Original Article

Nutritional Status of Tribal Under-Five Children in a Community Development Block of Birbhum District, West Bengal: A Cross-Sectional Study

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Abstract

Introduction: One of the essential components for maintaining health is having proper and adequate nutrition. The absence of this might affect majorly the physical domain of health, especially in under-five children as it is the age of development. The present study was conducted among the tribal under-five children in a tribal predominant block, Mohammad Bazar in Birbhum District of West Bengal to find out their nutritional status, along with the estimation of prevalence of anemia among them; and the association, if any, between the nutritional status of the study population with their demographic, socioeconomic, and environmental characteristics. **Materials and Methods:** This community-based cross-sectional study was conducted among 378 tribal under-five children residing in 21 villages of Mohammad Bazar Block during September 2018–August 2020 using Lot Quality Assurance Sampling (LQAS) technique. A predesigned, pretested schedule was used to collect necessary information regarding background characteristics. Anthropometric measurements (height and weight) and biochemical estimation (hemoglobin level in blood) were done to evaluate nutritional status. Ethical permission was obtained from Institutional Ethics Committee, Burdwan Medical College. Data were analyzed using the Statistical Package for the Social Sciences, version 20. **Results:** The present study showed that 31.0% of under-five children were underweight, 16.6% severely underweight, 31.5% stunted, 17.2% severely stunted, 21.7% wasted, and 7.7% severely wasted. Nearly one-third of the study participants were suffering from anemia and most of them (91.5%) had mild anemia. As per LQAS, none of the villages had acceptable nutritional status as far as the weight for age and height for age was concerned. **Conclusions:** This research unveiled that the undernutrition in various forms still persists among the tribal under-five children. Rigorous implementation of various schemes, missions, and programs by both state and Central Government are the need of the hour to overcome this downhearted situation.

Keywords: Anemia, lot quality assurance sampling, malnutrition, nutritional status, tribal, under-five children

Introduction

Proper and adequate nutrition plays a pivotal role for maintaining health, especially in children for becoming a healthy people in future.[1] Most of the physical (barring the pubertal growth spurt) and mental development of a child takes place during the first 5 years of life.[1] Any problem during this phase may reflect on the total life period of a person. Malnutrition may also affect the immune response of a child.[2] A child with a poor immune response may be more liable to develop fatal infections and thus die during this period.[3] This is an unnecessary and preventable loss to the society. Even if, mortality is not considered, malnutrition and infections are two components of the vicious cycle.[3]

The United Nations International Children's Emergency Fund has reported that nearly half of all deaths among under-five children are due to one or other of the various forms of malnutrition. Globally, the absolute number is in the range of

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30 lakhs deaths per year and 159 million under-five children were stunted and 50 million suffering from wasting.[4] In India, the situation is quite similar. Recent estimates revealed that more than one-third of all deaths of children are related to undernutrition in India.[5] In the National Family Health Survey (NFHS-4), it was found that in India, 35.8% of under-five children are underweight, 38.4% are stunted, and 21% are wasted.[6] The burden revealed a drop in NFHS-5, where 32.1%, 35.5%, and 19.3% of under-five children were found underweight, stunted, and wasted.[7]

Although the situation is alarming in the overall population in India, the situation is likely to be far worse among marginalized section of the society. Tribals or aboriginals form one such marginal group. They follow a community way of living and have their own culture, custom, tradition, belief, and health-seeking behavior. Certain factors such as illiteracy, poverty, different communicable diseases as well as some genetic disease, undernutrition, traditional health-seeking behavior, dragging them backward, and interrupting them to overcome the hurdle to intermingling with the mainstream of society. For these reasons, they are protected by the constitution of India and are provided reservations in the scope of education and job. Despite these steps, the financial situation as well as health status of the tribal people has not improved considerably.[8-10]

Nutritional deficiency is frequently observed among tribal under-five population. In all aspects, they are far behind (45.3% underweight, 43.8% stunted, and 27.4% wasted) compared to national-level status (NFHS-4).[6] Beside poverty, lack of knowledge about child nutrition, lack of care, and attention to the children and maintaining low hygiene level may be some factors responsible for undernutrition among tribal children. The vicious cycle of undernutrition, different diseases, and low immunity level is very much significant among them.[3]

Although very few literatures are available about the nutritional status of tribal under-five children in India, studies show the alarming situation of undernutrition among them.[11-13] Despite the importance of the undernutrition in this marginalized group, data were lacking in district-wise estimation of the same. The availability of this information is likely to be helpful for the policymakers to take appropriate evidence-based measures for combating this dreaded condition. With this background, the present community-based cross-sectional study was conducted among the tribal under-five children in a tribal predominant block, Mohammad Bazar in Birbhum District of West Bengal with the following objectives:-

1. To estimate the prevalence of underweight, stunting, and wasting among the tribal under-five children of Birbhum District
2. To find out the prevalence of anemia by estimating the hemoglobin level of tribal under-five
3. To assess if any association exists between the demographic parameters and undernutritional status of the tribal under-five.

Materials and Methods

Study design, study area, and study subjects

This community-based descriptive type of observational study, cross-sectional in design was conducted in Mohammad Bazar block of Birbhum District, West Bengal, between September 2018 and August 2020. This is a tribal predominant block with all rural populations. Tribal predominant villages were considered if more than 50% of the total population in that village were tribal. This is expected to minimize the effects of acculturation on the behavioral factors associated with undernutrition. Due to resource constraint, villages with total tribal population <200 were not considered. Twenty-one such villages were found in the block fulfilling both the criteria and all the villages were selected.[9] Tribal children from 6 months to 59 months of selected tribal villages and their parents residing in that area at least for 1 year before data collection were considered the study population. Seriously ill children were excluded from this study.

Sampling

Out of the various indicators available for measuring nutritional status, NFHS-4[6] revealed that wasting has the lowest prevalence (30.8%) in rural Birbhum District of West Bengal in the selected age group of children. Considering this prevalence with 5% alpha error and 5% absolute precision, 10% nonresponse estimated sample size became 361.

Lot Quality Assurance Sampling (LQAS) was used as sampling technique in this study. In addition to the prevalence of undernutrition, LQAS was expected to identify villages with adequate quality of nutrition among the study group in addition to measuring the prevalence of the undernutrition in the study area. Considering each of selected villages as a lot, 21 lots were selected. Children required from each village (lot) was thus $361/21 \approx 18$.

In each selected village, the list of eligible study participants was prepared with help from respective subcenters and from this sampling frame required sample of 18 children was identified by simple random sampling. Village with acceptable nutritional status was considered if the prevalence of wasting was not more than 30%. Considering this prevalence with 95% confidence leads to decision value of 2, this means no more than two cases out of 18 children should be present in a village to classify that village as a village with acceptable nutritional status. Hence, the final sample size was $18 \times 21 = 378$.

Data collection: Tools and techniques

Before data collection, respective authorities of district and block level were informed and cooperation was sought. Cooperation and support were also sought from local panchayats and subcenters. Workforce support for data collection and biomedical waste management was sought from local subcenters.

Respondents of the selected participants were briefed about the purpose of the study and written consent was obtained from the parents or in the absence of parents, the caregivers. If found absent in the house in the first visit, one more visit

was conducted. Thus, at least two attempts were made to reach every randomly selected child. Information about the background characteristics of the children were collected at the household level by a predesigned, pretested schedule. Weighing scale, and infantometer/stadiometer were used for measuring weight and height, respectively. Weight was recorded to the nearest 0.1 kg and height in centimeters to the last completed 0.1 cm according to the WHO standard procedures.[10] Hemoglobin estimation was done according to hemoglobin measurement technique using color scale kit.[14]

Operational definitions

Weight for age was noted as normal, underweight (weight for age <–2 standard deviations [SD] of the WHO Child Growth Standards median) and severely underweight (<–3 SD of the WHO child growth standards median). Height for age was noted in normal, stunting and severely stunting while weight for height in normal, wasting and severely wasting, and compared with WHO child growth standard median in the same way. Hemoglobin in blood was noted as no anemia (Hb% ≥11 g%) and having anemia (Hb % <11 g%). Anemia was further classified as mild anemia (Hb% 10–10.9 g%), moderate anemia (Hb% 7–9.9 g%), and severe anemia (Hb% <7 g%).[7]

Statistical analysis

Collected data were checked for completeness and consistency and then data were entered into the computer on Microsoft Excel™ spreadsheet software by two researchers separately. They were checked for duplicate and erroneous data entries. In case of any ambiguity, the data were checked with original paper-based records. The first author and corresponding author checked 10% of the data randomly. Qualitative data were expressed in proportion. Association of nutritional status with different demographic, socioeconomic, and environmental variables was checked using Chi-square or Fisher's exact test as applicable. Multivariable logistic regression was conducted to find out the factors responsible for undernutrition, stunting, and wasting among children. Goodness-of-fit of these models was tested using Hosmer–Lemeshow statistics. Variability of the dependent variable explained by the independent variables in the model was reported using Nagelkerke R squared value. Data were analyzed using the Statistical Package for the Social Sciences (IBM SPSS Statistics for Windows, version 20.0. Armonk, New York, USA: IBM Corp. 2011).

Ethical consideration

Ethical approval was obtained from the Institutional Ethics Committee of Burdwan Medical College, Purba Barddhaman, West Bengal (vide Memo No. BMC-78 dated 08/01/2021). Before the interview, informed written consent was obtained from each respondent and they were assured about the confidentiality of information.

Results

This study reveals the poor nutritional status of the study population as per the LQAS technique, and four villages (19.05%) were found to have adequate nutritional status.

Descriptive characteristics of the study participants are presented in Table 1.

The present study showed that among the study participants nearly 1/3rd (31.0%) were underweight and 16.6% were severely underweight where 31.5% of children were stunted and 17.2% severely stunted. Wasting and severely wasting was noted among 21.7% and 7.7% of children. More than 2/3rd of the children (70.1%) were undernourished in any form (either underweight/severely underweight/stunted/severely stunted/ wasted/severely wasted). Nearly one third of the study participants (31.0%) had anaemia. Majority of the participants with anaemia had mild anaemia (107, 91.5%) [Table 2].

It was noticed that few different influencing factors were associated with undernutrition among the tribal children. Underweight was significantly associated with housing condition, availability of ration card, regular Integrated Child Development Services (ICDS) attendance, Vitamin A in oil supplementation, exclusive breast feeding, prelacteal feeding, and colostrum feeding. Stunting was associated with age, ICDS attendance, Vitamin A in oil supplementation, exclusive breast feeding, and prelacteal feeding. Wasting was associated with age, number of siblings, housing condition, and Vitamin A in oil supplementation. However, finally, in multivariable logistic regression, significant predictors appeared to be age group (adjusted odd ratio [AOR] confidence interval [CI] = 0.45 [0.22, 0.91]), ICDS attendances (AOR [CI] = 0.39 [0.24, 0.62]), availability of ration card (AOR [CI] = 0.55 [0.33,0.93]), prelacteal feeding (AOR [CI] = 2.12 [1.15, 3.85]), and colostrum feeding (AOR [CI] = 0.28 [0.11, 0.70]) for underweight; age group (AOR [CI] = 0.45 [0.23, 0.90]), ICDS attendance (AOR [CI] = 0.58 [0.37, 0.91]) and prelacteal feeding (AOR [CI] = 2.32 [1.30, 4.14]) for stunting; type of house (AOR [CI] = 2.22 [1.06,4.68]) for wasting detailed in Table 3.

Multivariable logistic regression models for underweight, stunting, and wasting were good fit as evident from the Hosmer–Lemeshow statistic. All the independent variables together explained 21% (for underweight), 10.1% (for stunting), and 7.9% (for wasting) of dependent variables by using Nagelkerke R squared [Table 3].

Discussion

Through this study our intention was to realize the real time situation of nutritional status of tribal under-five children in a specified geographical area and it revealed that, we still have to go further to make them healthier. Although we could not find any similar type of the study in the Indian context conducted in individual village level through the LQAS technique, comparison with national-level data may be helpful to understand the overall situation. Findings of NFHS-4[6] of nutritional status of overall under-fives (35.8% underweight, 38.4% stunted, and 21% wasted) nearly corroborate our study, but in case of tribal under-five children, though not much promising, our study revealed much better findings

Table 1: Background characteristics of the study participants (*n*=378)

Descriptive characteristics	Frequency (%)
Age in months	
6-12	56 (14.8)
13-36	180 (47.6)
37-59	142 (37.6)
Gender	
Male	204 (54)
Female	174 (46)
Religion	
Hinduism	322 (85.2)
Christian	56 (14.8)
Ethnicity	
Santhal	373 (98.7)
Others	5 (1.3)
Type of house	
Kutcha	298 (78.8)
Semipucca and pucca	80 (21.2)
Number of siblings	
No sibling	130 (34.4)
1-2	208 (55.0)
>2	40 (10.6)
Family type	
Nuclear	164 (43.4)
Joint	214 (56.6)
Mothers age at this child birth (years)	
<18	54 (14.3)
18-25	275 (72.8)
>25	49 (12.9)
Socioeconomic status*	
Class II + III	6 (1.6)
Class IV + V	372 (98.4)
Domestic water source	
Ground water	262 (69.3)
Surface water	116 (30.7)
Defecation practice	
Open field	320 (84.70
Using latrine	58 (15.3)
ICDS centre attendance	
Regular	218 (57.7)
Irregular	160 (42.3)
Availability of ration card	
Available	100 (26.5)
Not available	278 (73.5)
Status of Vitamin A in oil supplementation*	
Complete	236 (62.4)
Incomplete and not started	142 (37.6)
Exclusive breast feeding for 6 months	
Yes	123 (32.5)
No	255 (67.5)
Prelacteal feeding	
Given	82 (21.7)
Not given	296 (78.3)
Colostrum feeding	
Received	345 (91.3)
Not received	33 (8.7)

*Based on B G Prasad scale (Updated for January 2020; CPI [IW]=330),[15] **Complete means those children received scheduled number of Vitamin A in oil doses up to their age and incomplete means those who did not receive. ICDS: Integrated Child Development Service, CPI: Consumer Price Index (CPI), IW: Industrial Worker

Table 2: Nutritional status of the study participants (*n*=378)

Nutritional status	Frequency (%)
Weight for age	
Normal	198 (52.4)
Underweight	117 (31.0)
Severely underweight	63 (16.6)
Height for age	
Normal	194 (51.3)
Stunted	119 (31.5)
Severely stunted	65 (17.2)
Weight for height	
Normal	267 (70.6)
Wasted	82 (21.7)
Severely wasted	29 (7.7)
Overall nutritional status	
Normal	113 (29.9)
Undernourished*	265 (70.1)
Anemia	
No anemia	261 (69)
Mild anemia	107 (28.3)
Moderate anemia	10 (2.7)

*Undernourished means the child was either underweight/severe underweight/stunted/severely stunted/wasted/severely wasted

than NFHS-4[6] where it was found that, 45.3% of children were underweight, 43.8% stunted, and 27.4% wasted. The observable enhancement of health status may be due to overall improvement of determinants of health in our study area or may be due to effective implementation of different interventions by the Government, like strengthening the public distribution system and ICDS for nutritional supplementation in tribal areas.

The findings of few other studies in the Indian context in this issue quite resemble our study, like the study by Islam *et al*.[11] in Assam, showed that the prevalence of underweight, stunting, and wasting was 29%, 30.4%, and 21.6%, respectively. Another similar study by Ghosh and Varerkar[12] in Maharashtra revealed nearly similar findings in the case of stunting (32%) and wasting (20%) among the tribal children, but they found much more underweight (53%) children. One study by Ghosh and Pati[13] in North 24th Parganas District of West Bengal found to some extent of higher prevalence of underweight (38.65%) and wasting (32.7%) and lower prevalence of stunting (21%) than our study.

Contd..

On the other hand, the findings of the study done by Shahnawaz and Singh[16] in Udaipur, Rajasthan is considerable difference in all the indicators from our study, where they found much higher prevalence of underweight (69%), stunting (63%), and wasting (46%). Kumar *et al*.[17] in their study in Maharashtra also reported much higher overall prevalence of underweight (86.2%), stunting (72.3%), and wasting (58.6%) among tribal children.

Although different studies done in different geographical areas at different times, it is evident from those findings and also from the interpretation of the findings of the present study that throughout the country nutritional status of tribal under-five children are still being compromised. Various indicators measuring different domains nutritional status varied significantly in different areas as also in our study area, though overall the indicators were slightly better in the present study. However, the deficits are still alarming.

We also measure the hemoglobin percentage in blood as a biochemical indicator of nutritional status among children, and it reflects that 31% of the tribal under-five children had anemia, 28.3% were mild anemic, and 2.7% were moderately anemic. Favorably none of the children were found to have severe anemia. Studies on the prevalence of anemia among tribal under-five children are limited in India. One study done by Philip *et al*.[18] in Wayanad District of Kerala in 2010 among tribal preschool children showed very high anemia prevalence of 95.7%. Another earlier study during 2000–2001 by Rao *et al*.[8] among tribal preschool children in Madhya Pradesh, revealed 86.7% prevalence of anemia with 71.1% severe anemia. In both the studies, the proportion was quite high as compared to the present study, but the referred earlier studies were done long back; thus, it would not be truly justifiable to compare. Though no specific studies among tribal under-five children were found in West Bengal; a study done by Meshram *et al*.[19] in 2010 among rural preschool children including in West Bengal, reported prevalence of anemia was 81%. Contrary to our findings among tribal children, supposed to be more vulnerable, the prevalence was high. Here again, the study refers to almost 10-year-old data.

In the absence of evidence from similar settings and population representing different geographical areas; national- and state-level information pertaining to tribal under-five children could have been helpful for comparison and interpretation of our findings. According to NFHS-4,[6] overall 63.3% of tribal under-five children suffering from anemia, 28.5% had mild anemia, 33.3% had moderate anemia, and 1.5% had severe anemia in India. In West Bengal, the prevalence of anemia was 68.1%. Mild, moderate, and severe anemia were found to be 34.6%, 33.3%, and 0.2%, respectively.[6] The burden has increased in NFHS-5 for West Bengal with 79% of tribal under-five children are anemic (34.1% mild, 43.4% moderate, and 1.5% severe).[7] This difference and a comparatively lower level of prevalence of anemia in the present area might be due to various programmatic interventions including regular iron-folic acid syrup supplementation under the Anemia Mukt Bharat programme. Further studies are warranted in this regard.

Some of the background characteristics may have some detrimental effects on the nutritional status of tribal under-five children revealed by this study. Socioeconomic marginalization (78.8% belonged from the lower socioeconomic class) probably the most common reason behind undernutrition. The study done by Islam *et al*.[11] in Assam also supports our finding as they also found most of the children were from lower socioeconomic class. Despite close proximity, this study explored poor ICDS centre attendance (only 57.7% attended regularly) is a matter of concern.

Less proportion of children (32.5%) received exclusive breastfeeding and continuation of only breastfeeding beyond 6 completed months without starting complementary feeding (35.2%) might be considered a risk factor for developing undernutrition. Majority of the children (78.3%) were not given any prelacteal feeding and 91.3% of children received colostrum, are the factors of some relief in this scenario. Philip *et al*.[18] in their study revealed nearly similar findings of exclusive breastfeeding status (40.8%) among the children, where Sinha *et al*.[20] in their study in Chhattisgarh revealed 90% of the children received exclusive breastfeeding for 6 months and contradicts our finding.

This study exposed the worse situation of undernutrition among under-fives of the tribal community still present at this modern era. Priority is to be accorded for their protection and improvement in terms of the different social indicators such as livelihood, health, nutrition, and education to decrease their vulnerability. Through different schemes, Govt is planning their socioeconomic advancement in a comprehensive way while retaining their culture and heritage by different developmental approach and intervening in all spheres of their socio-cultural, economic life, and health status, especially for improvement of tribal children, so that a visible impact is seen in the health status of children.

Limitation

In spite of sincere effort by the researcher, for feasibility and other issues, few limitations could not be avoided. Sociodemographic analysis of the study participants revealed that majority of them were from Santhal ethnicity and such a high presence of one ethnic group reduces the scope for external validity of the study finding to nonSanthal community. The effect of information bias could not be ruled out despite the best attempt from the researcher. The presence of the physician might have influenced them to fudge some socially undesirable facts (e.g., financial status, prelacteal feeding, exclusive breastfeeding for a period <6 months).

Conclusions

Childhood undernutrition is not only a global threat, but it also affects India, and is far worse in the indigenous population. This study revealed the disappointing situation of

Table 3: Association of background characteristics with nutritional status of children (*n*=378)

	Total	Underweight, *n* (%)	AOR (95% CI)	Stunting, *n* (%)	AOR (95% CI)	Wasting, *n* (%)	AOR (95% CI)
Age in months							
6-12	56	22 (39.3)	0.45 (0.22-0.91)	19 (33.9)	0.45 (0.23-0.90)	19 (33.9)	1.00 (0.50-2.00)
13-36	180	87 (48.3)	0.92 (0.56-1.51)	97 (53.9)	1.23 (0.78-1.97)	48 (26.7)	0.73 (0.47-1.31)
37-59	142	71 (50.0)	Reference	68 (47.9)	Reference	44 (31.0)	Reference
Gender							
Male	204	97 (47.5)	0.86 (0.55-1.35)	97 (47.5)	0.87 (0.57-1.34)	63 (30.9)	1.08 (0.68-1.72)
Female	174	83 (47.7)	Reference	87 (50.0)	Reference	48 (27.6)	Reference
Religion							
Hindu	322	149 (46.3)	0.71 (0.37-1.36)	155 (48.1)	0.88 (0.47-1.63)	95 (29.5)	1.11 (0.57-2.19)
Christian	56	31 (55.4)	Reference	29 (51.8)	Reference	16 (28.6)	Reference
Mother's age at this childbirth (years)							
<18	22	10 (45.5)	0.69 (0.22-2.13)	11 (50.0)	0.86 (0.29-2.53)	8 (36.4)	0.95 (0.32-2.85)
18-25	307	148 (48.2)	1.06 (0.53-2.10)	150 (48.9)	1.02 (0.54-1.93)	85 (27.7)	0.64 (0.33-1.24)
>25	49	22 (44.9)	Reference	23 (46.9)	Reference	18 (36.7)	Reference
Type of house							
Kutcha	298	152 (51.0)	1.74 (0.91-3.33)	144 (48.3)	0.82 (0.45-1.51)	98 (32.9)	2.22 (1.06-4.68)
Non-kutcha	80	28 (35.0)	Reference	40 (50.0)	Reference	13 (16.2)	Reference
Main source of domestic water							
Ground water	262	122 (46.6)	0.88 (0.54-1.46)	128 (48.9)	0.94 (0.58-1.51)	69 (26.3)	0.66 (0.40-1.08)
Surface water	116	58 (50.0)	Reference	56 (48.3)	Reference	42 (36.2)	Reference
Defecation							
Open field	320	159 (49.7)	0.94 (0.45-1.97)	156 (48.8)	0.99 (0.50-1.01)	100 (31.2)	0.90 (0.39-2.07)
Using latrine	58	21 (36.2)	Reference	28 (48.3)	Reference	11 (19.0)	Reference
ICDS center attendance							
Regular	218	82 (37.6)	0.39 (0.24-0.62)	93 (42.2)	0.58 (0.37-0.91)	55 (25.2)	0.64 (0.39-2.07)
Irregular	160	98 (61.2)	Reference	91 (56.9)	Reference	56 (35.0)	Reference
Ration card							
Available	100	36 (36.0)	0.55 (0.33-0.93)	42 (42.0)	0.70 (0.42-1.14)	26 (26.0)	0.93 (0.54-1.61)
Not available	278	144 (51.8)	Reference	142 (51.1)	Reference	85 (30.6)	Reference
EBF* for 6 months							
Yes	123	42 (34.1)	0.63 (0.38-1.04)	54 (43.9)	0.99 (0.61-1.61)	30 (24.4)	0.87 (0.50-1.50)
No	255	138 (54.1)	Reference	130 (51.0)	Reference	81 (31.8)	Reference
Prelacteal feeding							
Given	82	57 (69.5)	2.12 (1.15-3.85)	54 (65.9)	2.32 (1.30-4.14)	30 (36.6)	1.17 (0.64-2.11)
Not given	296	123 (41.6)	Reference	130 (43.9)	Reference	81 (27.4)	Reference
Colostrum feeding							
Given	345	155 (44.9)	0.28 (0.11-0.70)	165 (47.8)	0.86 (0.40-1.88)	98 (28.4)	0.65 (0.29-1.43)
Not given	33	25 (75.8)	Reference	19 (57.6)	Reference	13 (39.4)	Reference
Hosmer-Lemeshow test (*P*)			0.953		0.420		0.790
Nagelkerke R^2			0.210		0.101		0.079

AOR: Adjusted odds ratio, CI: Confidence interval, ICDS: Integrated Child Development Service, EBF: Exclusive Breast Feeding

nutritional status among tribal under-five children. Rigorous implementation of various schemes, missions, and programs by both state and central Government is the need of the hour. A collaborative, comprehensive, and holistic approach between different departments should be ensured to take any decision aiming for upliftment their nutritional status. Combating this undernutrition requires the identification of the local factors acting as barriers for good nutrition. Being a community problem, the opinion of nongovernmental organizations working in this field and expertise of the Community Medicine Department of the Medical College located in the district might be roped in. We must continue our efforts until the tribal children are nourished at an acceptable level.

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Conflicts of interest

There are no conflicts of interest.

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