

Incidence of anaemia among women: the case of Assam

Mr. Sanjib Dutta^{1*}

^{1*} Assistant Professor, Department of Economics, Digboi Mahila Mahavidyalaya
sanjibdutta316@gmail.com

Dr. Daisy Das²

² Associate professor, Department of Economics, Cotton University
daisy.das@gmail.com

***Corresponding Author: Mr. Sanjib Dutta**

*Assistant Professor, Department of Economics, Digboi Mahila Mahavidyalaya
sanjibdutta316@gmail.com

Abstract

Anaemia is a serious health concern across the globe. India, especially Assam is not exception to it. Anaemia may cause maternal mortality and prenatal mortality. In addition it also increases risk of premature delivery and low birth weights. Anaemia among children may lead to other health problems in future to make life redundant, it reduces human productivity and causes poor level of concentration. The present study will try to analyse the incidence of anaemia among women in Assam, India. For that matter the study is based on secondary data which are collected from different reports published by government and non-government agencies. We find that anaemia has remained a chronic problem in the state. However, it is more prominent among women and girls are also prone to become more anaemic.

Keywords: Anaemia, iron deficiency, productivity, folic supplement

INTRODUCTION:

India has high prevalence of anaemia in comparison to many other countries in the world (Kapil and Bhadoria, 2014). According to the World Health Organisation, “Anaemia is a condition in which the number of red blood cells (and consequently their oxygen –carrying capacity) is insufficient to meet the body’s physiological needs”. It has several types. Iron deficiency anaemia is the most common one. Gardner and Kassbaum (2019) have studied about global, regional and national prevalence of anaemia and its causes during 1990 to 2019. They found that despite reduction in anaemia prevalence across the globe, the burden of anaemia remains persistently high in many regions and it calls for more attention and intervention. Anaemia can affect adults regardless of their age, sex and education level (Alok et al., 2012). However prevalence of anaemia among men is less in comparison to women. Iron deficiency anaemia reduces human productivity (Hunt, 2002). It also hampers the capacity for work especially for those who are engaged in heavy physical activities. Studies have found that anaemia may become the underlying cause of maternal mortality and prenatal mortality. In addition it also causes an increased risk of premature delivery and low birth weights. Further in case of infants and children it is associated with impaired physical and cognitive development and lowered resistance to disease (Sharma, 2003). Therefore, efforts must be taken towards spreading awareness about the various consequences of anaemia, which is usually preventable with early correction (Rohilla et al., 2010).

Although we can have a bunch of literature related to anaemia among women in India, but literature related to anaemia in Assam is very few and in a sense it is almost non-existent. Therefore, this study will be an attempt to bridge the gap in the existing literature.

REVIEW OF LITERATURE:

In this section the researcher has gone through the available literature in order to understand the different aspects of anaemia and related issues emerge over time.

Prevalence of any anaemia is very high India. Educated people with high standard of living are also anaemic, but the presence of severe anaemia among them is low. In case of pregnant women, frequent childbirth increases the degree of anaemia. Further, early entry to sexual union and motherhood also raises the severity of anaemia among women (Chellan and Paul, 2010). In addition to these factors vegetarian diet, having higher wealth quintiles, being in paid employment, rural residence can also affect the chances of having iron deficiency anaemia among women (Rammohan et al., 2012). Several studies have tried to identify the socio-economic and other determinants of anaemia among women (Agarwal et al., 2004; Chaudhary and Dhage, 2008; Kalaivani, 2009; Rao et al., 2010; Mehrotra et al., 2018; Yilma et al., 2020).

A notable finding is observed in the study of Agarwal et al.(2006), where the authors have claimed that severity of anemia is significantly higher in India as compared to the reported figures in the National Family Health Survey(NFHS)-2. However the study of Balarajan et al.(2013) have focused on social inequalities of anemia which is the need of the hour along its trends. In a similar kind of work, Rao et al.(2010), Mehrotra et al(2018) also have examined various social, demographic dimensions related to anemia among Indian women. Gupta et al.(2019) have moved to a different dimension regarding anemia among women by incorporating the issue of women empowerment in agriculture. Nutritional anaemia is more among lactating women as compared to pregnancy. As an immediate measure medical iron is necessary to control anaemia (Kapur et al., 2002). Similar call was made by Haider (2010) regarding Ethiopian women. On the basis of a community based study the author found that 50.1 percent Ethiopian women has iron deficiency. Another community based study conducted by Bansel et al.,(2013) has concluded that Muslim community women are more anaemic than non-Muslim women. Less health awareness, extreme poverty, large family size & overcrowding are the main reasons due to which Muslim women are found as more anemic.

Maternal anaemia is associated with increased risk of postpartum hemorrhage, low birth weight, small-for-gestational age babies and prenatal death (Nair et al., 2016). Therefore, efforts must be taken towards safe motherhood and spreading awareness about the various consequences of anaemia, which is usually preventable with early correction (Rohilla et al., 2010). Adolescent school girls have less knowledge about anaemia (Singh et al., 2019). They exhibited knowledge towards anemia but not adequate attitude and practice. However iron deficiency and iron deficiency anaemia is very much present among adolescent girls (Kumari et al., 2017). Strong predictor of anemia in these girls is history of excessive menstrual bleeding and vegetarian diet. Bharati et al.,(2009) have observed that the highest prevalence of anaemia were among older girls(15 to 19 years), illiterate girls living in the rural areas, girls in illiterate households, girls from households with a low standard of living, non-Christian girls, girls from schedule tribes, girls living in west India and married girls. Similar results have been presented by the studies of Mengistu et al.,(2019) and Chandrakumari et al., (2019).

Family background plays an important role in determining the prevalence of anaemia. The study by Mengistu et al.,(2019) have found that household monthly income ,family size, Intestinal parasite infections ,duration of menstruation and BMI for age are the main factors of causing anemia. The authors have also called for strategic prevention and early treatment. However along with tracing out the causes behind anemia, Chadrakumari et al.(2019) have found a significant relationship between anemia and lower socio-economic status of adolescent girls.

Anaemia can affect adults regardless of their age, sex and education level (Alok et al., 2012). Anaemia among men is an important public health problem (Didzun et al., 2019). However prevalence of anaemia among men is less in comparison to women.Iron deficiency anaemia reduces human productivity which in turn carries some economic losses (Hunt, 2002). Adults and children with anemia cost developing countries billions of dollars every year in terms of lost productivity. When the long-term impact of learning and motor impairments in children with anemia is added,

the figure becomes 4 percent of the GDP (Horton, 2003). Similar results have been offered by the studies of Horton and Ross (2003) and Alcazar (2013).

Based on the findings from literature review our study tries to assess the prevalence of anemia in Assam among women.

Objectives:

The objectives of the study are as follows:

- To study about the prevalence of anaemia in Assam in comparison to national scenario.
- To know about magnitude of anaemia across gender and districts in Assam.

METHODOLOGY:

Our study is a descriptive one. Therefore we describe the extent of anaemia and relevant issues associated with the theme. To carry out the study we have used on secondary data. Secondary data are collected from various sources like National Family Health Survey, Census of India, Human Development Reports, National Rural Health Mission, Socio-economic caste census, Planning and Development department report etc. It is mainly a quantitative study and observations of the researchers are also being incorporated. We have represented the data with the help of diagram as and when required.

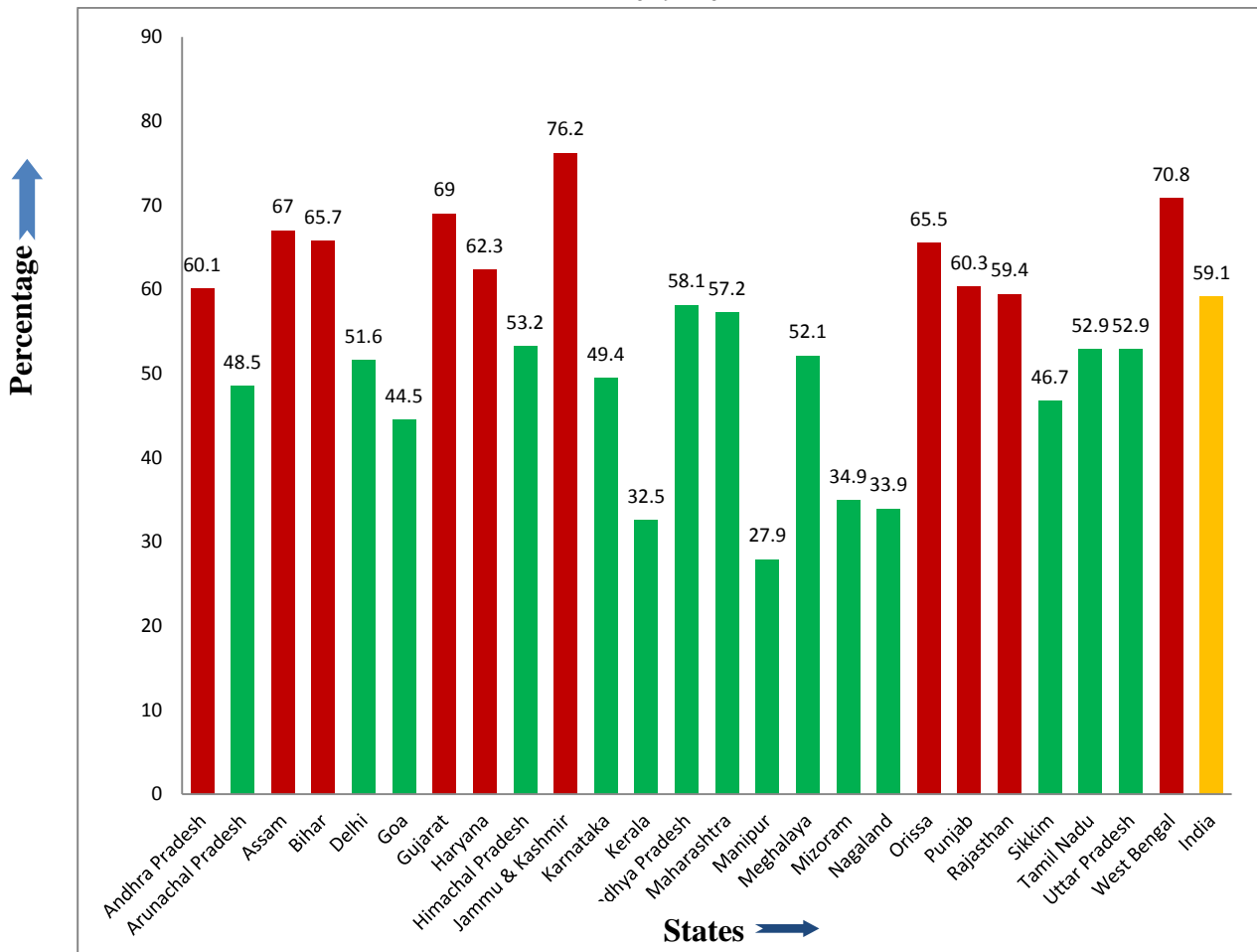
RESULTS AND DISCUSSION:

In 1998, the World Health Organisation had estimated that prevalence of anaemia among pregnant women in developed and developing countries were 14 percent and 51 percent respectively and it was 65-75 per cent in case of India. A deeper look into the reports of NFHS will reflect the severity of the problem more clearly. Presence of anaemia is high among Indian women. NFHS provides information on various indicators of anaemia among women in India. It is found that across different age groups, 15-19 years age group has highest prevalence of any anaemia with 56 percent in 1998-99 and 54.1 percent in 2015-16. Rural women are more anaemic than women residing in the urban areas. On the basis of maternity status women are classified into three groups in NFHS reports. They are accordingly pregnant, breastfeeding and neither. Out of these three groups breast feeding women are more anaemic than the other two categories. Anaemia is very common among schedule tribe women with 64.9 percent in 1998-99 and 59.9 percent in 2015-16. Level of education has an important association with anaemia. This is because; if women are more educated then they are less anaemic and vice-versa. More over it is found that women having high wealth index are less anaemic than the women from low wealth index group. Indian men are also anaemic. As per the data provided by NFHS-IV, it is witnessed that 29.20 percent men of the age group 15-19 years are anaemic. Similarly in the age group of 40-49 years 24.9 percent men are anaemic. However it is worth mentioning that prevalence of anaemia is less among men in comparison to women in India.

Assam is one of the states where a large section of the population is anaemic. In fact, Assam stood as one of the top five states in terms of average prevalence of any anaemia during the last three considered years (i.e., 1998-99, 2005-06 and 2015-16 respectively) in India. In the year 1998-99 Assam had the highest prevalence of any anaemia among women with 69.7 percent among all the Indian states. During that year all India average was 51.8 percent only. For the same period out of 25 states under consideration 10 states had higher prevalence of anaemia in comparison to the national average. In 2005-06, prevalence of anaemia has increased to 55.3 percent at the national level, but in the same year Assam has witnessed 0.2 percent reduction in the prevalence of any anaemia among women with 69.5 percent. From 1998-99 to 2005-06, some states like- Andhra Pradesh, Bihar, Gujarat, Haryana, Madhya Pradesh, Uttar Pradesh and West Bengal have experienced increase in the prevalence rate of anaemia among women. A reduction has been seen in case of incidence of anaemia at national level during the period from 2005-06 to 2015-16. In the year 2015-16, presence of anaemia among women was 53.1 percent with a reduction of 2.2 percent

from the year 2005-06. During the same period Assam has experienced a sharp fall in the prevalence of any anaemia among women and the percentage has fallen to 46 percent (which is lower than the national average) in comparison to 69.5 percent in 2005-06. This change needs a critical assessment, because the state has observed a very high incidence of anaemia among women, i.e. 67 percent in the year 2019-20. It is higher than the national average of 59.1 percent. It is worth mentioning that in the same year 10 out of 25 states have higher amount of anaemia burden in comparison to the national level which is shown in Figure-1.

Figure-1: State wise comparison of prevalence of any anaemia among women in India in 2019-20

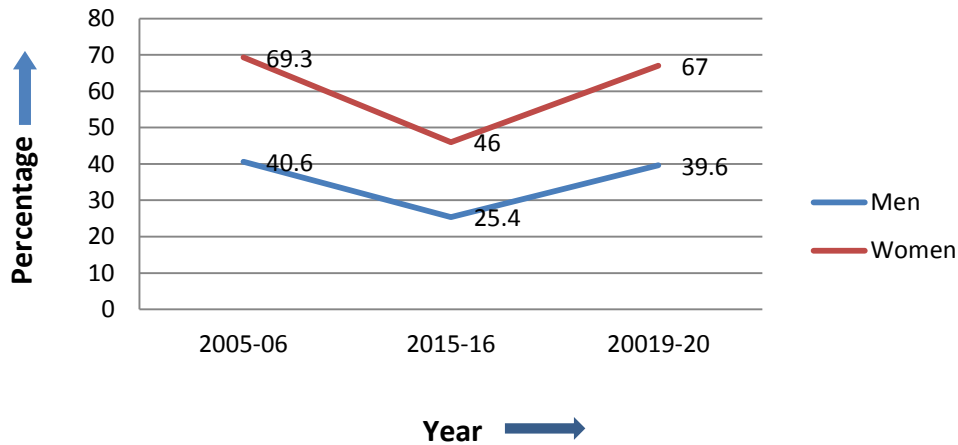


Source: Authors' compilation from NFHS-II, NFHS-III, NFHS- IV and NFHS- V

As per the latest report of National Family Health Survey (NFHS)-V for the year 2019-20, Assam has recorded highest increase in the prevalence of anemia among children under five years and women in the age group of 15-49 years, compared to that in the remaining 21 states and union territories covered in the fifth round of the NFHS conducted under the aegis of the Union Health Ministry for 2019-20(Outlook, 2021). This result necessitates some more intensive studies in the state for efficient handling of the issue.

There is inequality in the prevalence of anaemia among men and women in the state. It is represented in figure-2

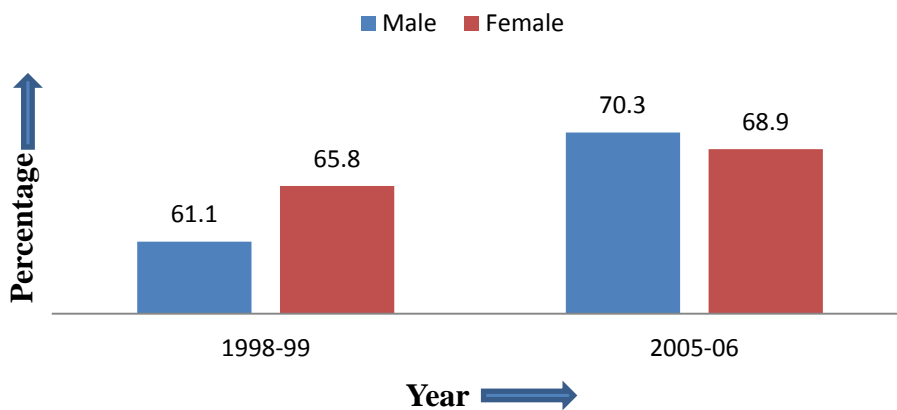
Figure-2: Prevalence of any anaemia across gender in Assam of age group 15-49 years



Source: Authors’ compilation from NFHS-III , NFHS- IV and NFHS- V

We observe that presence of anaemia among women is quite high in comparison to men in the state. This fact can be observed with due importance as the identification of factors behind will definitely help in bridging the gap across gender. At this point it is worth mentioning that the scenario is different regarding prevalence of anaemia among children in Assam.

Figure-3: Prevalence of any anaemia among children in Assam of age group 6-35 months

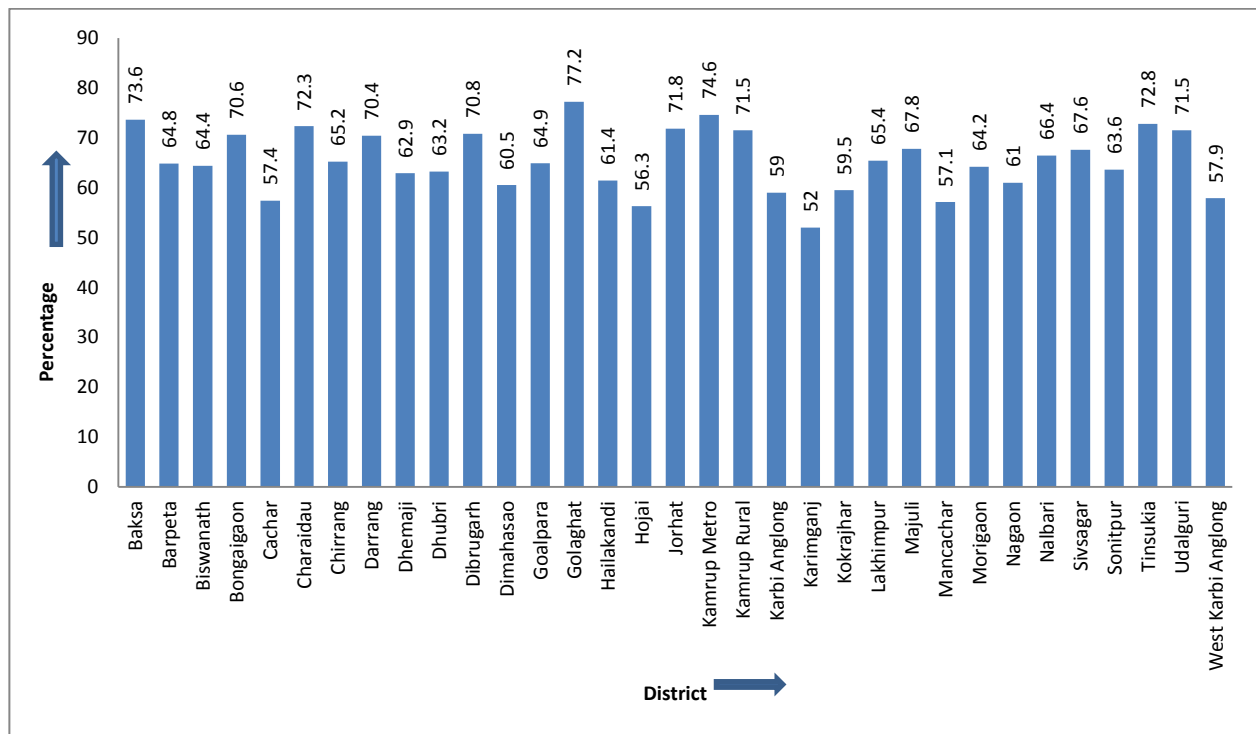


Source: Authors’ compilation from NFHS-II and NFHS-III

We find from figure-3, that during 2005-06 male children were more anaemic than female children. But in the same period among adults females are more anaemic than males. Now this finding may unfold certain detrimental belief of our society. Most of our societal structure prefer boy child over girl (Kumari et. al 2017). It is believed that boy will provide financial and emotional support and care, especially in parent’s old age; sons contribute to family wealth and property while daughters drain it through dowries (UNFPA, 2007). It is often visible that girls are not given proper share of food where as boys are given with more and better share. In most of the families women take food only after male members are done with their part. These unwritten norms in our families as well as in societies induce anaemia among women in our country.

There are variations in the distribution of anaemic women among the districts of Assam. Some of the districts have very high dominance of anaemia where as some other districts have low percentage of anaemic women in comparison to state average. Figure-4 depicts the distribution of anaemic women in Assam at district level.

Figure-4: District wise prevalence of anaemia among women of age group 15-49 years in Assam in 2019-20



Source: National Family Health Survey - V

In the year 2019-20, average prevalence of anaemia among women in Assam was 65.9 percent. We see from the figure 4 that out of 33 districts, 14 districts of the state have high concentration of anaemia in the year 2019-20. More importantly these districts constitute a significant part of the state's population. It implies a large section of the state's population is prone to be anaemic. The highest incidence of anaemia has been observed in case of Golaghat and lowest in case of Karimganj.

There are numerous interventions for anaemia reduction in India. To get rid of this problem India has launched National Nutritional Anaemia Prophylaxis Programme as early as in 1970. Under the National Iron Plus initiatives (NIPI), the government of India has provided daily doses of Iron and Folic Acid (IFA) to pregnant women for a period of 100 days during pregnancy. Despite of various Government-run programmes like Integrated Child Development Scheme (ICDS), National Nutritional Anemia Control Program (NNACP), Weekly Iron and Folic Acid Supplementation (WIFS), National Iron Plus Initiative (NIPI) have taken to combat anaemia in India, there is marginal decrease in prevalence of anaemia. Another important initiative from government to curb anaemia is the campaign of Anaemia Mukta Bharat (AMB). But Assam is still to improve its performance in it. As per the AMB score card for the year 2020-21 in the first quarter Assam stood at 13th rank out of 29 states. At the same time Assam is one of the highest anaemia prevailing states in the country. This fact should be taken into consideration while preparing different policies to curb this evil and for desired outcomes.

CONCLUSION:

In India, and particularly in Assam, anaemia has always been a chronic health issue. It is not anaemia is not curable. However, lack of awareness and lackadaisical attitude has always aggravated the issue. Over the years, the Indian government has implemented a number of programmes with the help of state governments. However, in order to reap the full benefits of those programmes, they must be implemented with efficiency and equity. More education should be imparted to women and there should be awareness programs in the rural areas. Gender equality should be ensured in case of job with parity in remunerations. Most importantly mass awareness

should be spread to control anaemia. For that matter government, society and different non-governmental organizations should go hand in hand.

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