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Quality of new born and child care: A vaccination facility assessment in Rural Berhampore, Murshidabad, and West Bengal, India

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ABSTRACT

Life saving vaccination plays a vital role in protecting the life of many new born babies throughout the world. New born and child care related challenges facing by India are more adverse than any country of the developing world. Mother knowledge about new born care is very significant for the survival of a new born baby. Different country takes different step for the sake of new born care in their corresponding health center. Healthy new born baby and healthy child are the reflection of healthy mothers and good medical facility of a country. It has been found that health infrastructure try to expand immunization coverage in rural Berhampore. But lack of awareness among the rural mother, the government initiative for neo-born and child care couldn't reach at target level.

Key Words : New born baby, Neonatal care, Vaccine, Low Birth Weight (LBW), Breast feeding

INTRODUCTION

Improving new-born and child care is a part of improving socio-economic condition of the local people, which create a wide gap between rural and town in health care facilities for new-born baby and child in a region. Neonatal mortality share more than half of infant mortality in India. Minimizing childhood mortality is a very significant aim of health department of India. New-born care immediately after delivery is very important for controlling and reducing neonatal morbidities and mortalities. India has made remarkable success in reducing child death rate but neonatal death still remain high in respect of proportion to total child death.

Objectives:

1. To know the new born weight and related aspects of it.
2. To describe the pattern of new-born and child vaccination practices in rural Berhampore of Murshidabad district.

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METHODOLOGY

This has been done on two phase basis, *viz.,* – database collection and data analysis. Secondary data have been collected from news paper, Chief Medical Officer of Health (CMOH), Karnasurbarna Block Primary Health Center (KBPHC). Thereafter, these data have been analysed and interpreted applying various statistical techniques.

RESULTS AND DISCUSSION

Distribution of male and female new-born baby reflects the mentality of a parent and a society of a region. Total number of male new born baby has been decreased remarkably from 2013 - 2014 to 2016 – 2017. On the other hand in Fig. 2 shows that female new born baby has also been decreased from 2013-2014 to 2016-2017. Overall total number of new born baby has been decreased from last couple of years which is a good indication of population control in a region.

But total number of female new born baby is lower than the total number of male new born baby which is not good indicator for age-sex ratio of a region (Fig. 1 and 2). Each and every year all the new born baby weight has been measured at birth. It is the good government step to know the nutritional status of new born baby as well as mother.

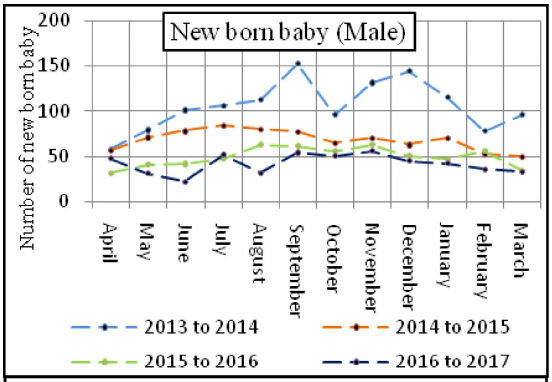

Fig. 1 : Temporal distribution of new-born baby (Male)

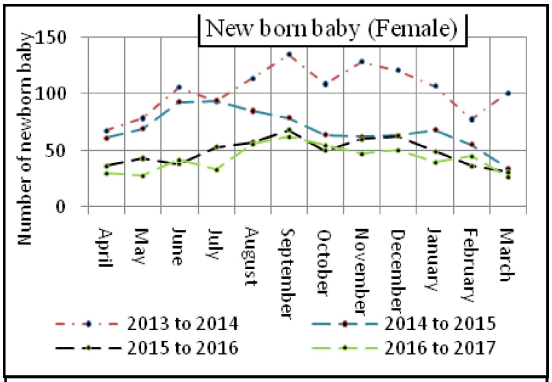

Fig. 2 : Temporal distribution of new-born baby (Female)

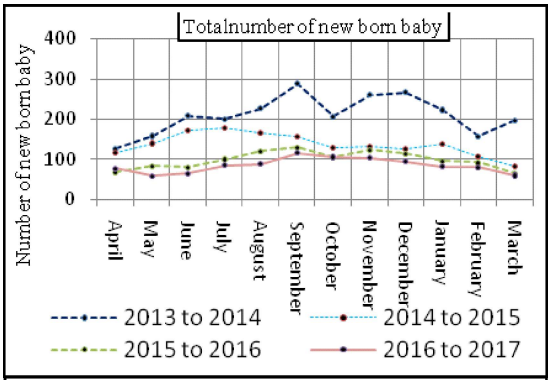

Fig. 3 : Distribution of total number of new born baby

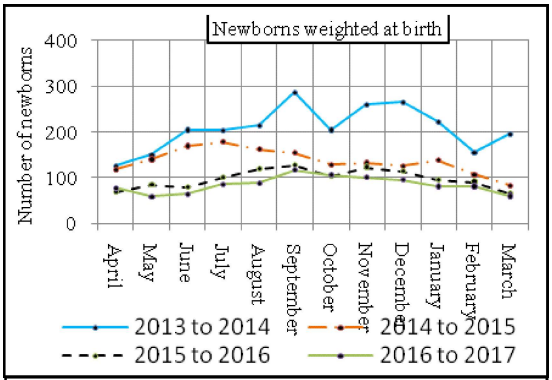

Fig. 4 : Number of new born baby weighted at birth

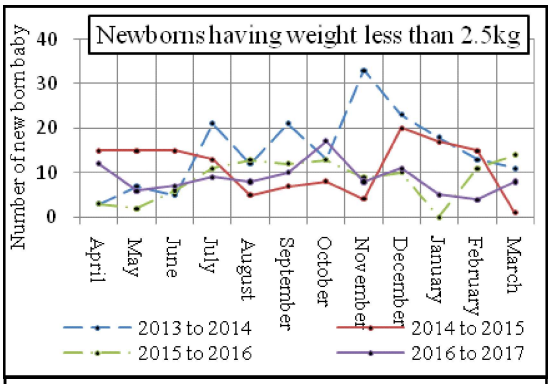

Fig. 5 : Distribution of new born baby having weight less than 2.5 Kg at birth

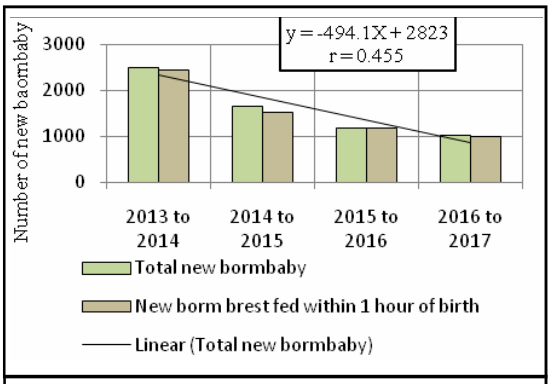

Fig. 6 : Number of new born baby breast fed within 1 hour of birth

If weight of a new born baby is less than 2.5 kg, then it's called low birth weight (LBW). In India average range of weight of a new born baby is 2.5kg to 2.9 kg. But in this region every year, more than 100 take birth at a lower weight than 2.5kg. The presence of LBW is the indication of poor nutritional food habit of a region and having a habit of drinking and smoking of a mother. Having a nutritional value of breast milk, it is necessary to fed new born baby within one hour of birth. It is very important for preventing new born baby from neonatal death. Fig. 6 shows that in the year of 2013-2014 and 2014-2015, there is gap between total number of new born baby and total number of new born baby having breast fed within one hour of birth. But in the year of 2015-2016 and 2016-2017, there is no gap between total number of new born baby and new born baby having breast fed within one hour of birth.

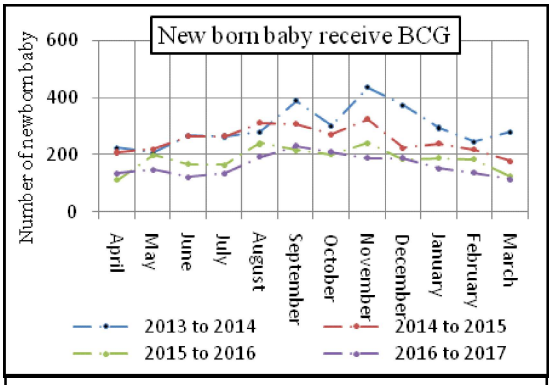

Fig. 7 : Number of new born baby receive BCG

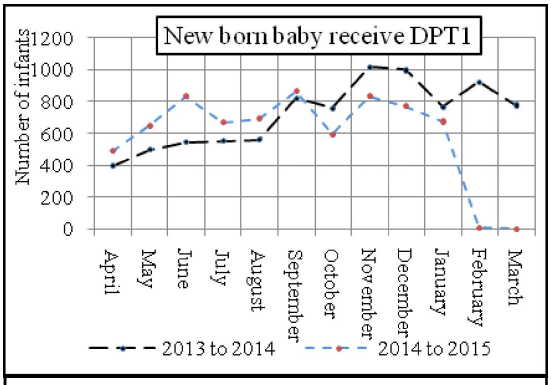

Fig. 8 : Number of infants receive DPT1

The BCG vaccine given to the children under five years of age, so that they cannot attack by TB. This vaccine has been given to the entire new born baby at every month in every year. Fig. 7 highlight that BCG has been given maximum number of new born baby at month of September to December. DTP1 vaccine has been given to the children for protecting them from Diphtheria, Tetanus and Pertusis (Whooping cough). After the month of February of 2014-2015, it has been stopped. After 6 weeks DPT 1, Hepatitis B1 and OPV 1 has been given to the children. After 10 weeks DPT 2, Hepatitis B 2 and OPV 2 has been given to the children. After 14 weeks DPT 3,

Hepatitis B3 and OPV 3 has been given to the children. DPT 2 vaccine has been stopped at the month of May in 205-2016 and DPT 3 has also been stopped in the month of July in 2015-2016.

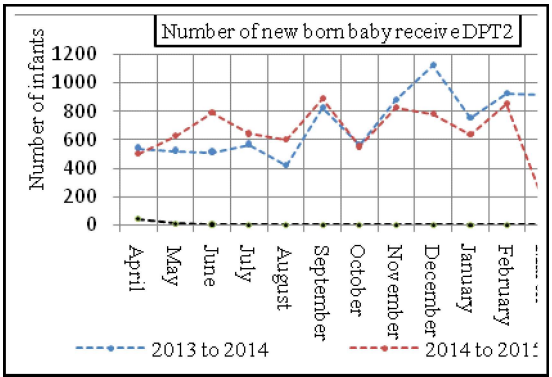

Fig. 9 : Number of infants receive DPT2

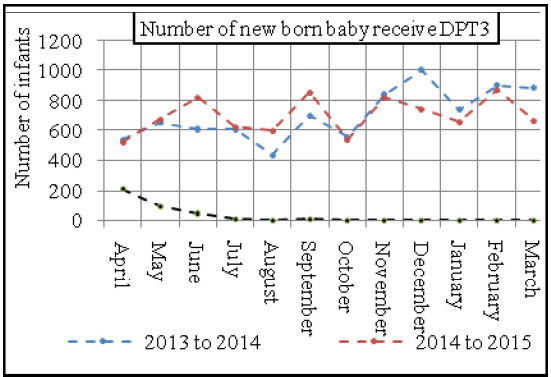

Fig. 10 : Number of infants receive DPT3

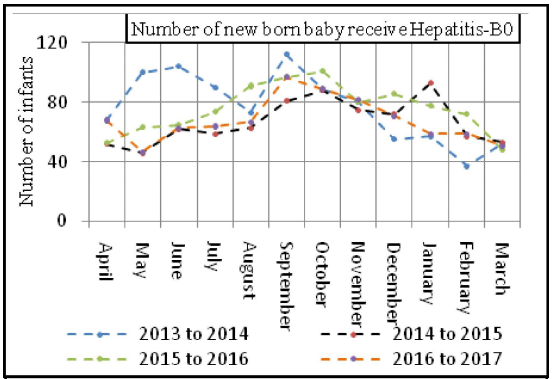

Fig. 9 : Number of new born baby receive Hepatitis-B0

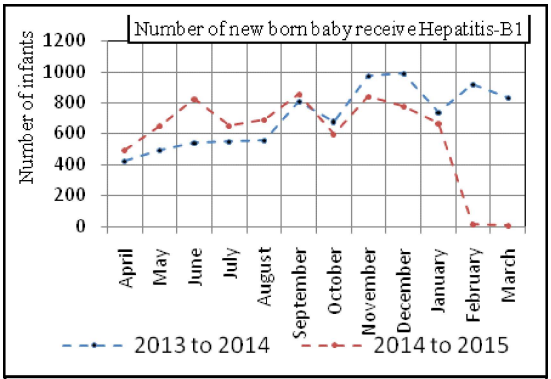

Fig. 10 : Number of infants receive Hepatitis-B1

Hepatitis-B vaccine has been given to the children in order to prevent the Hepatitis B. Hepatitis-B1 has been stopped in the month of February of 2014-2015. Hepatitis-B2 has been stopped in the month of May of 2015-2016. Hepatitis-B 3 started to stop in the month of July of 2015-2016.

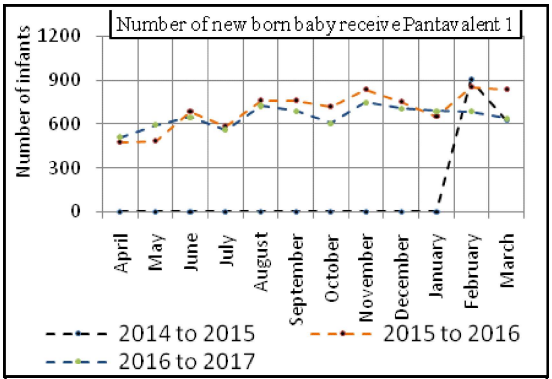

Fig. 9 : Number of infants receive Pentavalent 1

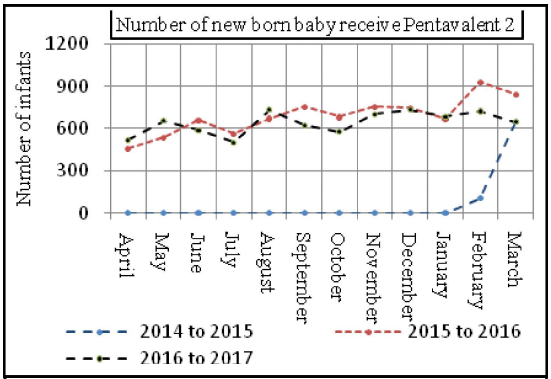

Fig. 10 : Number of infants receive Pentavalent 2

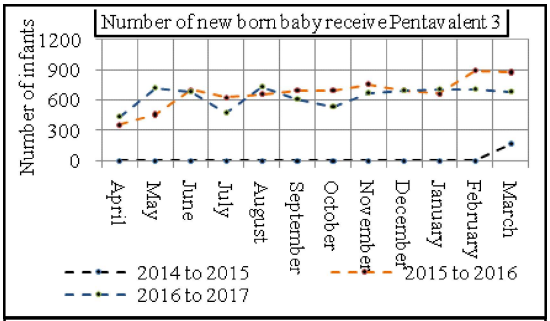

Fig. 9 : Number of infants Pentavalent 3

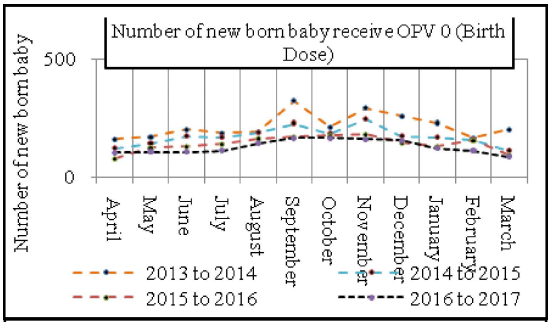

Fig. 10 : Number of new born baby receive OPV 0

Immunization is one of the most effective methods of preventing life threatening disease at childhood. The government of India introduced pentavalent vaccine in existing immunization programme through National Health Programme. Pentavalent vaccine provides protection to children from five life threatening disease at childhood such as Diphtheria, Pertussis, Tetanus, Hepatitis-B and Hib. DPT and Hepatitis-B are all ready existed in the daily immunization programme. Homophiles influenza type B (Hib) can prevent childhood disease like Pneumonia, Meningitis, Septic arthritis etc. Pentavalent 1, Pentavalent 2, and Pentavalent 3 vaccine have been started in the month of January, February and March of 2014-2015, respectively.

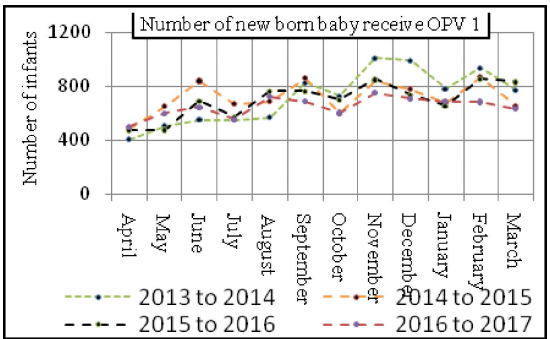

Fig. 9 : Number of infants receive OPV 1

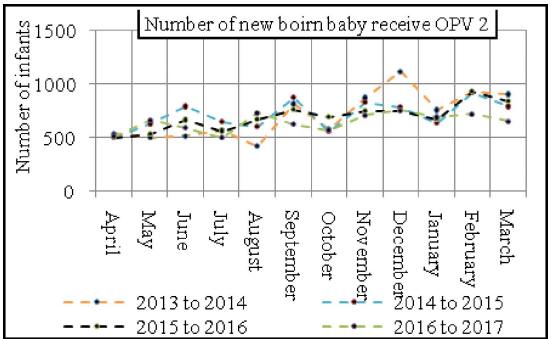

Fig. 10 : Number of infants receive OPV 2

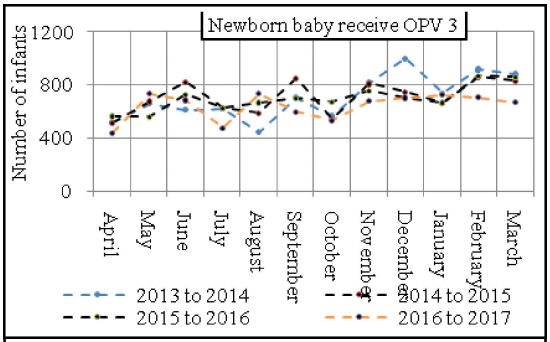

Fig. 9 : Number of infants receive OPV 3

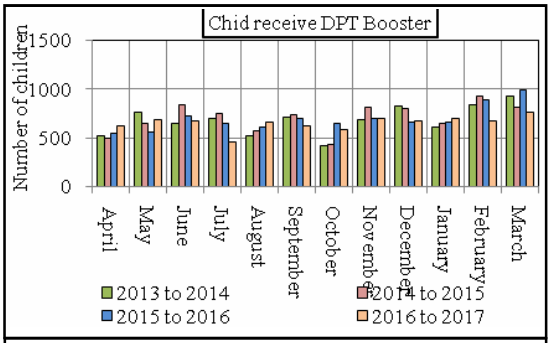

Fig. 10 : Number of children receive DPT booster

The Oral polio Vaccine (OPV) has been introduced in the routine immunization programme in India. It produces antibodies in the blood which prevent the spread of polio virus to the nervous syatem. It protects individual children from polio paralysis. OPV -0, OPV- 1 OPV-2, OPV-3 are given to the children throughout the year.

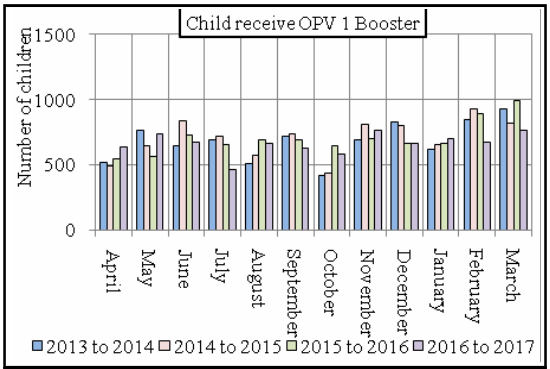

Fig. 9 : Number of children receive OPV 1 Booster

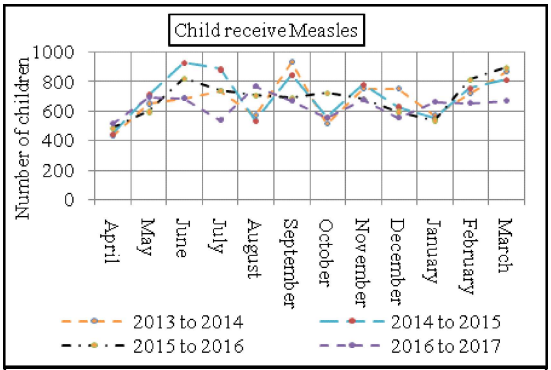

Fig. 10 : Number of children receive Measles

After 16 to 24 month, DPT Booster, OPV 1 Booster and Measles vaccine has been given to children for the benefit of continue protection from Diphtheria, Tetanus and Pertusis (Whooping cough), polio paralysis and from measles.

Conclusion:

New born care and child care are good in this region, but lacks of awareness among the rural people create a gap between the government target and present record. All the vaccine that has been introduced by the government for new born baby that should be fully utilized by the local people for protecting their child from life threatening disease. If local people aware of the fact that new born care and child care is very important then a disease free society develop in a region. The local people go to the nearest health center and receive a different vaccine for children with time. In this region male-female ration among the new born baby is not satisfactory and another problem is every year this region gets many new born babies less than 2.5kg, which is a matter of concern because low weight baby are vulnerable to different life threatening disease. For the betterment of new born health pregnant women should follow the rule of antenatal care, having nutritional food, take proper rest and regular check up etc.

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