Mother's Health Seeking Behavior During Childhood illness in Northeast India: Findings of National Family Health Survey 4 (2015-16)

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Abstract

The latest National Family Health Survey (NFHS-4) report reflects the current health condition of the country and its states as well as.Based on these findings this review carried out to highlight the mother's health seeking behaviours during childhood illness for the North-eastern states of India along with existing health programs catering to maternal and child health.Overall 60 percent of the children aged under five (U-5) were received any advice or treatment for Acute Respiratory Infection (ARI) from a health provider in Northeast India. Nearly 20 percent of the children with fever were given antibiotic drug and only 1 percent of them were given antimalarial drug. Meghalaya is the only North-eastern state were the maximum incidence (12%) of diarrhoea has been observed while least was seen in Sikkim (2%). The lack of basic amenities is directly or indirectly responsible for the high burden of childhood morbidities in this region. Also, poor and unequal distribution of maternal health seeking behaviours for their children were observed to all the North-eastern states of India. A huge proportion of children are still lagging behind from the adequate advices or treatments due to various reasons like, poor quality of care and the lake of government health facility in the area, health personnel were often absent from government health facilities and the major problem was the distance to a health facility specially in rural areas.

Key-words: *Children U-5, Childhood illness, Health programs, Northeast India.*

Introduction

Despite the economic success over the last two decades, India failed to achieve its millennium development goal targets for child mortality[1]. Globally, one in five deaths in children under the age of 5 yearsoccurs in India[2]. Preschool child population constitute approximately 15 percent of the county's total population and are the most vulnerable group suffers from highest morbidity[3]. Most of the Indian children are affected by various common and easily preventable illness. Infectious diseases like ARI, fever, diarrhoea, malaria and whooping cough have been found to be the leading cause of morbidity and premature death especially in developing countries[4-5].It has been estimated thatthe mortality among children are mostly caused by respiratory infections 6.9%, malaria fever 2.2% and other childhood illness 2.0%[6]. Thus, this review has been made to highlight the mother's health seeking behaviours during childhood illness base on the current National Family Health Survey (NFHS) report in North-eastern states of India along with existing health programs that catering to maternal and child health. This region comprises eight small states, namely, Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. The latest NFHS report shows a little variation across states in all the indicators. While some of the states performing well in some of the indicators, a couple of states show completely deteriorated picture.

Material and Methods

Analysis of data in this study is based on 37,167 Northeastern children included in the fourth round of National Family Health Survey (NFHS-4) conducted during 2015-16. This study considered only children

aged 0-59 months (U-5) and the three basic parameters of childhood illness included, namely acute respiratory infection (ARI), fever and diarrhoea which are collected from a representative sample of 98,702 eligible women aged 15-49 years form 89,992 households in Northeast India.The fourth round of NFHS data[7] has recently released by the government of India after a decade in the previous one in the year 2005-06 (NFHS-3)[8], which was conducted during 2015-16. The survey provides crucial information on reproductive and child health, including socio-economic characteristics of the usual members of household, fertility, family planning, water and sanitation, health insurance, certain non-communicable diseases (NCO), and many other topics. For the first time, in NFHS-4, all 640 districts in the country were covered by adopting a modular approach to arrive at estimates of crucial indicators at the district and state levels and also address the key healthcare challenges facing by the districts and the states.

The NFHS provides a separate section for the common childhood illness where discussed prevalence and treatment of acute respiratory infection, fever, and diarrhoea. Mothers of children born during the five years preceding the survey were asked if their children had suffered from cough, fever, or diarrhoea during the two weeks preceding the survey, and if so, the type of treatment given. Accuracy of all these measures is affected by the reliability of the mother's recall of when the disease episode occurred. But two-week recall period is ideally most suitable for ensuring that there will be an adequate number of cases to analyse and that recall errors will not be too serious.

Graphical representation is used to show the prevalence of childhood illness among the North-eastern children aged U-5.

Findings

Acute Respiratory Infection (ARI)

ARI is one of the leading causes of childhood morbidity and mortality throughout the world[9-10]. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths caused by ARI. In NFHS-3, the prevalence of ARI was estimated by asking mothers whether their children under age five years had been ill with a cough accompanied by short, rapid breathing which was chest related in the two weeks preceding the survey. These symptoms are included with ARI which are same for NFHS-4.During last one decade**,** the prevalence of ARI decreased nearly 50% from the level of 5.8% in NFHS-3 (2005-06) to 2.7% in NFHS-4(2015-16) at national level but it was slightly high in Northeast India (3%) (Figure 1). Meghalaya is the only North-eastern state where the prevalence of ARI has increased more than three times (5.8) in NFHS-4 as compared to NFHS-3 (1.9). While lowest prevalence was observed in Sikkim (0.3%) followed by Assam (1%). The percentages of children who received some advice or treatment from a health provider were comparative low in all the North-eastern states of India than the national average (78%) except Sikkim (100%). Only one third of the children aged U-5 in Nagaland received some advice or treatment from a health provider and half of the children in Arunachal Pradesh (51%) and Manipur (46%) are not received any treatment for ARI from a health provider. Form these statistics it is clear evidence that – still, the healthcare facilities are not utilizedby many population in Northeast India.

The ARI Control Programme was started in India during 1990. Since then, various community-based interventions are implemented under ARI control program. Identification of severe respiratory infections by health care worker from rural area, wide access to antibiotics, and its administration by health care workers can prevent and control the burden of ARI. While acute upper respiratory tract infections are very frequent in children, pneumonia is the leading cause of under-five mortality. For children with non-severe pneumonia the ARI control program recommends oral Cotrimoxazole as the first line drug. A number of previous study has revealed that the assessment of various interventions against ARI like breast feeding, zinc prophylaxis, access to clean fuel for cooking, and community/facility-based case management has high impact to combat the burden of ARI[11].

Fever

Fever is a major manifestation of malaria and other acute infections in children. Malaria and fever contribute to high levels of malnutrition and mortality among children in India [8]. In NFHS-3, mothers were asked whether the child took any medicine at any time when ill with fever, and if yes, to give the name of the drug. Overall, the prevalence of children suffered from fever were decreased only one percent from 14% in NFHS-3 to 13% in NFHS-4 at national level. Though, prevalence of childhood fever is low in North-eastern region (10%) (Figure 1) as compared to national level but there exists an unequal distribution among the North-eastern states of India. For instance, nearly one fourth of the children (23.3%) in Meghalaya had fever in two weeks before the survey while in Sikkim it was only 4 percent followed by Nagaland (7.1%) Manipur (8.2%) and Assam (9%). Twenty percent of children aged who were ill with fever were given antibiotic drugs in NE India during 2015-16 where it was highest in Mizoram (55%) and lowest in Assam (15%) even below at the national average (21%). Almost all of the children in Manipur, Meghalaya and Tripura who were ill with fever are likely to be received advice or treatment from a health provider but half of the children in Arunachal Pradesh (54%) were not received any advice or treatment from a health provider when they were ill with fever. Other hand, nearly 20 percent of the children with fever were given antibiotic drug and only 1 percent of them were given antimalarial drug in Northeast India during 2015-16.

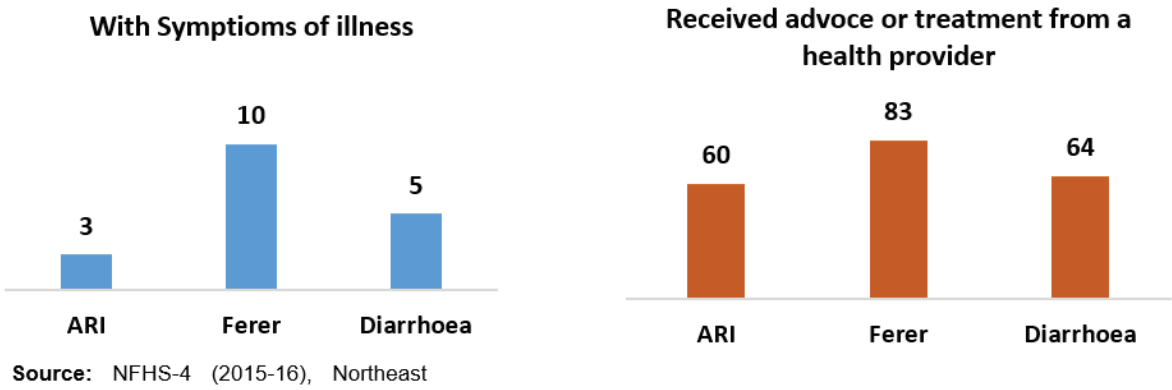

Figure 1: Percentage distribution of children aged U-5 with symptoms of illness (ARI, Fever and Diarrhoea) in two weeks before the survey and percentage of children who were received advice or treatment form a health provider, Northeast India, 2015-16.

Diarrhoea

Diarrhoea is one of the single most common causes of death among children, following acute respiratory infection. Deaths from acute diarrhoea are most often caused by dehydration due to loss of water and electrolytes. Nearly all dehydration-related deaths can be prevented by prompting administration of rehydration solutions. NFHS asked a series of questions to eligible mothers about episodes of diarrhoea suffered by their children in two weeks before the survey, including questions on feeding practices during diarrhoea, the treatment of diarrhoea, and their knowledge and use of ORS. The incidence of diarrhoea remain the same (9%) between NFHS-3 and NFHS-4 in India. Maximum incidence of diarrhoea has been observed in Meghalaya (12%) among the North-eastern states of India while least was seen in Sikkim (2%) followed by Assam (3%), Mizoram (5%), Nagaland (5%) and Tripura (55). Overall, 36 percent of the children in NE India who had diarrhoea in two weeks before the survey were not received any advice or treatment at all during 2015-16. Maximum advice or treatment were received by the

children of Meghalaya (78%) and Tripura (73%) even above the national average (68%) and the lowest advice or treatment were received by the children of Nagaland (30%).

Oral rehydration therapy (ORT) is a simple and effective way which can reduce the duration and severity of diarrhoea. Eighty-three percent of the children in Meghalaya who were suffer from diarrhoea had received some form of ORT while in Tripura, only 49 percent of the children received ORT followed by Nagaland (54%) and Assam (59%). In order to control deaths due to diarrhoea and generate awareness in the community, an Intensified Diarrhoea Control Fortnight (IDCF) was implemented by the Govt. of India in the year 2014 all over the country with the ultimate aim of "zero child deaths" due to childhood diarrhoea. Also, Govt. of India has launched the Oral Rehydration Therapy Programme as one of its priority activities for child survival. One major goal of this programme is to increase awareness among mothers and communities about the causes and treatment of diarrhoea. Oral rehydration salt (ORS) packets are made widely available and mothers are taught how to use them. To strengthen the child health activities in the country, Government of India has introduced Integrated Management of Neonatal and childhood Illness (IMNCI) for early diagnosis and case management of common ailments of children with special emphasis on pneumonia, diarrhoea and malnutrition is being promoted for care of children at community as well as facility level[12].

Discussion and Conclusion

NFHS surveys is a landmark initiative of Ministry of Health and Family Welfare (MOHFW), Government of India, which conducted periodically with a vast amount of information on reproductive and child health, including socio-economic information for the country and its states as well as. This survey is a proxy remainder for the government to wake up and respond to the urgent issues that have been triggering through decades. Despite the launch of many health related programs between 2005 to 2015, only some improvement has been seen. Global evidence states that, unless a country expends at least 5% of its GDP on health with Government expenditure contributing to a major part, fundamental healthcare needs are hard to meet[13-14]. The Government spending on healthcare in India is only 1.15% of GDP[15]. In contrast, 2.7% of GDP is allocated to military spending[16]. Therefore, a differentiated and more focused strategy is called for. At the same time the new NHP 2017, has set stringent objectives for child health viz. to reduce under-five mortality to at least 23 by 2025, infant mortality rate to at least 28 by 2019; neonatal mortality to at least 16 and still birth rate to "single digit" by 2025[17]. The policy aims at universal health coverage with provision of comprehensive services to all while reducing out of pocket expenditures.

Findings of NFHS-4 reflect that – all the North-eastern states of India comes under poor and unequal distribution of maternal health seeking behaviour for their children. Though, prevalence of childhood illness is low in Northeast region as compared to other parts of the nation, a huge proportion of children aged U-5 are still lagging behind from the adequate advices or treatments due to various reasons like, poor quality of care and the lake of government health facility in the area, health personnel were often absent from government health facilities and the major problem for rural women was the distance to a health facility. Other hand, waiting time was too long in government hospitals and health personal were often absent in the government health centres[18]. Also, this region is not only physically isolated from the rest of the country due to mountainous terrain and poor infrastructure, it also has diverse socio-cultural practices of bringing up children, given that the region is inhabited by numerous tribal and ethnic groups. These indigenous people live in traditional, thatched roof huts, without basic amenities. The lack of basic amenities is directly or indirectly responsible for the prevalence of high burden of childhood morbidities and malnutrition in this region.

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Ethics Statement: This study is based on secondary data available at **http://rchiips.org/nfhs/NFHS-**

4Report.shtml. Therefore no ethical issue is involved.

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