Original article

Understanding Health and Care Practices among Oraon Pre-school Children: Comparing with other communities of West Bengal

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ABSTRACT

Survival, health and development of the child in the first 5 years of life are a major public health concern and opportunity. Stunting in children is a measure of chronic under nutrition, with irreversible, profound and lifelong consequences. Prevalence of stunting is highest (54 per cent) among children of India's tribal peoples consisting 6.2 million out of 11.5 million tribal children aged under five according to NFHS 2005-2006. The present study seeks to find out the recent health and caring practices among Oraon children below 5 years of age in rural west Bengal comparing with children of other community residing in the same areas and same socio-economic background in respect of WHO classified standardized anthropometric scale. Total 600 Children below 5 years of age (200 each from Oraon, Muslim & Hindu scheduled caste community) were identified from the northern part of West Bengal (tea-garden areas of Jalpaiguri district). Data were collected on their caring practices from their parents along with standard anthropometric measurements from the selected children. The result showed that except exclusive breast feeding, caring practices are not of major concern comparing with other communities. Though result showed that stunted rate is higher among Muslim children than Oraon children (40.5%) though it is very high. But short term malnutrition i.e. underweight and wasted is significantly high among Oraon children comparing with other communities and thus of major concern and tobe taken care by the government health service providers.

Key words: Oraon, child care, nutritional status

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INTRODUCTION

Childhood is a cultural concept with goals, defining, continuous adaptation, and struggle, and anthropology explains the remarkable variations of childhoods lived around the world. Biological, psychological, and cultural anthropologists together study the childhood, as biology, mind, and culture are all important to understand childhood (Weisner, 2001). Anthropologists try to find out health status of the children from various standardized measurements and often correlate them with their social practices to justify cultural impacts on health and care practices. A common view of childhood and its purpose focuses on the child's health, growth and physical maturation (LANCY, 2012). Survival, health and development of the child in the first 5 years of life are a major public health concern and opportunity. There are multiple factors those play vital role in occurrence of child malnutrition such as poor food quality, insufficient food supply and repeated infectious diseases, or sometimes combinations of the three. Hence to study child growth pattern is not only to evaluate health status of the children but also to assess the quality of life of a population. Along with that the database also shows that in India 53.4% children were underweight and 52% were stunting which is an alarming figure (Onis & Blössner, 1997).

In India, Tribal peoples are one of the most exploited and deprived sections. In all aspects of development, they mostly remain excluded, though various kinds of policies and programmes have been introduced by government for their upliftment in the post-Independence India (Xaxa, 2010). Even today, areas where tribals live, the health services remain grossly underdeveloped (Mavalankar, 2016). A child born to a ST family in India has 19 per cent higher risk of dying in the neonatal period and 45 per cent greater risk of dying in the post-neonatal period compared with other social classes (Anderson et al., 2016).

Review of Literature

Widespread malnutrition exposes children to infection and diseases, resulting in high mortality among them. Infant mortality among Indian tribals was 84.2 where it is 67.6 per 1000 for the general population in 2002. Child mortality rate was 29.3 for general population where among tribal population it is 46.3 per 1000 live births. The under-five mortality among tribal children was 126.6 % as compared to 94.9 % for the general population. The

percentage of undernourished children (weight-for-age) was 64.9 for tribes; where among general population it is 51.8%. Childhood immunization reached up to 26.4% in comparison to 42.0% for the general population (Planning Commission, Government of India, 2008). According to the National Family Health Survey 4 (2015-2016), the under-5 mortality among the tribal population was 57.2 per 1000 live births compared to 38.5 among others. NFHS-4 data also shows 94.7 per cent of children below five years of age and 83.2 per cent of women between the age of 15 and 49 in tribal district of Lahaul and Spiti in Himachal Pradesh were suffering from anemia (International Institute of Population Sciences, 2017). In a cross-sectional study conducted in 2015, 76.6% of the pre-school children surveyed (Toal 2926) among tribal district of Melghat in Maharashtra, India, were found to be severely or moderately undernourished (Dani et al., 2015). Studies showed in some areas that tribal mother breast- fed their children, the harmful practices of mothers such as discarding of colostrums, giving prelacteal feeds, delayed initiation of breast-feeding and delayed introduction of complementary feeds affected child health. Predominantly, tribal mother preferred giving goat's milk for 3 to 5 days for the new born infants instead of colostrums due to the reason that it leads to stomach problem to the child. Intake of vaccination and immunization of infants was found to be low among the tribal community (Seema & Begum, 2008; Basu, 2000).

A study in Orissa showed that bulk of the Oraon population lives under acute poverty, poor socio-economic conditions, rigid cultural norms and religious taboos. They attribute sickness and illness to the disappointment and curse of some supernatural power. The study also revealed poor sanitary conditions and use of unhygienic sources of drinking water. It was noticed that cultural taboos regarding food choices coupled with poverty results to widespread malnutrition among the Oraon (Koshy *et al* 1992). Study between Oraon children of Jharkhand and West Bengal reveals that complete immunization rate is higher in Bihar (45%) in respect of West Bengal (27.4%) (Planning Commission, 2002). A study conducted among the Oraon Tribe of New Mal area showed that BMI of the adult population were normal but in case of children it was not adequate. 54% of children found severally undernourished and 34% were moderately undernourished (Mittal & Srivastava, 2006). A case study among Oraon population in some tea garden areas of Jalpaiguri District showed that generally, no childbirth had taken place in the hospital, but at their respective homes with

the help of local untrained midwives of the labourer line. Often this birthplace is in an unhygienic corner of their kitchen. Neonatal and postnatal cares were very much unsatisfactory. Thus most of the time the newborn were found weak and exposed to various forms if infections; therefore, infant mortality rate was high. Also it was observed that parents were not taking their children to nearest hospitals or registered medical practitioners for treatments. They used to consult with local herbalist and black magician (*ojha*) before it gets too late or having serious physical disabilities (Roy *et al* 2013). A study by Bisai *et al.* (2012) among Oraon and Munda children of Paschim Medinipur showed 38.5% stunted, 61.5% underweight and 55.4% wasted children according to WHO classified reference values which is severally poor.

Objectives

The objectives of the present study are

1. To find out the health care practices provided to the pre-school Oraon children residing in tea garden area of West Bengal comparing with Muslim and Hindu scheduled caste children of same age group of the selected area and socio-economic background.
2. To understand the health status of the Oraon pre-school children and compare them to Muslim and Hindu scheduled caste children of same age group and area.

METHODOLOGY

Study Area: The present study has been conducted among four tea gardens namely Nepuchhapur Tea Garden (26°47'16.27"N & 88°43'57.71"E), Gurjang Jhora Tea Garden (26°54'00.20"N & 88°43'39.89"E), Oodlabari Tea Garden (26°49'42.15"N & 88°37'0.82"E) and Rangamati Tea Garden (26°53'27.21"N & 88°41'47.27"E) of Jalpaiguri District of West Bengal.

Study Participants: Total 200 Oraon children (100 of each sex) below 6 years of age were selected for the present study along with 200 Muslim and 200 Hindu scheduled caste children of same age group and sex from the proposed area under study.

Sampling: Data has been collected from the study area through multi stage random sampling method keeping in minds the objectives and availability of participants for the present research.

Data Collection: in the present study the health care related data were collected from parents of the selected children with cross verification of the official documents viz. birth certificates, immunization card and doctors prescriptions. Later the standard anthropometric measurements were collected from the children like height and weight.

Data Analysis: Collected data were primarily tabulated in Microsoft excel 2007 version and compared with WHO (2006) standardized reference values by age to find out the health status of the children by means of height-for-age, weight-for-age, weight-for-height and BMI-for-age. Health care data were analyzed by standard guidelines such as exclusive breast feeding practices, immunization status and disease treatment facility providers. Later the classified data were analyzed statistically in IBM SPSS 24.0 to understand the existing differences between Oraon, Muslim and Hindu scheduled caste children whether significant at 0.05 level or not.

RESULTS

Table 1 shows mean height, weight and BMI distribution with standard deviation & Standard error of the children by age group and community.

Table 2 shows the health care practices provided to the children under study. First finding is the place of birth which shows 93.5% Oraon children took birth in Hospital; significantly higher than Muslim (50%) and Hindu (76%) scheduled caste children. Statistics also depict the same fact (p-value < 0.001). Second part of Table 2 deals with exclusive breast feeding practice which is comparatively low among Oraon children (94.5%) than Muslim (98%) & Hindu scheduled caste children (99%). Statistically the difference is significant (p-value 0.017). Third part shows the immunization status which is up to the mark among Oraon (96% full immunized) Muslim (96.5%) and Hindu (99%). There is no statistical difference between communities. Part four of Table 2 deals with the disease treatment facilities provided to the children. It was found that among Oraon, treatment with registered doctors is significantly

high (98.5%) than Muslim (47%) and Hindu (84%) children. This difference is also statistically significant (p-value <0.001).

Table 3 describes the nutritional status of the children under study in respect of WHO standardized reference values. First part of Table 3 describes the height-for-age status of the children. It was found that 40.5% Oraon children are stunted, i.e. low height-for-age which is higher than Hindu scheduled caste children (34%) but significantly less than Muslim children (52%). Statistical difference found significant (p-value 0.001). Part two of table 3 deals with weight-for-age status of the children. It was found that low weight-for-age i.e. Underweight rate is significantly high among Oraon children (65.5%) than Muslim (44%) and Hindu scheduled caste (32.5%) children. The difference is statistically significant (p-value <0.001). Next part shows weight-for-height status of the children. It was observed that low Weight-for-height status i.e. wasted rate is significantly high among Oraon children (26%) than Muslim (8%) and Hindu scheduled caste (14%) children (p-value <0.001). Last part explains the BMI-for-age status of the children. It was observed from the study that low BMI-for-age status i.e. underweight is significantly high among Oraon children (27.5%) than Muslim (10.5%) and Hindu scheduled caste (12.5%) children (p-value <0.001).

DISCUSSION

Among Oraon community of Jalpaiguri District, West Bengal, children are getting better health care facilities from their parents regarding institutional delivery, proper immunization and treatment from registered medical practitioners, though awareness about exclusive breast feeding practice is less than other communities.

According to UNICEF, Stunting (inadequate length/height for age) reflects cumulative effects of intergenerational poverty, poor maternal and early childhood nutrition, and repeated episodes of illness in childhood. It was evident that 38% preschool children of India are stunted from the median of the WHO Child Growth Standards (UNICEF India, 2012). Study showed that long term malnutrition i.e. stunted rate 40.5% which is higher than average rate of India but in comparison to Muslim children, the rate is significantly less. In all other health status indicators like Weight-for-age, BMI-for-age or Underweight and Weight-for-height or Wasted the Oraon children are significantly exposed to risk comparing with

other children i.e. short term malnutrition is much higher among Oraon children than Muslim or Hindu scheduled caste children.

RECOMMENDATIONS

Half of adolescents' girls of India are below the normal body mass index, which has an impact on the health of their future pregnancies and children. Preventing stunting is critical to survival in the immediate term, and in the longer-term, to ensure healthy, well-educated and productive adults. Thus to prevent this kind of health problems and disease and to ensure healthy life cycle is a critical aim for UNICEF India. Also it is imperative to focus on enhancing the overall development of tribals to try and bridge the prevailing inequalities and disparities in the country (Narain, 2019). Thus the governments both at the Centre and States must recognize improvement in the health status of the tribal population as well as children residing in the rural areas as among the topmost priorities from policy point of view and ensure adequate budget allocations made including under the National Tribal Plan along with proper supervision.

Conflict of Interests: Author declares that there is No conflict of interest for this research work.

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TABLES

Table-1: Distribution of Height, Weight and BMI in respect of age group and community.

Age Group (years)	Community (n)	Height (c.m.)			Weight (k.g.)			BMI (k.g./m^2)		
		Mean	SD	SE	Mean	SD	SE	Mean	SD	SE
Below 1 Year	Oraon (32)	64.56	7.36	1.3	6.0	1.36	0.24	14.31	1.71	0.30
	Muslim (34)	62.17	8.27	1.42	6.32	1.71	0.29	16.30	2.77	0.48
	Hindu scheduled caste (25)	68.09	16.57	3.31	7.36	2.31	0.46	16.37	3.94	0.79
1 to below 2 Year	Oraon (44)	74.99	8.92	1.35	7.48	1.28	0.19	13.55	2.52	0.38
	Muslim (38)	73.06	4.85	0.79	8.54	1.07	0.17	16.09	2.21	0.36
	Hindu scheduled caste (35)	74.29	5.23	0.88	8.85	1.68	0.28	16.01	2.49	0.42
2 to below 3 Year	Oraon (64)	82.74	7.31	0.91	10.13	6.40	0.80	14.36	7.17	0.90
	Muslim (37)	81.64	4.15	0.68	9.90	1.30	0.21	14.82	1.38	0.23
	Hindu scheduled caste (36)	83.49	5.99	1.00	10.11	1.75	0.29	14.51	2.17	0.36
3 to below 4 Year	Oraon (28)	91.15	4.41	0.83	11.50	1.82	0.34	13.78	1.50	0.28
	Muslim (49)	88.50	4.10	0.59	11.23	1.49	0.21	14.34	1.54	0.22
	Hindu scheduled caste (45)	92.53	6.06	0.90	12.47	1.73	0.26	14.57	1.66	0.25
4 to below 5 Year	Oraon (32)	97.07	4.76	0.84	12.56	1.72	0.30	13.29	1.18	0.21
	Muslim (42)	99.05	9.71	1.50	13.42	2.75	0.42	13.66	1.87	0.29
	Hindu scheduled caste (59)	98.83	6.54	0.86	13.49	2.08	0.27	13.92	2.57	0.34

Table-2: Distribution and statistical comparison of child health care practices community.

Health Care Practices	Caring Status	COMMUNITY			Total	Chi-square value	p-value
		Oraon	Muslim	Hindu scheduled caste			
Place of Birth	Hospital	187 (93.5)	100 (50)	152 (76)	439	97.607	0.000*
	Home	13 (6.5)	100 (50)	48 (24)	161		
Exclusive breast feeding	Yes	189 (94.5)	196 (98)	198 (99)	583	8.112	0.017*
	No	11 (5.5)	4 (2)	2 (1)	17		
Immunization Status	Full	192 (96)	193 (96.5)	198 (99)	583	3.753	0.153
	Partial	8 (4)	7 (3.5)	2 (1)	17		
Disease Treatment	Registered Doctor	197 (98.5)	94 (47)	168 (84)	459	156.918	0.000*
	Quack Doctor	3 (1.5)	106 (53)	32 (16)	141		
* p-value less than 0.05; Difference is significant							

Table-3: Distribution and statistical comparison of child nutritional status by community according to WHO cut-off values.

Nutritional Parameter	Nutritional status	COMMUNITY			Total	Chi-square value	p-value
		Oraon	Muslim	Hindu scheduled caste			
Height-for-age	Normal	119 (59.5)	96 (48)	132 (66)	347	13.368	0.001*
	Stunted	81 (40.5)	104 (52)	68 (34)	253		
Weight-for-age	Normal	69 (34.5)	112 (56)	135 (67.5)	316	44.540	0.000*
	Underweight	131 (65.5)	88 (44)	65 (32.5)	284		
Weight-for-height	Normal	148 (74)	184 (92)	172 (86)	504	25.453	0.000*
	Wasted	52 (26)	16 (8)	28 (14)	96		
BMI-for-age	Normal	145 (72.5)	179 (89.5)	175 (87.5)	499	24.544	0.000*
	Underweight	55 (27.5)	21 (10.5)	25 (12.5)	101		
* p-value less than 0.05; Difference is significant							