INTRODUCING THE TOPIC

Today's children are the citizens of future. They are the valuable assets of a nation. Their healthy build-up makes them healthy future citizens. It is their right to build them up healthily and it is the duty of the parents to make them healthy. There are striking variations from place to place in the patterns of care that the infants receive from birth to pre-school age stage. A healthy baby needs proper care from its existence in the mother’s womb to the age of 3 to 4 years.

In many cases there is a lack of knowledge of what is needed for optimal new born care which may be responsible for birth of babies with low birth weight. According to the UN's 1982 report 10 million babies die every year in the world before reaching their first birth day. In India, one out of every three babies born has low birth weight and an estimated three millions die every year from conditions which could be prevented by oral rehydration therapy and immunization alone (UNICEF : 1985).

Infant and child mortality are best indicators of health and well being of a population. Sometimes high infant mortality strongly motivates couples to have more children. Besides, high infant mortality shortens the lactation period of the mothers and thereby exposes them to the risk of another pregnancy earlier than expected.

In India the infant mortality rate (IMR) per thousand was 134 in 1971-73; 114 in 1981 (Indian Registrar General 1982); 86 in 1991 (Sample Registration system 1990-95), 68 in 2001 (National Family Health Survey 2005-06), 38
in 2003 and 40 in 2004. In rural areas the infant mortality rate (IMR) per thousand was 66 in 2003 and 64 in 2004. Still the level of infant mortality rate in India continues to remain high. In Assam in rural areas the infant mortality rate (IMR) per thousand was 70 in 2003 and 69 in 2004 while in urban areas it has declined to 35 in 2003 and 38 in 2004 (Statistical Hand Book, Assam: 2006).

Several causes like low socio-economic condition, inadequate poor medical facilities, cultural factors, poor diet of expectant mothers are found as some of the potent factors responsible for high infant death. This can be avoided by both preventive measures (such as clean and safe delivery) and by effective measures including encouraging supplementary nutrition, prolonged breast feeding of the infants, immunization, simple treatment for dehydration and other infections, prevention of accidents, fostering continuity of support and helping mothers to avoid becoming pregnant once again too quickly without any healthy spacing and also to avoid giving birth to more children than the family can afford (Arora: 1980).

Neonatal deaths (those within 1 month of birth) are primarily due to prenatal and natal influences such as prematurity of birth, birth injustices, congenital malformation, bleeding during delivery etc. (Royner Claire: 1980). On the other hand children who survive the first month of life die before they complete one year are usually succumb to communicable diseases of the respiratory system, diseases due to malnutrition and postnatal influences such as insanitary environmental conditions etc. (Padmanabha : 1982). However, girls are found to be less affected than the boys. This is due to the presence of two x-chromosomes (Waddington : 1957). The level of neonatal tetanus mortality as well as the incidence of poliomyelitis was undertaken as a response to the WHO's Expanded Programme of Immunization (EPI) in 1981-82. In India about 1.23 and 1.25 millions infants die due to neonatal tetanus every year with significant inter-state differentials (Bhargava and
An important cause of neonatal deaths identified and described in anthropological literature is the "blue baby". The symptoms of such deaths are said to include the baby becoming black or blue or even red without any obvious cause. The blackness may be seen first under the nails. These symptoms appear immediately after birth or within a few days and death generally follows (Matthews: 1979). In many instances these symptoms are considered to be in the grip of evil spirit and in most cases it is fatal.

Food is a major concern of the mankind starting from the time of conception and extending through the entire life span of the individual. Food supplies energy for physical activity and other metabolic needs. Good nutrition is a basic component of health; this is of prime importance in the attainment of normal growth and development and in the maintenance of health throughout life. Good health from infancy to adulthood provides the individual impetus to work more and produce more, which leads the nation to progress.

Growth distinguishes an adult from a child. Biologically growth implies increase in size of the various parts and organs of the body. It is caused by multiplication of cells and intercellular components. This multiplication is possible during the period commencing from fertilization to physical maturity in presence of specific essential nutrients such as carbohydrates, proteins, fats, vitamins, minerals and water. The lack of such nutrients can, on the contrary delay growth. Poorly-fed and sick babies grow less quickly than well-fed children (Tanner: 1964).

Nutritional deficiencies impair normal growth during childhood and delay the appearance of the adolescent spurt. Adequate nutrition is a necessary first step in the improvement of qualities of life. A malnourished child has four hundred times greater risks of dying from measles than a well-nourished child. A good nutritional start in life is necessary for a child to ensure its maximum mental and physical development (Bajkhaif et. al. 1993).
Malnutrition is directly or indirectly responsible for 60 percent of the 10.9 million annual deaths of children of below five years of age. Over two-thirds of such deaths are associated with inappropriate feeding practices during the first year (Gupta: 2004).

In India the health care system is very complex and diverse with further co-existence of different systems of medicine such as Allopathy, Ayurved, Unani, Homeopathy, Naturopathy, Yoga etc. Each and every population has its own concept about health care and unique ways of tackling diseases. The Chopra Committee established in 1940 drew up a plan for health services comprising a primary level health care system based mostly on the indigenous system of medicine and a secondary and tertiary levels integrated with the modern system. But this has not quite happened until recently when the traditional medicine systems have been incorporated into the health care system to offer a synthesized medicine (Chatterjee M.: 1988).

There are some traditional practices which are harmful and unhelpful for the infants. In India in 1979 a survey on infant and child mortality has tabulated the causes of death reported by the respondents for the ten 'most frequent causes', among them tetanus topped the list followed by dysentery, diarrhoea, premature birth and various types of respiratory diseases including pneumonia, bronchitis and influenza. Diarrhoea is the most common cause of illness among infants (Idris: 1981; Naidu: 1982). To reduce infant mortality care must be taken during antenatal, natal and postnatal stages.

The rate of infant and child mortality in India is though high in comparison to the developed countries yet a substantial decrease of mortality and morbidity may be accomplished through immunization campaigns, good sanitation activities in rural areas, clean water supply in rural areas, health of the mother, personal hygiene, education etc. (Kumar Ram: 1990).
Nutrition and health of the mother has important bearing on the growth of the foetus and the infants. The low nutritional status of mothers appear to be associated with a higher incidence of low birth weight (LBW) babies which are at a greater than average risk of early death. The incidence of low birth weight (LBW) continues to remain high at 30 percent in an all India basis. The WHO standards specify babies with a birth weight less than 2,500 grams (2.5kgs.) as high risk needing special care. However, Indian Pediatricians regard the WHO standard as too high and unacceptable because of the short stature or height of Indian women contributing to a low birth weight (Bhargava: et. al. 1980). Maternal under nutrition is a health impairment which has been frequently identified as one of the causes of high infant mortality (Lechtig et. al. 1978). Poor health of the mother may led the baby to low birth weight (LBW), anaemia and susceptible to various infections (Bhargava: 1987). Maternal malnutrition also affects the infant's nutritional status and survival chances through its effect on breast milk and duration of breast feeding (Wray: 1978). Such surviving babies will remain small throughout childhood and never seem to catch up with normal babies (Ghose: 1985). Poor maternal nutrition also led to still birth or death of babies and also cause congenital deformities (Passmore and Eastwood: 1986).

Infancy is a nutritionally turbulent period. The three micro nutrients which are today globally recognized as a public health problem are Vitamin A deficiency (VAD), iron deficiency anaemia (IDA) and iodine deficiency disorders (IDD). Most of these deficiencies are sub clinical and "not visible" (Sarma and Sundararaaj: 2001). Again iodine deficiency disorder (IDD) is not only limited to goiter but also constitutes the single greatest cause of preventable brain damage in the foetus and infant and of retarded psychomotor development in young children (De Maeyer EM, Dallmann J.M, Gurnery L. 1989). Iron deficiency anaemia (IDA) of the mother is a major threat to safe motherhood and contributes to increase post partum maternal mortality, increase foetal
growth retardation, prenatal and perinatal mortality and low birth weight. It is estimated that more than 2 billion women globally are affected (INACG/WHO/UNICEF 1998). Mishra, et. al. (1998) stated that according to NFHS report in Assam the percentage of receiving antenatal care is 49.3. According to National Institute of Nutrition 10-20 percent of all maternal deaths are due to nutritional anaemia. Mother's death in many developing societies reduces sharply the new born child's chances of survival. None of the babies born to mothers who died after delivery did not live beyond 28 days (Khan et. al. 1986).

Early age at marriage leads to early age at first child birth which is dangerous to both the mother and the child.

Sinha (1979) observed that 80 percent of Indian girls attained their first menstruation between 12 and 15 years of their age and 50 percent of them got married before they completed their 15th year. In a recent study conducted by national family health survey (NFHS) 2005-06 found that in India 44.5 percent women aged between 20 and 24 years are married by 18 years of age. As per the survey, 52.5 percent of these women live in rural areas and 71.6 percent do not have any education.

The three maternal factors namely age, parity and birth interval may not directly affect the risk of infant death, still they cannot be ignored. (Mosley and Chen: 1984). Age at marriage varies among different cultural groups (Busfield : 1972). The infant mortality rate is found to be the highest at the very young and old ages of child bearing and lowest at the middle range i.e. about 20-39 years. Comparatively high incidence of low birth weight (LBW) babies are seen among the too young mothers. Among the very old mothers the increased risk of infant death may be due to the maternal depletion syndrome, under nourishment, anaemia and general weakness associated with the biological demands of excessive reproduction (Bhatia: 1983).
China is witnessing a soaring number of birth deformities due to later age pregnancies and unhealthy life styles according to health experts.

At least one million babies are born with defects in China each year with an incidence rate of 60 out of every 1,000.

Women over 35 years face greater risk of their babies born with mental and physical defects. Defects include cleft palettes, neural tube defects, abnormal numbers of fingers or toes, congenital heart disease and water in the brain (Zhu: 2007).

When parity is considered child mortality is found to be high for the first order and high order births. The incidence of malnutrition among children of pre school age was found to increase with family size (Wray and Aguirre: 1969, Wray: 1971). The elimination of fourth and higher order births along with the limitation of reproductive period within the maternal age of 20-34 years would reduce infant mortality typically by about 12 percent (Trussel and Pebley: 1984)

The effect of maternal age and parity is significant in all social class categories of mothers (Heady and Morris: 1956).

The greatest losses to health and life of both mothers and children result not only from bearing many children but also from having comparatively short intervals between them. The shorter the birth interval, the higher are the chances of infant deaths (Gandotra et al. 1982, Swenson: 1977, Wolfers and Serimshaw: 1975, Wyon and Gordon: 1962, Yerushalmy et al. 1956). Short intervals deprive the mother's body of the chance of fully recovering after the last pregnancy. It is sometimes called maternal depletion syndrome (Jelliffe: 1966).

Maine and Mc. Namara (1985) analysing data from 25 developing countries are of the opinion that if all children were born at least two years apart, one in five infant deaths could be avoided. There are considerable
evidences from a large number of studies (Omran and Standley: 1981; Winikoff: 1983; Wray: 1971) that the timing and spacing of babies have a significant impact on maternal and child health.

Immunization is a very important step to be taken for the health of the children. The Expanded Programme of Immunization (EPI) was initiated by the government of India in 1978 with the objective to control infectious diseases which cause morbidity and mortality. Such diseases are DPT, polio, childhood tuberculosis, measles and typhoid (Reejhsinghani: 1987). Without immunization, an average of three out of very hundred children born will die from measles, another two will die from whooping cough, one more will die from tetanus and of every two hundred children one will be disabled with polio (Mitchell et. al. 1989). The maternal and child health (MCH) programme under the National Health Policy emphasized on-

- Protecting the children against vitamin A deficiency
- Promoting oral rehydration
- Supplementary feeding

Indian medical research during the last fifteen years has paid considerable attention to infant feeding and rearing practices. Young babies sucking their thumb seem to be not having enough sucking at the breast or bottle to satisfy their sucking need. Most babies start this habit before they are 3 months old. Breastfeeding enhances child survival by transmitting nutrients for growth along with certain immunity raising elements to the infants. A study conducted at the All India Institute of Medical Science showed that exclusive breast feeding for the first six months had a "protective effect" against diarrhoea (AIIMS: 2004). Wray (1978) and noted that breast-fed babies had lower morbidity rate than the bottle-fed babies. The findings of Bhat and Kheterpal (1983) revealed that most of the mothers are ignorant about the nutritive value of colostrum which is particularly rich in anti infective
factors and nutrients such as vitamin A. Infant mortality is more widespread among children who are not breast fed (Mondot: 1981).

Dr. Gupta of "Breast Feeding Promotion Network of India", an NGO stated in 2004 that breast feeding for first six months can reduce the mortality rate of children upto the age of five years by 15 percent and can also reduce the risk of diarrhoea and other life threatening diseases in new borns. Raja Gopalan in 1974 found that 30 percent of the mothers in India stopped breast feeding during the first year because of milk drying out.

Some other factors like the place of delivery, the type of attendants, instruments used for cutting the umbilical cord and the practices followed with respect to care of the new born are equally important. The training of dais in some basic minimum hygiene and safe delivery practices has therefore been a key element in the programme of improving maternal and child health.


Pathak in 1981 states that utilization of health services is significantly dependent on occupation of parents.

Some diseases that infants suffer from are caused by contaminated water supply, inadequate feces disposal and unhygienic conditions at home. Proper hand washing after a bowel movement has been shown to reduce the spread of the infection in Bangladesh (Khan: 1982). Personal hygiene was found to be even more important than the availability of pure water in a study in Madurai district in Tamil Nadu (Raja Sekaran et. al: 1977).
The traditional outlook and superstitions of the older family members with regard to infant care may not always be conducive to an infant's health and survival. Some infant deaths may also result from some beliefs and practices (CICRED: 1975).

In India the diet during pregnancy is strongly influenced by beliefs, customs and taboos. Belief about "Hot" and "Cold" foods here are widely prevalent and various food items are excluded from the diet of the pregnant women. Hot food includes meat, egg, pumpkin (Cucurbita moschata), spices, chillies (Capsicum annuum); and cold food includes bottle gourd (Lagenaria siceraria), curd, previous days left over rice etc. The reason behind it is believed to be that hot foods may cause stomach problem and cold foods may cause cold and cough.

The study of morbidity patterns of an area gives a clear understanding about the health situation in that area. It varies from region to region in India. Morbidity studies help to know one about the type of diseases occurring more and the sex and age group suffering from.

In the light of the above discussion in the present study an attempt has been made to see the "Effect of Health Care Practices on Infant Mortality and Morbidity among two caste populations of North Guwahati, Kamrup, Assam.

LITERATURE REVIEW

Demographers, sociologists, anthropologists, politicians planners and thinkers have either undertaken studies about or pondered over mortality specially on infant and child mortality. In the same way various research centres and organizations have also shown special interest in population studies. Some of such agencies are the Central Statistical Organization, Census Commission, Demographic Research Centres, International Institutes of Population Studies, Register General of India and the National Sample
Survey etc. These agencies are more concerned about the alarming growth of population in India and bringing down the growth rate for safe and sound living. Here an attempt has been made to review some of the available literature in the field of infant mortality, morbidity and health care practices.

Dyson and Moore (1983) worked in the North, South and Eastern states of India like Maharastra, Kerela and West Bengal and found low infant and child mortality due to social developments.

Nag (1983) found low infant mortality in Kerela when compared it with that of West Bengal. He indicated that it is because of its higher social development, favourable environment and hygenic condition. Social development includes education, health and transportation through public policies.

Ahmed (1986) reported that there is large variation in mortality levels of infants between the regions that are not equally exposed to modern medical facilities and other developmental facilities.

Bajkaif and Mahadaven (1993) indicated that malnutrition leads to greater risk of a child dying from measles than a well-nurished child.

According to Koko (1987) lack of medical facilities, elementary hygiene and inadequate food ultimately led to death.

Suchindran et. al. (1981) states that mothers of lower age group have high risk of infant mortality during the first year of the infant and gradually this mortality level decreases to the minimum for the mothers of age group 25-35 years old and thereafter again the risk rises.

Perkin (1968) reported that mothers below 18 years and mothers above 35 years having more than 5 children and close birth interval are likely to expose to high risk to both mother and child life.

Snyder and Merson (1982) highlighted that in a study conducted by World Health Organization (WHO) that 5 million children die because of diarrhoea.
Pathak in 1981 reported that factors like age of the mother, education and occupation of parents, nature of illness of child and facilities of health services play important role in infant mortality.

Anker and James (1980) narrated that nutrition and health care are interrelated because differences in mortality rate is due to differences in the state of nutrition.

Srivastava and Saxena (1980) found that infant mortality is influenced by the caste system, education of the mother, occupation and income of the father.

Arora (1980) reported that mothers between the age group of 15-19 years are likely to expose to high infant mortality.

Agarwal (1962) reported corelation between the age at marriage and infant mortality.

Bhowmick et. al (1971) reported early marriage of women endowed with high fertility and high infant and child mortality.

Cadwell and Mc. Donald (1981) studied the education of women which helps in taking discision within the family situation.

Bourgeois-Pichat (1964) highlighted that death due to the exogenous cause is easier to control than the endogenous cause.

Abeykoon (1987) in his study at Sri Lanka found that older women experience higher level of infant and child mortality.

Agarwala in 1972 opined that high infant death is observed in cases of young mother.

Sharma (1989) found that infant and child mortality among the rural poor in Uttar Pradesh is higher than among the urban counterparts.

Rahman et. al. (1993) stated that infant mortality is higher in rural areas than in urban areas in the developing countries because of the differences
of standard of living, health condition, availability of public health facilities.

Mahadevan et. al. (1986) studied mortality in neonatal and postnatal period and reported that male mortality is greater than female mortality among Muslim Harijons and caste Hindus.


Vaidyanathan in 1989 stated that education of women is necessary. It exerts an influence on the mortality of infants.

Ram (1989) studied the Kashmiri pandit women and reported that lower age group mothers have high reproductive wastage than the mothers of higher age group.

Ghosh (1969-70) found that low birth weight babies are related to per capita income as well as literacy and education of the parents.

According to Chandrasekhar (1959) factors associated with infant mortality may be grouped into four groups and they are (i) biological, (ii) economic, (iii) social and cultural and (iv) medical and pathological.

Yankaur (1959) pointed out that in India social institutions, pattern of behaviour and ways of thinking are etiologically related to infant mortality.

Rao in 1972 pointed out that certain customs and habits e.g. branding the skin, applying cow dung to the cut end of the umbilical cord, frequent purgation, faulty feeding and weaning practices are some of the cultural factors associated with high infant mortality in India.

Simmons et.al. (1979) emphasized on the importance of the village health environment for infant and child survivality.

Gandotra, Das and Bhatt (1980) observed that the most important factors influencing seminatal (early neonatal) mortality are the birth weight and the maternal conditions at the time of birth.
Srivastava and Saxena (1980) concluded that the incidence of infant mortality is lower:

- where the mothers availed of regular antenatal care
- when the birth weight of the child was the normal weight of 2.5 kgs. and above and
- when the nutrition value of food given to the infant measured by the feeding index was higher.

Bhattacharya, Srivastava and Lamba (1980) concluded that some of the factors like environment, sanitation, education, economic conditions, food habits, living pattern and cultural practices exert an influence on the mortality of infants.

The hospital-based studies conducted by Agarwal et al. (1978), Kasturilal et al. (1974) and Puri et al. (1981) reported a U or J-shaped relationship between the age of the mother as well as birth order and early neonatal mortality.

The studies conducted by Bhandari et al. (1983), Ghosh et al. (1971), Karan et al. (1972) and Singh et al. (1982) found that neonatal mortality is much higher among infants weighing less than 2.0 Kgs. than the babies weighing more than 2.0 Kgs.

Rama Rao (1983) found that only six demographic and socio economic variables were important in explaining variations in the IMR values among 52 developing countries. And the six variables are crude birth rate ($X_1$), per capita calorie intake ($X_2$), population per physician ($X_3$), percentage of non agricultural workers to total workers ($X_4$), per capita income ($X_5$) and percentage of literates in the population of age 15 years and above ($X_6$).

Ilich (1976) used to look at health as a sector of development. The paradigm he uses in terms of optimal limited health care is what he calls as the recovery from society in terms of atrogenetic disease.
Driver (1963) in his studies among the central Indian women found the highest child mortality (41.3%) in the artisans. Among the cultivators, the child mortality percentage was found to be 30.4 and for professional and administrator group, to be 27.3. Therefore it is clear that child mortality is low in the high profession group.

Visaria (1999) worked out the level, trends and determinants of infant mortality in India. She stated that there is a relationship between beliefs and practices concerning the feeding of infants and the high levels of infant mortality.

Jain (1979) while explaining regional variations in infant mortality rates in rural India gave importance on medical and non-medical care.

Kumar and Datta (1982) highlighted some methodological issues. Their study helped to assess the impact of the efforts to prevent neonatal tetanus and encourage to use of oral rehydration therapy to control diarrhoea.

Khan in 1980 studied the correlates of infant mortality in rural areas of three districts of Uttar Pradesh.

Gandotra and Das (1979-80) reviewed the causes of death distribution of neonatal, postneonatal and infant deaths in Gujarat and found 10 factors divided into 5 broad groups (i) demographic (e.g. maternal age), (ii) socio-economic (e.g. mothers education), (iii) environmental, sanitation and hygiene (e.g. housing Condition), (iv) nutrient availability and (v) medical care (e.g. prenatal care).

Gunasekaran and Ramanujan worked in rural areas of Tamil Nadu during 1980-81 on infant and child mortality.

Srinivasan (1979) reviewed problems and issues involved in infant mortality on the basis of micro and macro data.

Mahadevan (1986) criticized the using of intermediate or proximate variables as determinants of mortality, because according to him these are
meant only for the study of fertility determinants. Reasons for his criticism are - identification of limited number of mutually exclusive intermediate or proximate variables through which all other variables - environmental, social, economic and cultural can affect mortality is a very important step forwarded for better understanding of mortality determinants.

Mosley and Chen (1984) incorporated both social and biological variables and integrated research methods employed by social and medical scientists. They grouped 14 proximate variables into 5 categories or factors-

- maternal factors: age, parity, birth interval
- environmental contaminations: air, food, water, fingers, skin, soil, inanimated objects; insect vectors
- nutrient deficiency: calories, proteins, micronutrients (vitamins and minerals)
- injury: accidental and intentional
- personal illness control: preventive measures and medical treatment

Jain (1984) questioned the inclusion of parity and birth interval as proximate variables by Mosley and Chen instead. According to him the appropriate proximate variables should be maternal health, pre-natal care and post-natal care.


The Sample Registration Survey in 1979 reported that for each state, infant and child mortality rates are much lower in urban areas than in rural areas.

Talwar differentiated the effect of infant mortality at individual and community level. In individual level, factors affecting infant mortality are-
time of conception (age of mother)
period of gestation (prenatal medical care)
time of delivery (type of attendants)
post natal period (immunization of infant)

Aykroyd (1971), Puffer and Serrano (1973) gave importance to the notion of congenital abnormalities as a major determinant of neonatal mortality.

Anderson et. al. (1943) found that the frequency of low birth weight babies is high among the mothers below 20 years of age.

Lesiniski (1962) and Achar and Yankaver (1962) reported that the birth weight of babies and maternal age are related to each other.

Millis in 1954 reported that older mothers gave birth to lighter babies.

Sarma and Sundararaj (2001) elaborately reported about the causes of anemia among children in Delhi.

Seshadri and Gopaldas (1989) reported that anemia results in poor performance in academic test hence iron supplementation for three or more months results in significant improvement in academic performance.

Works done in North-East India

Das and Das (1973) studied the child mortality in a Kachari village. Choudhury (1993) studied the aspects of fertility and child mortality of the Mismis of Arunachal Pradesh.

Baruah S.K (1980) studied problems relating to fertility among the Khasis of Meghalaya.

Das R. in 1991 studied the child mortality among two caste groups of Mirza in Kamrup district of Assam.

Adak D.K. (1993) discussed the child mortality among the tribal populations of Meghalaya. Here mortality pattern and its bio-social proximates were
Population Research Centre Gauhati University in their report 1985-86 and 1992-93 dealt with different aspects of child mortality in North-East India.


Mandal B. (1992) studied the four population groups regarding the causes and effects of birth weights.

Kalita in 1997 studied some aspects of demography of the Bodo Kacharis and the Kalitas of Rani block area of Kamrup district, Assam.

Devi in 1980 studied the body dimensions of newborn babies and parturient mothers.

NFHS (1992-93) worked on contraceptive use and reported that in India there is a strong demand for temporary spacing method. Information regarding maternal and child health topics such as breast feeding, infant and child nutrition, were also included.

Sarma (1991) studied the infant and child mortality of the Pati Rabhas of Boko area, Kamrup, Assam.

Assam Area Project (AAP) of India Population Project (IPP)-IX implemented in Assam since 1994 conducted a coverage survey on Morigaon and Dhubri district of Assam under the headings of attainment of health goal infrastructure development etc. of women and child health services.

Mazumdar. G. in 2000 reported the causes of child mortality among the Harijans of Guwahati.

Borkataky. M. in 2004 studied the mortality and morbidity of the 0-5 years children of the tea working populations of Dibrugarh District, Assam.
AIMS AND OBJECTIVES

The aims and objectives of the present study are-

- To study the demographic profile of both the Kayasthas and the Kaibartas of North Guwahati, Kamrup, Assam
- To study the impact of medical and nonmedical health care practices in antenatal stage
- To see the effect of medical and nonmedical health care practices at the natal stage
- To see the influence of medical and nonmedical health care practices on infant mortality and morbidity in postnatal stage
- To see the effect of demographic factors on infant mortality and morbidity
- To see the effect of socio-economic factors like education and occupation of parents on infant mortality and morbidity
- To see the effect of environmental factors on infant mortality and morbidity
- To find out the patterns of morbidity and causes of death of the infants
- To see the nature of treatment that the infants get at the time of illness
- To see the traditional health care practices including the use of local herbal medicines during antenatal, natal and postnatal periods.
- To find out the nutritional status of the mothers and their children

MATERIALS AND METHODS

For the present study the data have been collected mainly by interview method using structured schedules. The observation method was also applied wherever necessary.
A demographic survey schedule was used to collect information regarding age-sex distribution, type of family, size of family, marital status, education, occupation, houses and sanitation, sources and treatment of drinking water etc.

A second schedule was used to collect data on health care practices of the mothers during antenatal period. This schedule includes information like health condition of the mother during pregnancy, diet, nature of work, rest, routine visit to doctors, immunization, taboos etc.

A third schedule was used to collect information on natal, neonatal and postnatal care which include place of birth, attendant at birth, cutting of umbilical cord, cord care, initiation of breast feeding, weaning, supplementary food, child rearing practices, patterns of diseases and nature of treatment of the infants, traditional beliefs and practices of child care etc.

Anthropometric measurements like circumference of head, mid upper arm circumference, weight, height of the infants were taken with the help of the anthropometer, tape and weighing machine. The height and weight of the mothers were also taken to find out the nutritional status of the mothers. For the assessment of malnutrition height and weight measurements were taken on each subject following standard technique given by Weiner and Lourie (1981). The value of body mass index (BMI) was calculated for each subject as: Body Mass Index (BMI) = Weight (Kg.)/Height (m².) The criteria used for finding the prevalence of malnutrition in the present study have been given by World Health Organization (WHO 1995).

To collect the data mothers were mainly interviewed. The help of other family members were also taken. Help of local doctors and hospital staff was also taken whenever necessary.

For the present study 162 Kayastha and 239 Kaibarta households were visited to collect the data for demography. Out of these 206 Kayastha and
285 Kaibartra mothers having children in the age group of 0-3 years were selected and interviewed to collect data on infant mortality, morbidity and health care practices. Data for traditional health care practices of children of 0-5 years age group were also collected.

The data so collected have been analyzed and classified systematically. Information furnished by the respondents have been transferred from the interview schedules to data sheets and then sorted out according to age, sex and caste. Quantitative data have been presented in the tabular form. Diagrams for graphic presentation of data are also presented where necessary. Some photographs have also been included as a part of the study.

STUDY AREA

On the eastern part of India lie the seven states known as North eastern states or states of seven sisters commonly known as the North-East. Assam is one of these seven states. It is located between latitudes $24^\circ 10'\ N$ and $27^\circ 58'\ N$ and longitudes $89^\circ 49'\ E$ and $97^\circ 26'\ E$. (Kausik and Kausik : 1999) Assam is surrounded by Bhutan and Arunachal Pradesh on the north, Nagaland, Manipur and Arunachal Pradesh on the east, Meghalaya, Mizoram and Tripura on the south, and Bangladesh, Meghalaya and West Bengal on the west. Assam is connected with the rest of the Indian Union by a narrow corridor in West Bengal that runs for 56 kms. below the foothills of Bhutan and Sikkim. Assam is famous for the one horned rhino (Rhino cerous unicornis); its scenic beauty, natural resources, historical places and temples. It has a population of 26.6 million according to 2001 census. In 2001, the population density per km$^2$ in Assam was 340, compared with 324 in India as a whole. The per capita income of its population is lower than the national average. In terms of the literacy rate, Assam is near the average for India. According to 2001 census the literacy rate of Assam is 64.28 percent with 71.93 percent male literacy rates and 66.03 percent female which is higher than the national female literacy of 54.16 percent.
Kamrup is one of the twenty districts of Assam. Its eastern side is surrounded by Darrang district, on its west lies the Nalbari district, towards its north the state of Bhutan is there and the Meghalaya state is in its southern side. Recently Kamrup district has been divided into two districts namely Kamrup Nagar (urban) and Kamrup village (rural).

Kamrup district lies between 25.43° and 26.51° North Latitudes and 90.36° and 92.12° East Longitudes. Maximum portion of its land is plain and the mighty river Brahmaputra flows in the east-west direction through it.

There are two sub-divisions of Kamrup district, namely Guwahati sub-division and Rangia sub-division. The area of Kamrup district is 4345 sq.kms. (1562.66 sq.miles); of which 29,89,012 bighas 2 kathas 7 1/2 lochas (1079.03 sq.miles) falls under Guwahati sub-division and the rest 9,36,326 bighas, 14 lochas (483.63 sq.miles) is included under Rangia sub-division (Rajguru and Borgohain: 2004).

Deputy Commissioner is the head of the Kamrup district in all administrative functions. Under him there are Additional Deputy Commissioners, Magistrates Sub-Divisional Officer (S.D.Os), and other Officers who help the office of the Deputy Commissioner function.

North Guwahati

The historic North Guwahati is situated at a distance of about 30 Kms from Guwahati on the northern bank of the mighty river Brahmaputra. On the east of North Guwahati lies the river Bornadi (a tributary of the river Brahmaputra). On its west lies the area known as Amingaon. Chowki Tinali is in the North and the river Brahmaputra is on the South of North Guwahati.

To reach North Guwahati, from Guwahati—one could go by ferry service or by speed boat crossing the river Brahmaputra. One can drive over the bridge called "Saraighat". There is A.S.T.C bus, private bus and trekker services from Guwahati to North Guwahati. The National Highway 31 passing...
by the side of North Guwahati touches Gouripur area of North Guwahati. Another main road from Amingaon also passes through North Guwahati.

North Guwahati has a Town Committee and a Gaon Panchayat to look after all civic and development matters. The Town Committee, includes the areas called Rajaduar, Madhayam Khanda, Pachim Rajaduar, Silsako, Dihing satra, Majgaon, Manikarneswar, Tilinggaon, Silarmukh, Barichuk, Ghoramara, Mariapatty, Sreenathpatty, Murgapatty, Ashwaklanta, Cutting Pahar and Lathiabagicha. Under the town committee there are 2148 holdings in four wards. Ward I has 609 holdings, ward II has 443, ward III has 573 and ward IV has 523 holdings. Those wards consist of several villages like

- **Ward I**: Cutting Pahar, Ghoramara, Tilinggaon, Mariapatty, Murgapatty, Sreenathpatty, Lathiabagicha
- **Ward II**: Majgaon and Dihing Satra
- **Ward III**: Silsako, Ashwaklanta, Madhyam Khanda
- **Ward IV**: Manikarneshwar, Rajaduar, Pachim Rajaduar, Silarmukh and Barichuk

The Gaon Panchayat includes Gouripur, Abhaipur, Kota bazar, Raahdhala, Madhupur, Rudreshwar, Bihlagani, Rangmahal, Jollah and Sandara.

For the present study the following areas of different municipal wards were visited to collect the data from the Kayasthas and the Kaibartas

- **Ward I**: Tillinggaon and Ghoramara
- **Ward II**: Dihing Satra and Majgaon
- **Ward III**: Ashwaklanta, Silsako and Madhyam Khanda
- **Ward IV**: Rajaduar, Pachim Rajaduar and Manikerneshwar

The houses of the survey area are close to each other and are connected by lanes and byelanes, which are both gravel roads and pitch roads.
People of North Guwahati are engaged in service and other types of occupations in maximum. Agriculture is not the primary means of livelihood for them. People are very religious and are mostly devotees of Lord Krishna. In each and every temple morning and evening prayers are held every day according to the rites and rituals. People enjoy the festival of "Holi" with great enthusiasm. The near and dear ones staying at distant places gather there during the "Holi" festival - the festival of colours.

North Guwahati has many temples. Among them, Ashwaklanta, Dol Gobinda, Gopinath, Jagarnath and Dirgheshwari temples are famous. There is a location called "Kanai barakhi bowa sil" in Manikerneshwar. It is believed to be a place where Lord Krishna used to practise fishing. North Guwahati has three historic "Satras" Auoniati Satra is situated between Silsako and Majgaon, Dihing Satra is situated at village Dihing Satra and Garmur Satra is situated at Madhyamkhanda. Here the disciples are given "Saran-bhajan" (initiation into Vaishnava religion).

The office of the sub-divisional collector to which North Guwahati belongs is situated at Amingaon of North Guwahati.

There are several educational institutions in North Guwahati. Several lower primary schools, High schools, College, I.I.T. Guwahati, one sanskrit training institute, one Hindi training college, Ananda Ram Barua Institute of language and culture are worth mentioning. The lower primary schools provide mid-day meals to its pupils. The food is vegetarian. It includes rice, dal, vegetables or sometime "Khichiri". There is one anganwadi centre at Abhaipur.

The Rajive Gandhi sports complex is also situated at Amingaon of North Guwahati, where some games and sports events of 33rd National games were held in February, 2007.
There is one telecommunication office, one police station, three banks namely United Bank of India, Central Bank of India and one State Bank of India are there at Majgaon. There is the facility of postal service also and it is situated at Madhyamkhandha. The pincode of North Guwahati is 781030. The S.T.D. code for North Guwahati is 0361. The Gas Cracker Project is also situated at Abhaipur of North Guwahati.

Regarding the communities residing in North Guwahati it can be said that besides the scheduled castes and General Castes people many other communities live in North Guwahati. The Bodos, the Nepalis, the Muslims, the Ahoms, the Mikirs (Karbis) are worth mentioning.

Two markets, namely, Dirgheshwari weekly market and Majgaon evening market and several shops fulfill the need of essential commodities of daily consumption of the people. Since North Guwahati is rich in temples, religious institutions and satras, it always attracts a good number of devotees from different parts of Assam. A large number of devotees visit the famous "Dol Gobinda Temple" every day.

PERIOD OF DATA COLLECTION

The data for the present study have been collected in different phases. It was started in the months of January, 2004 and continued upto February, 2005. The researcher had to discontinue her field visit during too windy and summer season when the river Brahmaputra rose in torrents.

OBSTACLES FACED DURING DATA COLLECTION

Not much difficulties were faced during the period of data collection in North Guwahati. Sometimes during windy and summer season whenever the researcher missed the ferry service from Guwahati, she had to cross the river Brahmaputra by the speed boat. She was scared at the very beginning, but later on she became accustomed. For going to the villages which were a bit far from the "ferry ghat" (ferry stoppage) hired rickshaws or autorickshaws
were available but on return journey hardly could the investigator get a rickshaw and she had to move on foot. During winter season it becomes dark very early and the village streets are without any street light. So, the investigator had to return home early; but in many such occasions the villagers helped the investigator in reaching "ferry ghat". As the people of the present study use to speak Assamese and they could understand what the investigator used to ask and they had no problem in responding to the queries. In some of the families the mothers could not make themselves free with the investigator at the beginning but later on they became friendly to each other. At the later part of the fieldwork the days were quite enjoyable and memorable for the investigator. The investigator used to think as if the people were known to her from quite a long time. The obstacles that the investigator faced during the field work are very few in comparison to the sweet memories of the field work.

STATISTICAL CONSIDERATIONS

To find out the variations if any among the two castes of the present study percentile distribution and the tests of significance (x^2 tests) have been carried out as statistical considerations.

ABOUT THE PEOPLE

The historic North Guwahati is inhabited mainly by the people of the Assamese Community. They are mostly Hindu by religion. For the present purpose two castes, namely, the Kayasthas and the Kaibartas have been selected. These two are the major castes of North Guwahati area.

THE KAYASTHAS

The term 'Kay' is said to be derived from the word 'Khaith' meaning royal family (king's family) of the Khatrias. In ancient times a group of people known as 'Kayath' are said to have migrated to India and Persia from the middle East where they were called 'Kaith'. The Kayasthas held two prestigious
portfolios namely 'Bharal Kaith' (Store in charge) and Bharal-bar-Kayastha (Chief in charge of the store in the then state administration (Singh 1991). They are distributed in the Brahmaputra Valley particularly in the districts of Kamrup, Darrang, Barpeta and Goalpara. The Kayastha dominated villages of North Guwahati are - Silsako, Rajaduar and Madhyam Khanda. The mother tongue of the people is Assamese. Women are seen producing cloth in their own hand looms for their daily use. Females wear makhela chadar as well as sarees. Males wear dhoti Kurta and modern outfits too. Young girls wear all modern outfits. Most of the older generation people had the sacred thread called "Lagun" though it is not in practice now a days. The people of this caste are generally service holders. Originally their titles were - Dutta, Bhuyan, Kayastha, Ghose, Baruah, Kakati, Choudhury etc. Most of them lost their original identity due to admixture with the people of different cultures. They have their own priests to perform the religious rites. Marriage by negotiation is the main type of marriage. Monogamy is the rule amongst them. Both joint and nuclear type of families are found. In case of joint family the eldest family member is the head and in case of nuclear family the father is the head. The family being patrilineal, the right to inheritance of parental property passes in the male line. The status of women is not lower than that of the male. Of the four caste systems-the Brahmin, the Khatriya, the Vaishya and the Sudra. the Brahmins are at the top of the rank followed by the Khatriyas. Then come the Vaishyas and the Sudras. Right from early days there are strict rules and restrictions regarding marriage. Taking food, making friendship with low caste people and some of them are still continuing among the Kayasthas of the present study.

A ceremony is performed before the birth of a child i.e. during the 5th month of pregnancy, locally known as "Panchamrita Khowa" i.e. taking of five delicious sweets. They observe month long pollution period during child birth. On 5th or 6th day of child birth the mother comes out of the room, clean
herself and the baby. The "Ganak" (village astrologer) is invited to calculate the "rashi" i.e. the zodiac sign of the child at the time of birth and gives a name accordingly. Then he prepares the baby's horoscope. On the 30th day the final purificatory rites are performed and it is locally called "amohiya". "Naam Prasanga" (religious prayer functions) is performed on that day and people are invited for light refreshment. Another ceremony called 'anna prasana' (giving of first solid food "rice" to the baby) is performed by the Kayasthas. In case of girls it is observed when the baby is nine months old and in case of boys it is performed at eight months.

THE KAIBARTAS

In India there are certain specialized fishing castes. The caste system has confined fishing as a profession strictly for certain particular community who are considered to have low social status. The social stigma attached to the profession is so pronounced even today that any person engaged in fishing trade is looked down upon (Saha: 1970).

Like in other parts of India, Assam possesses a vast fresh water fishing resources. It has no marine fisheries. In Assam, as in other parts of the country fishing is a caste based occupation practised by the Namasudra, Kaibarta, Jhalo-Malo, Patni and Jalkeot castes. They are all Hindu by religion.

**TABLE-I**

DISTRIBUTION OF SCHEDULED CASTE POPULATION BY SEX IN KAMRUP DISTRICT AS PER CENSUS 1991

(For each caste separately)

<table>
<thead>
<tr>
<th>ALL SCHEDULED CASTES</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>1,50,743</td>
<td>79,010</td>
</tr>
<tr>
<td><strong>Rural</strong></td>
<td>98,212</td>
<td>51,241</td>
</tr>
<tr>
<td><strong>Urban</strong></td>
<td>52,531</td>
<td>27,769</td>
</tr>
</tbody>
</table>

28
<table>
<thead>
<tr>
<th>Location</th>
<th>Males</th>
<th>Females</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BANSPHOR</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5,179</td>
<td>2,733</td>
<td>2,446</td>
</tr>
<tr>
<td>Rural</td>
<td>471</td>
<td>264</td>
<td>207</td>
</tr>
<tr>
<td>Urban</td>
<td>4,708</td>
<td>2,469</td>
<td>2,239</td>
</tr>
<tr>
<td><strong>BHUINMALI, MALI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12,110</td>
<td>6,227</td>
<td>5,883</td>
</tr>
<tr>
<td>Rural</td>
<td>8,866</td>
<td>4,567</td>
<td>4,299</td>
</tr>
<tr>
<td>Urban</td>
<td>3,244</td>
<td>1,660</td>
<td>1,584</td>
</tr>
<tr>
<td><strong>BRITTIAL-BANIA, BANIA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6,601</td>
<td>3,526</td>
<td>3,075</td>
</tr>
<tr>
<td>Rural</td>
<td>3,836</td>
<td>2,028</td>
<td>1,808</td>
</tr>
<tr>
<td>Urban</td>
<td>2,765</td>
<td>1,498</td>
<td>1,267</td>
</tr>
<tr>
<td><strong>DHUPI, DHOBI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7,272</td>
<td>3,923</td>
<td>3,349</td>
</tr>
<tr>
<td>Rural</td>
<td>1,788</td>
<td>993</td>
<td>795</td>
</tr>
<tr>
<td>Urban</td>
<td>5,484</td>
<td>2,930</td>
<td>2,554</td>
</tr>
<tr>
<td><strong>DUGLA, DHOLI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>75</td>
<td>66</td>
</tr>
<tr>
<td>Rural</td>
<td>66</td>
<td>35</td>
<td>31</td>
</tr>
<tr>
<td>Urban</td>
<td>74</td>
<td>39</td>
<td>35</td>
</tr>
<tr>
<td>Area</td>
<td>Males</td>
<td>Females</td>
<td>Total</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------</td>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td><strong>HIRA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7,799</td>
<td>4,045</td>
<td>3,754</td>
</tr>
<tr>
<td>Rural</td>
<td>6,610</td>
<td>3,417</td>
<td>3,193</td>
</tr>
<tr>
<td>Urban</td>
<td>1,189</td>
<td>628</td>
<td>561</td>
</tr>
<tr>
<td><strong>JAL KEOT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,732</td>
<td>944</td>
<td>788</td>
</tr>
<tr>
<td>Rural</td>
<td>857</td>
<td>441</td>
<td>416</td>
</tr>
<tr>
<td>Urban</td>
<td>875</td>
<td>503</td>
<td>372</td>
</tr>
<tr>
<td><strong>JHALO, MALO OR JHALO-MALO</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6,934</td>
<td>3,625</td>
<td>3,309</td>
</tr>
<tr>
<td>Rural</td>
<td>5,243</td>
<td>2,716</td>
<td>2,527</td>
</tr>
<tr>
<td>Urban</td>
<td>1,691</td>
<td>909</td>
<td>782</td>
</tr>
<tr>
<td><strong>KAIBARTA OR JALIYA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>40,651</td>
<td>20,986</td>
<td>19,665</td>
</tr>
<tr>
<td>Rural</td>
<td>23,945</td>
<td>12,401</td>
<td>11,544</td>
</tr>
<tr>
<td>Urban</td>
<td>16,706</td>
<td>8,585</td>
<td>8,121</td>
</tr>
<tr>
<td><strong>LALBEGI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>73</td>
<td>50</td>
</tr>
<tr>
<td>Rural</td>
<td>99</td>
<td>58</td>
<td>41</td>
</tr>
<tr>
<td>Urban</td>
<td>24</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Community</td>
<td>Total Males</td>
<td>Total Females</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td>MAHARA</td>
<td>130</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>21</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>109</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>MEHTAR, BHANGI</td>
<td>2,009</td>
<td>1,095</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>287</td>
<td>168</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>1,722</td>
<td>927</td>
<td></td>
</tr>
<tr>
<td>MUCHI, RISHI</td>
<td>2,188</td>
<td>1,268</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>873</td>
<td>472</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>1,315</td>
<td>796</td>
<td></td>
</tr>
<tr>
<td>NAMASUDRA</td>
<td>54,565</td>
<td>28,683</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>43,370</td>
<td>22,711</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>11,195</td>
<td>5,972</td>
<td></td>
</tr>
<tr>
<td>PATNI</td>
<td>543</td>
<td>297</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>375</td>
<td>201</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>168</td>
<td>96</td>
<td></td>
</tr>
</tbody>
</table>
The Kaibartas are considered as a scheduled caste in the census of Assam. Earlier they were known as Nadial or Jalia. The word Kaibarta consists of two parts "ke" means water and "barta" means depending upon (Das: 2002).

In North Guwahati the villages like Ghoramara, Majgoan, Tilinggaon, Dihing Satra, Manikarneshwar and Ashwaklanta are inhabited by the Kaibartas. They belong to the fisherman community and they are traditionally engaged in the fishing trade. For catching fish they use different tools and equipment depending upon the type of fish. Among them net ('jal') is seen to be prominent with variety of its kind, such as ghat jal, langi jal [kawai langi jal, puthi langi, bor langi, garai langi, ghuk langi jal (to catch hilsa fish) kheyali jal] etc. Among the other equipments polowa (one kind of conical-shaped equipment made of bamboo sticks), chepa (one kind of drum like equipment made of bamboo sticks), khoka, atar, jathi, jakoi are important.

The Kaibartas of the present study do not have cultivable land. Generally the women folk do not go for fishing, rather they perform household activities whereas in some rare cases it is seen that women also take part in fishing or in selling fishes. These female fish sellers are called "poharis" Some of the Kaibarta women engaged themselves in various occupations like weaving, day labour, teaching etc. They live by the side of the river and practise caste endogamy. They do not have much knowledge about their gotra (clan). Among the Kaibartas monogamous type of marriage is found. Marriage by
elopement is much familiar amongst them. Traditionally inheritance is always through the male line.

After giving birth to a baby a woman stays separately for a period of seven days. On the sixth or the seventh day the astrologer (Ganak) prepares the baby's horoscope. After completion of one month of 'akhous' (pollution period) a purificatory rite is performed. After that they perform another purificatory ceremony know as 'Sudhibhanga'. On that day the baby's hair is shaved by a barber. The whole family is then purified. The name giving ceremony is also performed on that day. "Naam Prasanga" (holy performance) is performed in the house. Guests are invited for refreshment. Just at the time of eruption of milk teeth there is another ceremony known as "annaprasana" (First rice giving ceremony). The first rice is given by the maternal uncle of the child. For a male child it is performed in an even month and for a girl child, in an odd month. Adulthood ceremony for girls known as "toloni biah" (Attainment of puberty) is also performed by the Kaibartas.

They generally cremate their dead bodies except in the unnatural deaths such as a snake bite, suicide etc. Their mourning period continues for 11-13 days. After the independence of the country sufficient progress of the members of this community has been observed in various fields.

The traditional fishing occupation of the Kaibartas of North Guwahati is not so favourable for earning their livelihood. Hence most of the fishermen here are changing this occupation to other professions. As a result, some members of the fishing community have gradually engaged themselves in with some small tea stalls, hand-cart and rickshaw pulling, daily labourers, auto drivers, speed boat drivers etc. The fisher women are also engaged as maid servants for their livelihood. These fishing folks are collectively called 'Dom'. Although they are presently in transition and adopting other occupations yet they are known as a fishing community and the place where they live.
collectively is also known as fishermen villages locally called "Dom village" or "Dom gaon" or by the particular village name.

Though North Guwahati is a satellite town still a rural environment prevails there. Generally the people are simple, kind and hospitable. They practise some cultural beliefs and practices. The day starts with cleaning the house, courtyard etc. After bathing the women folk, if they have a temple in their house, offer prayer there, otherwise they put an earthen lamp or an incense stick near a "tulsi plant" (a kind of sacred basil) in the courtyard, because they believe that doing so Lord Vishnu will give them blessings. After that they involve themselves in doing household duties; preparing food, getting their children ready for school, making tiffin for school going children and accompanying them to school, if they are too young and taking care of the baby that is at home. Again when school is over they bring back their children. The husbands go to their respective jobs. In the leisure hours those women who have handlooms use to keep themselves busy in weaving, girls keep themselves busy in embroidery, watching T.V or listening to music or gardening etc. During holidays the mothers take special care of their children at home irrespective of their age. Mothers take special care of their children falling ill, visiting and consulting doctors if necessary. Other family members also take equal care. Those mothers who are in nuclear families are helped by their husbands generally and by the neighbours on certain occasions.

MEDICAL FACILITIES AT NORTH GUWAHATI

Regarding the medical facilities available in North Guwahati area it can be mentioned that there is one Primary Health Centre in Abhaipur, College road. It has good concrete boundary wall with an iron gate. There is a sub-divisional medical officer. The detail of the hospital was reported to the investigator by the nurse of the PHC, Farida Begam and Block Extension Education officer Mr. Jatindra Nath Bora.
There are three doctors, five nurses, two watchmen, one sweeper, one laboratory technician and one driver. There is no washerman in the hospital. There is no gynaecologist and child specialist. For water facility only a hand pump is there. There is no running water facility. A generator was given by Director of Health services to combat power failure but later it became idle.

DOT facility (Curing Tuberculosis), Blood test for Malaria, urine and sputum test facilities are available there. The laboratory technician examines the samples. For detecting tuberculosis the doctors were trained by District Tuberculosis Centre, Guwahati. If a patient is found having TB virus in his sputum, he is referred to District Tuberculosis Centre. In the centre he is examined well and the centre provides free medicine to the patient. There is no surgery facility, but normal delivery facility is available in the primary health centre. Saline is given there to the patient if required. Medicines are collected from, medical store of the office of the Joint Director of Health services and are supplied to the patients free of cost. Tetanus toxoid and other vaccines are given in the primary health centre. Medicines are kept in deep freeze and in iller machines. On instruction from the office of Director of Health services to set up camps for free general check up, the primary health centre organizes the camp. During the camp period doctors from Gauhati Medical College hospital also visit to check up patients. There are five private pharmacies near the primary health centre and two of them open 24 hours. If some medicines are not available in the primary health centre then the medicines prescribed by the doctor are purchased by the patients from these pharmacies. There is no ambulance facility. A car is hired only for polio duty. There are six beds in the PHC. Generally for ailments like weakness, diarrhoea etc, small children and pregnant women are mostly admitted to the PHC.

The Drug Inspector concerned uses to give sudden visits to the primary health centre and sends his report to the Joint Director of Health Service.
There is a separate Nurse's room near the delivery room. The Nurses rest there; specially during night. At the back side of the primary health centre there are three doctor's quarters but two of them are in deplorable condition; only one is in good condition. Near the doctor's quarters there is one Nurse's quarter.

The sweeper cleans the PHC compound, bathrooms and other rooms and destroy the hospital wastes and other garbage at the back side of the PHC. The used injections are buried under the ground and others are destroyed by burning. The primary health centre (PHC) does not have a morgue.

Since the primary health centre is lacking in many facilities patients prefer to go to either Mohendra Mohan Choudhury Civil Hospital at Guwahati or Gauhati Medical College Hospital. Besides the primary health centre there are two sub centres; one centre is at Madhyam Khanda and the other is at Rangmahal.

There are three homeopathic centres. The Jaiguru Caliper centre is at Gauripur where artificial limbs are provided to the patients.