04	-2.6	1.94	1	1
35m	1	4	1	2	1	2	5	2	4	2	2	3	1	3	2	2	1	1	2.5	2	1	11	1	1	1	3	2	14	2	735	4	8.7	5	2	17	87	11.5	47	48	16	-0.7	-1.82	-2.42	15.2	-0.34	36.7	-1.72	0.21	58.5	-0.96	-1.9	-1.95	1	1
12m	2	4	1	1	1	2	1	2	5	3	1	3	1	1	2	2	2	1	2.6	2	1	3	3	1	1	3	11	3	2	836	9	8.8	4	2	2	75	7.1	48	50	14	-3.12	-1.8	0.95	12.4	-3.34		2.42	1.44	92.5	-2.93	-2.37	0.14	4	1
49m	2	4	1	1	2	1	5	2	4	2	1	2	1	1	3	2	2	2	2	1	12	1	1	1	4	2	3	2	639	5	6.7	6	2	2	95	11.7	49	48	16	-1.98	-2.74	-2.3	13	-1.8	3.6	-0.4	-0.32	37.4	-1.94	-2.58	-1.8	1	1	
31m	1	4	1	2	1	3	5	2	5	3	2	2	1	1	3	2	2	1	3.1	2	1	12	1	1	1	4	11	14	2	673	4	6.5	6	2	2	91	11.7	48	49	15	-1.46	-1.27	-0.61	14.1	-1.4	8.1	-0.78	-0.47	32	-1.52	-1.43	-0.1	8	1
20m	1	4	1	2	3	1	1	2	4	3	1	3	1	1	3	2	1	1	3	2	1	3	3	1	1	4	12	3	2	843	1	6.6	6	2	2	77	10.2	49	50	14	0.32	-0.9	-2.39	17.1	0.84	79.9	0.95	-0.85	19.7	-0.08	-1.36	-2.34	4	1
18m	2	4	1	3	3	5	2	4	3	2	1	3	1	1	3	2	1	1	2.5	2	1	3	3	1	1	2	11	1	2	839	9	8.3	5	2	2	77	8	45	46	15	-2.67	-2.69	-1.69	13.4	-2.47	0.7	-1.79	0.13	55.2	-2.33	-2.44	-1.34	1	1
15m	1	4	1	1	2	2	5	2	4	2	1	2	1	1	3	2	2	1	2.5	2	1	3	3	1	1	3	2	1	2	822	1	9.7	4	18	2	83	8	48	50	13	-4.19	-2.38	1.58	11.4	-4.71		0.84	1.64	5.1	-3.94	-2.66	1.16	1	1
18m	1	4	1	1	3	1	1	1	4	1	4	1	1	1	3	2	2	1	2.6	2	1	3	3	1	1	4	2	4	2	852	1	10.2	4	2	12	78	8.7	46	48	12	-1.98	-2.15	-1.53	14	-1.79	3.7	-1.11	-2.78	0.3	-2.14	-2.37	-1.51	4	1
17m	1	4	1	1	1	2	1	2	4	1	1	1	1	1	3	2	2	1	2.7	2	1	3	3	1	1	3	2	4	2	738	2	10.4	4	2	2	86	8.9	49	51	15	-3.72	-1.72	-1.97	11.8	-4.18		-0.93	0.16	56.3	-3.47	-2.09	1.46	1	1
14m	1	4	1	2	3	2	5	2	5	3	1	3	1	1	2	2	1	1	2.6	2	1	3	3	1	1	2	2	14	2	853	1	11.4	3	2	2	77	8.3	45	46	14	-2.35	-1.87	-0.37	13.7	-2.39	0.8	-1.31	0.67	74.8	-2.39	-2.25	-0.58	1	1
13m	2	4	1	3	2	2	5	2	4	3	1	3	1	1	2	2	3	1	2.6	2	2	3	3	1	1	2	2	4	1	954	9	11.2	3	2	2	72	8.8	45	52	14	0.12	-0.42	-1.13	16.6	0.32	62.7	-0.2	-0.22	41.1	-0.12	-0.97	-1.31	3	1
18m	1	4	1	1	3	1	1	2	4	2	1	2	3	1	3	2	1	1	2.5	2	1	3	3	1	1	3	2	14	2	906	1	7.8	5	2	2	70	8.7	47	44	13	-0.56	-2.64	-4.39	16.4	0.23	59.2	-0.33	-1.74	4.1	0.18	-2.37	-4.13	5	1
32m	2	4	1	3	2	2	1	2	1	1	1	3	2	3	2	1	2	1	3	2	1	12	1	2	1	3	2	3	2	894	2	8	5	2	2	88	10.1	46	48	14	-2.15	-2.19	-1.24	13	-2.12	1.7	-1.55	-1.21	11.3	-2.15	-2.4	-0.88	1	1
30m	2	4	1	1	2	1	5	2	5	2	2	1	1	3	2	2	3	2.2	2	1	11	1	1	1	3	2	1	2	894	2	9.3	4	2	2	86	12	45.5	46.5	14	0.34	-0.46	-1.33	16.2	0.51	69.7	-1.73	-1.1	13.5	-0.04	-0.79	-1.03	3	1	
42m	2	4	1	3	2	1	5	1	5	3	3	2	1	1	3	2	2	2	2	2	12	1	1	1	1	11	1	1	872	3	9.5	5	2	12	96	14	48	48	13	-0.12	-0.51	-0.75	15.2	-0.09	46.4	-0.68	-2.42	0.8	-0.28	-0.69	-0.53	2	1	
59m	2	4	1	3	2	1	5	1	5	3	3	2	3	1	3	2	2	2	1.7	2	2	11	1	1	1	3	2	3	2	899	3	9.6	5	12	11	107	15	47	49	13	-1.69	-1.36	-0.51	13.1	-1.64	5.1	-2.05	-2.84	0.2	-1.52	-1.33	-0.22	45	1
58m	2	4	1	3	3	1	1	2	5	3	3	2	3	1	3	1	2	3	2	1	11	1	1	1	2	2	3	2	903	3	10.3	4	2	2	88	10	48	46	13.5	-2.27	-3.04	-2.45	12.9	-2.08	1.9	-0.58	-1.91	2.8	-2.25	-3.01	-2.13	1	1	
58m	2	4	1	3	3	1	5	2	5	3	3	1	3	1	1	2	2	3	3	2	1	11	1	1	1	2	2	1	2	894	3	10.2	5	2	12	95	12	47	46	13	-1.68	-2.91	-2.86	13.3	-1.48	7	-1.99	-2.38	0.9	-1.7	-2.86	-2.85	2	2
55m	1	4	1	1	1	2	1	2	5	1	1	1	2	1	3	1	1	2																																				

51m	1	4	1	3	2	3	5	1	4	2	1	1	3	2	1	2	1	1	1	2.8	2	1	11	1	1	1	3	2	4	1	876	4	12.6	4	2	2	100	12	48	49	14	-2.74	-2.46	-1.06	12	-2.74	0.3	-1.07	-1.8	3.6	-2.73	-2.66	-1.13	5	1
59m	2	4	1	3	2	1	1	2	4	3	2	2	3	2	1	1	1	1	3.2	2	1	11	1	1	1	3	2	3	1	940	3	11	4	2	2	102	14	46	46	13	-1.37	-1.82	-1.5	13.5	-1.34	9	-2.74	-2.83	0.2	-1.35	-1.86	-1.36	4	1	
30m	1	4	1	3	2	1	1	2	4	3	3	2	1	1	1	2	1	1	2.4	2	1	3	3	1	1	3	2	4	1	906	2	7.8	6	2	13	82	9	48	47	13	-2.49	-3.35	-2.98	13.4	-2.17	1.5	-2.13	-2.28	1.1	-2.33	-3.26	-2.43	3	1	
54m	2	4	1	1	1	1	1	2	4	3	1	3	3	1	1	2	1	3		2	1	1	1	1	4	2	4	1	928	3	6.7	6	13	11	96	12.5	47	47	13	-1.41	-2.35	-2.28	13.6	-1.27	10.1	-1.87	-2.72	0.3	-1.47	-2.39	-2.18	1	1		
49m	1	4	1	3	2	1	1	4	2	2	1	3	2	1	2	1	1	2.4	2	1	11	1	1	1	3	2	4	1	946	3	7.4	6	2	11	100	14	51	47	14	-1.17	-1.94	-1.97	14	-1.01	15.7	0.19	-1.97	2.4	-1.27	-1.51	-0.86	4	1		
13m	2	4	1	3	3	1	1	2	5	1	1	1	3	1	1	1	1	2.5	2	1	3	3	1	1	3	11	3	1	978	9	8.2	5	12	2	72	9	45	46	12.5	-0.03	-0.89	-1.84	17	0.28	61.2	-1.08	-2.07	1.9	0.13	-0.79	-1.31	1	1		
19m	1	4	1	3	1	1	1	2	3	2	1	2	1	1	1	2	1	2.5	2	1	3	3	1	1	3	2	1	1	852	1	9.4	4	2	2	83	10	46.5	46	14	-1.4	-1.04	0.01	14.3	-1.52	6.5	-0.83	-0.82	20.7	-1.7	-1.4	-0.17	1	1		
43m	1	4	1	3	2	1	1	2	3	3	2	3	3	2	1	2	1	3.5	2	1	11	1	1	1	3	2	1	1	610	6	9.3	5	2	2	91	11	49	49	15	-2.27	-2.88	-2.48	13.3	-1.87	3.1	-0.68	-0.81	21	-2.11	-2.72	-2.17	1	1		
55m	1	4	1	2	1	1	1	2	3	3	2	3	3	1	1	1	1	2.5	2	1	11	1	1	1	2	2	4	1	760	5	10.2	5	2	11	96	12	49	13	13	-2.24	-2.94	-2.53	13	-1.93	2.7	-1.04	-2.83	0.2	-2.11	-2.89	-2.52	4	1		
40m	1	4	1	3	3	2	1	2	4	3	2	1	3	1	1	2	1	2.8	2	1	11	1	1	1	3	2	4	1	750	4	11.9	4	2	2	86	10	48	46	13	-2.23	-3.35	-3.3	13.5	-1.72	4.3	-1.23	-2.55	0.5	-2.13	-3.13	-2.99	1	1		
50m	1	4	1	4	3	2	5	2	4	2	1	2	3	2	1	1	1	3.5	2	1	11	1	1	1	3	2	1	1	783	4	12.3	4	2	12	97	13.5	49	48	14	-0.94	-1.72	-1.84	14.3	-0.77	22	-0.92	-1.81	3.5	-1.12	-1.83	-1.69	4	1		
38m	1	4	1	3	3	1	1	5	2	2	2	3	2	1	1	1	1	2.8	2	1	12	1	1	1	3	2	4	1	794	4	14.6	2	15	2	93	13	47	45	13	-0.55	-1.04	-1.22	15	-0.41	34.1	-1.85	-2.51	0.6	-0.8	-1.22	-0.9	14	5		
50m	2	4	1	3	2	1	5	2	5	3	2	1	3	1	1	2	1	2.9	2	1	11	1	1	1	2	11	3	1	896	3	9.6	5	2	13	97	13.2	47	45	13	-0.99	-1.66	-1.63	14	-0.92	17.9	-1.74	-2.63	0.4	-1.09	-1.77	-1.45	3	1		
44m	1	4	1	3	3	1	1	5	2	2	1	3	2	1	1	1	1	3.2	2	1	11	1	1	1	3	2	1	1	784	4	8.4	6	2	2	92.5	12	48	47	14	-1.17	-1.97	-1.98	14	-1	15.8	-0.81	-1.62	5.3	-1.53	-2.23	-1.94	5	1		
43m	1	4	1	2	2	1	E	2	4	4	2	4	3	1	1	1	1	3.5	2	1	11	1	1	1	2	2	4	1	734	5	8.2	6	2	2	96	13	49	49	15	-1.2	-1.51	-1.24	14.1	-1.1	13.6	-0.68	-0.81	21	-1.33	-1.61	-0.95	4	1		
49m	1	4	1	2	2	1	5	2	4	6	3	4	3	1	3	2	1	2		2	2	11	1	1	1	2	11	14	1	902	4	9.1	6	2	2	102	14.1	52	53	16	-1.5	-1.94	-1.65	13.6	-1.37	8.5	0.86	-0.36	36	-1.54	-1.45	-0.4	1	1	
52m	2	4	1	1	1	2	5	1	5	1	1	1	2	3	2	2	2	2	11	1	11	1	1	1	2	2	1	2	900	3	10.2	5	2	2	96	12	46.5	48	12	-1.89	-2.56	-2.12	13	-1.75	4	-2.17	-3.56		-1.86	-2.57	-1.94	1	1		
54m	2	4	1	3	3	1	1	2	5	2	2	1	3	1	2	2	1	3	2	2	11	1	1	1	2	2	1	1	785	4	8.1	6	2	112	99	14	48	47	15	-0.73	-1.52	-1.67	14.3	-0.7	24.2	-1.19	-1.11	13.3	-0.83	-1.57	-1.47	8	1		
24m	2	4	1	3	3	1	1	2	5	2	2	2	3	1	2	2	1	3	2	1	3	3	1	1	2	2	1	1	878	9	8.4	5	2	11	78	10	45	44	14	0.19	-1.25	-2.57	16.4	0.56	71.2	-1.64	-0.8	21.1	-0.36	-1.57	-2.08	1	1		
49m	2	4	1	2	2	1	5	2	5	2	2	1	1	1	1	2	2.5	2	1	11	1	1	1	2	2	1	2	784	4	8.5	6	2	12	95	14	48	49	16	0.07	-1.15	-1.98	15.5	0.16	56.3	-1.01	-0.23	40.8	-0.08	-1.24	-1.8	5	1			
18m	1	4	1	3	2	1	5	1	5	3	3	3	1	1	2	2	1	3	11	1	3	3	1	1	3	2	1	2	783	2	8.3	5	2	14	78	9	47	46	13	-1.55	-1.88	-1.58	14.5	-1.32	9.4	-0.38	-1.75	4	-1.78	-2.12	-1.51	1	1		
36m	2	4	1	2	2	1	5	2	4	6	3	5	2	1	1	1	1	2	2	2	12	1	1	1	2	11	1	1	985	1	5.7	6	2	13	87	9.5	48	45	13	-2.64	-3.16	-2.23	12.6	-2.52	0.6	-0.41	-2.27	1.2	-2.53	-3.14	-1.9	1	1		
59m	2	4	1	3	2	1	1	2	5	2	2	1	2	1	1	2	3	2	1	11	1	1	1	2	12	1	2	865	3	5.9	6	2	12	105	105	47	48	15	-1.24	-1.34	-0.91	13.6	-1.22	11.1	-2.05	-1.25	10.5	-1.18	-1.33	-0.68	4	1			
54m	2	4	1	2	2	3	5	1	5	2	2	1	3	2	3	2	3	2	1	12	1	1	1	3	2	3	2	783	4	6.2	6	2	13	99	15	48	53	15	-0.04	-1.01	-1.67	15.3	0.03	51.4	-1.19	-1.11	13.3	-0.08	-1.02	-1.47	4	1			
48m	2	4	1	4	3	3	5	2	4	6	4	2	1	1	1	1	3	11	1	11	1	1	1	2	2	1	2	783	4	5	6	2	2	99	14	47	51	16	-0.73	-1.08	-0.97	14.3	-0.73	23.3	-1.67	-0.2	42.1	-0.83	-1.17	-0.68	1	1			
48m	1	4	1	1	1	1	2	5	2	6	3	4	3	1	2	1	1	2.2	2	1	11	1	1	1	1	2	3	2	792	4	5.8	6	2	2	97	14	49	51	14	-0.48	-1.29	-1.6	14.9	-0.36	36.1	-0.85	-1.77	3.8	-0.74	-1.43	-1.43	36	3		
49m	1	4	1	1	2	3	5	1	5	3	2	2	3	1	1	2	2	3	2.2	2	1	11	1	1	1	2	2	4	1	945	3	7.1	6	2	13	86	11	45	45	12	-1	-3.27	-4.3	13.1	-0.35	36.4	-3.61	-3.71		-1.22	-3.06	-4.12	5	3	
54m	1	4	1	2	2	1	1	5	2	2	2	2	1	1	1	2	3	11	1	11	1	1	1	2	2	4	2	900	4	7.2	6	2	2	103	16	48	52	15	-0.17	-0.67	-0.92	15.1	-0.13	45	-1.71	-1.04	15	-0.39	-0.85	-0.83	4	1			
42m	1	4	1	2	2	1	1	4	4	1	4	3	2	3	1	1	2	2.8	2	1	11	1	1	1	2	2	3	2	844	4	9.7	5	2	2	86	11	46	48	13	-1	-2.78	-3.58	14.9	-0.45	32.5	-2.71	-2.6	0.5	-1.22	-2.66	-3.25	3	1		
42m	1	4	1	1	2	1	1	4	2	2	2	3	2	1	1	1	3	2	1	11	1	1	1	2	2	3	2	830	4	8.9	5	2	2	103	14	50	48	14	-1.81	-0.81	0.67	13.2	-1.98	2.4	0.05	-1.65	5	-1.78	-0.96	0.96	4	1			
12m	2	4	1	1	1	2	5	2	4	2	2	2	3	1	1	1	2	3	2	1	3	3	1	1	2	3	2	920	9	6	6	2	17	60	7	42	41	14	-1.36	-1.98	-1.97	14.8	-1.11	13.4	0.82	-0.2	41.9	2.14	-2.44	-5.09	1	1			
13m	2	4	1	1	2	1	1	4	1	1	1	3	2	1	2	1	1	2.8	2	2	3	3	1	1	1	2	4	2	856	9	5.8	6	2	2	66	7.2	46	45	13.5	-0.4	-2.02	-3.24	16.2	-0.03	48.7	0.6	-0.65	25.6	-0.08	-2.43	-3.35	1	1		
60m	1	4	1	1	1	2	5	2	4	2	2	1	3	2	1	1	1	2.6	2	1	11	1	1	1	2	2	3	2	710	5	7.1	6	2	2	106	16	47	51	14	-0.74	-0.95	-0.8	14.2	-0.73	23.2	-2									

50m	2	4	1	2	1	1	1	2	3	3	2	2	3	1	3	2	2	3	2.8	2	1	11	1	1	1	2	2	3	2	734	4	16	2	2	12	102	15	49	48	14	-0.59	-0.73	-0.56	14.4	-0.61	27.1	-0.35	-1.79	3.7	-0.64	-0.73	-0.21	5	1
50m	2	4	1	2	2	2	5	1	4	1	1	1	3	2	3	1	1	1	2.5	2	1	12	2	1	1	3	2	3	2	720	4	13.6	3	2	11	98	15	49	51	15	0.24	-0.73	-1.46	15.6	0.25	60	-0.35	-1	15.9	0.09	-0.73	-1.19	45	3
60m	1	4	1	2	2	1	1	1	4	1	1	1	3	2	1	1	2	2	3	2	1	11	1	1	1	2	2	3	2	758	5	13.4	3	2	2	94	13	47	51	13.5	-0.77	-2.67	-3.53	14.7	-0.37	35.8	-2.52	-2.45	0.7	-0.98	-2.69	-3.48	345	1
29m	1	4	1	2	2	2	1	2	5	2	2	2	3	1	1	1	1	2	2.5	2	1	3	3	1	1	2	2	3	2	874	3	14.6	1	13	2	83	10.5	47	48	14	-0.79	-1.92	-2.46	15.2	-0.49	31.3	-1.33	-1.26	10.4	-1.11	-1.11	-1.93	359	1
48m	2	4	1	3	2	1	1	2	4	2	2	1	1	1	3	1	2	2	3	2	1	11	1	1	1	2	2	3	2	783	4	9.5	5	2	2	92	15	45	48	15	1.44	-0.5	-2.5	17.7	1.56	94.1	-0.24	-0.91	18.1	1.09	-0.57	-2.39	35	1
60m	1	4	1	2	2	1	1	1	3	2	2	1	3	2	3	1	1	3	3	2	1	12	1	1	1	2	2	1	2	924	3	9.6	5	2	2	102	16	49	52	15	0.05	-1.02	-1.72	15.4	0.14	55.6	-1.16	-1.14	12.7	-0.2	-1.27	-1.74	3	1
60m	1	4	1	1	2	2	5	2	4	6	2	5	1	1	3	1	2	2	3	2	1	11	1	1	1	3	2	3	2	782	4	9.7	5	2	18	111	14	49	50	14	-3.43	-1.99	0.22	11.4	-3.54	-1.16	-1.98	2.4	-3.06	-2.22	0.22	35	1	
24m	2	4	1	3	2	1	1	2	5	2	2	2	3	1	1	2	2	3	2	11	1	3	3	1	1	2	11	1	2	744	2	9	4	2	2	77	9	45	45	13	-0.66	-1.95	-2.71	15.3	-0.26	39.2	-1.57	-1.68	4.6	-1.13	-2.4	-2.36	1	1
18m	1	4	1	2	2	2	5	2	5	4	2	4	3	1	3	2	2	2	2.2	2	1	3	3	1	1	2	11	4	2	638	3	9.8	4	13	2	77	10	45	45	13	-0.03	-0.82	-1.72	16.6	0.33	63.1	-1.8	-1.73	4.2	-0.33	-1.26	-1.8	5	1
36m	2	4	1	1	1	1	1	1	5	3	2	2	1	1	3	2	2	2	1.7	11	2	12	1	1	1	2	11	1	2	710	4	8.3	5	2	2	95	13	48	48	13	-0.75	-0.5	-0.02	14.4	-0.8	21.3	-0.36	-2.25	1.2	-0.89	-0.76	0.27	5	1
12m	1	4	1	2	2	1	1	1	5	2	2	2	3	1	3	2	2	3	2.8	2	1	3	3	1	1	3	11	1	1	724	3	5.8	6	2	13	71	8.8	44	45	14	0	-0.84	-1.71	17.1	0.24	59.4	-1.61	-1.72	4.2	-0.02	-1.36	-1.94	1	1
30m	2	4	1	3	1	5	5	2	4	4	2	2	3	1	1	1	1	1	2	11	1	3	3	1	1	3	2	3	2	682	4	8.9	5	2	11	87	11.5	48	50	14	-0.38	-0.81	-1.05	15.2	-0.26	39.8	0.04	-1.1	13.5	-0.7	-1.15	-0.72	1	2
24m	1	4	1	3	2	1	1	2	4	1	1	1	3	2	2	2	2	3	3	2	1	3	3	1	1	2	11	3	2	735	2	9.3	4	2	2	70	7.6	46	49	13	-1.51	-4	-5.61	15.5	-0.42	33.8	-1.66	-2.09	1.8	-1.18	-4.22	-4.91	58	1
48m	1	4	1	2	2	1	1	2	4	2	2	1	3	2	1	2	2	2	2.1	2	1	12	2	1	1	2	2	3	2	873	3	8.2	6	2	13	92	14.5	49	53	14	1.01	-0.95	-2.7	17.1	1.32	90.7	-0.83	-1.76	3.9	0.52	-1.16	-2.58	1	1
60m	2	4	1	1	1	1	1	1	4	1	1	1	3	2	3	1	1	2	3	2	1	11	1	1	1	3	11	3	2	802	4	8.4	6	2	2	107	15	48	52	16	-1.69	-1.36	-0.52	13.1	-1.64	5.1	-1.35	-0.56	28.8	-1.52	-1.39	-0.33	1	1
24m	2	4	1	1	1	1	1	1	5	1	1	1	3	2	3	2	1	2	3	2	1	3	3	1	1	3	11	1	2	730	2	8.5	4	2	2	82	11.5	46	50	14	0.83	0.01	-1.16	17.1	1	84.1	-0.85	-0.76	22.5	0.22	-0.27	-0.81	1	1
48m	1	4	1	2	2	1	5	2	4	3	2	2	3	1	1	1	2	2	2.5	2	1	11	1	1	1	2	2	3	2	724	5	8.8	5	2	11	99	10.5	46	49	14	-4.5	-3.5	-1.04	10.7	-4.44	-2.88	-1.76	3.9	-3.69	-3.27	-0.94	45	1	
60m	2	4	1	2	2	1	1	2	5	4	2	2	3	1	2	2	1	1	3	2	1	11	1	1	1	2	2	3	2	735	4	8	6	2	2	110	14.5	50	52	14	-2.66	0.4	0.05	-2.02	2.2	-2.32	-1.65	0.35	1	1				
40m	2	4	1	2	2	1	1	1	4	1	1	1	3	2	1	2	1	2	2.8	2	1	11	1	1	1	2	11	1	2	820	3	9.2	5	2	13	91	10	46	45	13	-0.5	-3.05	-4.21	15.2	-0.07	47.2	-2	-1.47	7	-2.73	-3.07	-1.49	6	1
60m	2	4	1	1	1	2	5	2	5	5	3	3	3	1	1	1	1	3	2	1	11	1	1	1	3	2	4	2	810	4	9.1	5	2	2	102	13.8	48	48	14	-1.53	-1.97	-1.57	13.3	-1.5	6.7	-1.35	-2.02	2.2	-1.5	-2.01	-1.46	5	1	
24m	2	4	1	1	2	1	5	1	4	3	3	2	1	1	1	2	1	2	2.2	2	1	3	3	1	1	2	2	1	2	738	2	9	4	2	2	74	11	45	45	13	2.04	-0.35	-3.65	20.1	2.73	99.7	-1.57	-1.68	4.6	1.16	-0.7	-3.3	1	1
36m	1	4	1	2	2	2	5	2	5	5	3	4	1	1	2	2	2	3	2.1	2	1	11	1	1	1	2	11	3	2	783	4	7.9	6	2	173	89	12	48	52	14	-0.66	-1.48	-1.92	15.1	-0.37	35.6	-1.03	-1.49	6.8	-0.9	-1.65	-1.57	1	1
49m	2	4	1	1	2	2	5	2	5	4	2	3	3	1	2	2	2	3	2	2	1	11	1	1	1	2	2	3	2	765	4	8.2	6	2	2	86	12.5	46	50	15	0.79	-1.97	-3.99	16.9	1.08	85.9	-2.39	-0.94	17.3	0.33	-2.1	-3.99	5	1
46m	1	4	1	2	2	2	5	2	4	2	2	2	3	1	2	2	2	3	3	2	2	11	1	1	1	2	2	3	2	812	4	10.2	5	2	2	90	11	45	49	13.5	-1.61	-2.76	-2.74	13.6	-1.34	9	-2.97	-2.08	1.9	-1.94	-2.89	-2.79	1	1
41m	1	4	1	3	2	1	1	2	4	3	2	3	3	1	2	2	1	3	2.2	2	1	12	2	1	1	3	2	4	2	689	5	11.7	4	12	2	94	11.8	44	47	15	-1.66	-1.77	-1.1	13.4	-1.63	5.1	-2.75	-0.69	24.6	-1.94	-2.13	-1.1	56	1
45m	1	4	1	1	1	2	1	2	5	2	2	3	1	2	2	2	3	2	2	1	11	1	1	1	2	11	4	1	894	3	12.4	3	2	2	104	11.6	49	47	15	-4.3	-2.53	0.57	10.7	-4.48	-0.73	-0.83	20.3	-3.58	-2.51	0.7	1	1		
19m	1	4	1	1	2	2	1	2	4	3	1	3	3	1	2	2	2	3	2.3	2	2	3	3	1	1	2	2	3	2	892	1	10.4	4	2	2	74	10	49	50	14	0.87	-0.98	-3.37	18.3	1.59	94.4	1.09	-0.8	21.1	0.47	-1.39	-3.03	1	1
37m	1	4	1	2	2	2	5	2	4	4	2	4	1	1	3	2	2	3	11	1	11	1	1	1	2	11	1	2	802	4	7.8	6	2	2	86	11.8	47	52	16	-0.12	-1.71	-2.86	16	0.31	62.1	-1.78	0.18	57	-0.49	-1.85	-2.52	4	1	
60m	1	4	1	2	1	1	1	2	4	3	1	2	3	1	3	2	2	2	3	2	1	12	1	1	1	2	2	4	2	1067	2	8.2	6	2	17	106	14.2	48	50	13	-2.29	-1.93	-0.86	12.6	-2.26	1.2	-1.83	-0.37	35.5	-2.13	-2.12	-0.87	8	1
12m	2	4	1	3	2	2	5	2	5	4	2	4	3	2	3	2	2	3	2.5	2	1	3	3	1	1	2	2	3	2	459	5	8.8	4	2	2	69	8.2	49	46	15.5	0.13	-0.72	-1.69	16.9	0.36	64	2.28	1.04	85.2	0.12	-1.3	-1.92	1	1
13m	2	4	1	3	2	1	1	2	5	3	2	3	3	1	3	2	2	3	2	2	1	3	3	1	1	2	2	1	2	657	3	7.9	5	11	2	62	9.8	47	48	14	1.28	0.53	-0.98	18.5	1.48	93.1	1.33	-0.21	41.6	1.16	-0.02	-1.26	1	1
31m	1	4	1	2	2	1	1	2	4	2	2	2	3	1	1	2	2	3	3	2	1	12	1	1	1	2	11	3	2	832	3	7.9	6	2	12	96	10.9	51	51	15	-3.49	-1.81	0.95	11.8	-3.79	1.4	-0.45	32.7	-2.97	-1.97	1.33	1	1	
57m	1	4	1	1	2	2	5	2	4	2	2	1	1	3	2	1	2	3	2	2	12	1	1	1																														



# Annexures

<h2>Annexure IV</h2>
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**ANNEXURE IV – KEY TO MASTER CHART**

Serial No –

1) Age - In completed months

Sex -

Male	-	1
Female	-	2

Address -

Kangrali	-	1
Agasaga	-	2
Handignur	-	3
Shivapur	-	4

2) Religion –

Hindu	-	1
Muslim	-	2
Christian	-	3
Others	-	4

3) Caste -

SC	-	1
ST	-	2
Others	-	3

4) Education - Father / Mother

Illiterate	-	1
Primary	-	1 <sup>st</sup> to 7 <sup>th</sup> standard - 2
Secondary	-	8 <sup>th</sup> to 10 <sup>th</sup> standard - 3
Post SSLC / Diploma	-	4
Graduate	-	5

5) Occupation –

Father – Farmer	-	1
Coolie	-	2
Private	-	3
Government employee	-	4
Skilled	-	5
Others	-	6

Mother - Farmer	-	1
Coolie	-	2
Private	-	3

Government employee	-	4
Housewife	-	5
Others	-	6

## 6) Family

Family type -

Nuclear	-	1
Joint	-	2

## Socio-economic Class ( B.G.Prasad Classification )

Class I	-	> 4372	-	1
Class II	-	2186 - 4371	-	2
Class III	-	1311 - 2185	-	3
Class IV	-	656 - 1310	-	4
Class V	-	< 656	-	5

Total no. of children &lt; 12 years - in actual figures

Total no. of children &lt; 5 years - in actual figures

Birth order - in actual figures

## 7) Housing –

Type of house -

Kaccha	-	1
Pucca	-	2
Semi – pucca	-	3

Overcrowding -

Present	-	1
Absent	-	2

Source of water supply –

Overhead tank with tap-		1
Borewell	-	2
Openwell	-	3

Toilet facility –

Present	-	1
Absent	-	2

Disposal of solid waste –

Manure pit	-	1
Backyard	-	2
Others (common bin )	-	3

Disposal of sullage –

Drain	-	1
Kitchen garden	-	2
Let free	-	3
Biogas	-	4

8) Birth weight - in actual figures

9) Complications after birth –

Yes	-	1
No	-	2

If Yes , NICU admission - < 48 hrs – 1  
> 48 hrs – 2

If yes and < 48 hrs - 11

If yes and > 48 hrs - 12

10) Immunisation status –

Complete	–	1
Incomplete	–	2
No immunized	–	3

11) Does the child attend anganwadi

Yes	-	1
No	-	2
NA	-	Not applicable for child < 3yrs

If yes, Regular - 1

Irregular - 2

If yes and regular - 11

If yes and irregular - 12

12) Whether child consumes food at anganwadi

Yes	-	1
No	-	2

13) Whether child attained milestones normally ?

Yes	-	1
No	-	2

14) Diet history –

Breast feeding given - Yes - 1

	No	-	2	
Period of EBF	-	< 3 mts	-	1
		3-6 mts	-	2
		7 – 12 mts	-	3
		> 12 mts	-	4
Prelacteal feeds –				
	Given		-	1
	Not given		-	2
If given and sugar water	-	11		
If given and honey	-	12		
If given and gutti	-	13		
If given and others	-	14		
Type of weaning food given –				
	Only Cereals		-	1
	Only Pulses		-	2
	Both cereals and pulses		-	3
	Others ( milk, vegetables, cerelac )		-	4
Type of diet –				
	Vegetarian		-	1
	Non – vegetarian		-	2
15) Total calories consumed - actual figures				
% deficit	-	< 10 %	-	1
		11 – 20 %	-	2
		21 – 30 %	-	3
		31 – 40%	-	4
		41 – 50 %	-	5
		> 50%	-	6
	If adequate		-	9
Total proteins consumed - actual figures				
% deficit	-	< 10 %	-	1
		11 – 20 %	-	2
		21 – 30 %	-	3
		31 – 40%	-	4
		41 – 50 %	-	5
		> 50%	-	6
	If adequate		-	9

## 16) Major illness requiring hospitalization

Yes	-	1
No	-	2

If yes and fever	-	11
If yes and Acute GE	-	12
If yes and LRTI	-	13
If yes and febrile convulsions	-	14
If yes and trauma	-	15
If yes and jaundice	-	16
If yes and other systemic problem ( pain abdomen etc )	-	17
If yes and NICU admission	-	18

## 17) Health problem in last 15 days –

Yes	-	1
No	-	2

If yes and fever	-	11
If yes and cold	-	12
If yes and LRTI/ URTI	-	13
If yes and acute GE	-	14
If yes and Eye problem	-	15
If yes and ENT problem	-	16
If yes and skin problem	-	17
If yes and others ( Trauma , CVD , burn )	-	18
If yes and jaundice	-	19

## 18) Anthropometry –

Height	-	actual height in cms
Weight	-	actual weight in kgs
Head circumference	-	actual figures in cms
Chest circumference	-	actual figures in cms
Mid arm circumference	-	actual figures in cms

z-scores based on WHO criteria for weight for height , weight for age and height for age.

BMI – in actual figures

z-score and percentile for BMI based on WHO standards .

z-score and percentile for Head circumference based on WHO standards .

z-score and percentile for Mid-arm circumference based on WHO standards .

z-scores based on NCHS criteria for weight for height, weight for age and height for age.

19) General physical examination –

Normal	-	1
Febrile	-	2
URTI	-	3
Caries	-	4
Pallor	-	5
Ear infections	-	6
Eye infections	-	7
Skin infections	-	8
Injuries	-	9
Burns	-	10
Deformities	-	11
Icterus	-	12
Oral ulcers	-	13
Congenital anomalies	-	14
Operation scar	-	15

20) Systemic examination –

Normal	-	1
Respiratory system	-	2
Circulatory system	-	3
Per abdomen	-	4
Central nervous system	-	5

Questionnaire to assess the knowledge of mothers , regarding child nutrition and personal hygiene -

Nutrition –

1) Time of starting breast feeding –

< ½ hour	-	1
½ hour – 2 hour	-	2
3 hour – 24 hour	-	3
> 24 hour	-	4

## 2) Prelacteal feeds –

To be given	-	1
Not to be given	-	2

## 3) How long EBF continued –

< 6mts	-	1
6 – 12 mts	-	2
13 – 18mts	-	3
19 – 24 mts	-	4
> 24 mts	-	5

## 4) Weaning foods preferred –

Only Cereals	-	1
Only pulses	-	2
Both cereals and pulses	-	3
Others (milk, cerelac , fruits )-	-	4

## 5) Restriction of food -

Yes	-	1
No	-	2

If yes and pulses	-	11
If yes and non – veg	-	12
If yes and cereals	-	13
If yes and fruits	-	14

## Personal hygiene –

1) After washing child soiled clothes	–	1
2) After using toilet	–	2
3) Before cooking	–	3
4) Before feeding the child	–	4

5) If all yes - 5

- If both 1 & 2 – 5
- 1 & 3 – 6
- 1 & 4 – 7
- 1, 2, 3 – 8
- 1, 2, 4 – 9
- 1, 2, 3, 4- 10