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ORIGINAL ARTICLE

Assessment of Nutritional Indicators: A Comparative Study among Pre-School Children of Birhor and Kawar Tribe of Korba District, Chhattisgarh, India

Dhansay[1], A.N. Sharma[2], Sarvendra Yadav[3], Sonia Kaushal[4], Swapan Kumar Kolay[5]

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ABSTRACT

The future strength of every developing country is judged by the wealth and health of its people. Nutritional inequality leads to other forms of social inequalities. Hence nutritional inequalities have great importance in the public health dimension to identify the more underprivileged communities. Thus, the study aims to evaluate the prevalence of nutritional indicators i.e., stunting, wasting, underweight and anthropometric failure among preschool children of two tribal communities of Korba district, Chhattisgarh, India. A total of 209 [102 Birhor (PVTG) and 107 Kawar (non-PVTG)] preschool children were randomly selected and anthropometrically measured through standard procedure and techniques. The nutritional indicators i.e., wasting, stunting and underweight were assessed by WHO (2006) classification, then categorised into different anthropometric failures (Nandy *et al*., 2005). The age, sex and tribe combined prevalence of wasting; stunting and underweight were 19.2%, 42.6% and 34.0% respectively. Similarly, the prevalence of one or more types of anthropometric failure (B-Y) was 56% among studied

AUTHOR'S AFFILIATION:

[1] Research Scholar, Department of Anthropology, Dr. Harisingh Gour Vishwavidyalaya, Sagar, Madhya Pradesh.

[2] Former Professor, Department of Anthropology, Dr. Harisingh Gour Vishwavidyalaya, Sagar, Madhya Pradesh.

[3] Associate Professor, Department of Anthropology; Hemvati Nandan Bahuguna Garhwal University, Srinagar, Pauri Garhwal, Uttarakhand.

[4] Assistant Professor, Department of Anthropology, Dr. Harisingh Gour Vishwavidyalaya, Sagar, Madhya Pradesh.

[5] Professor & Head, School of Anthropology and Tribal Studies, Dean, Faculty of Life Science, Saheed Mahendra Karma Vishwavidyalaya, Jagdalpur, Bastar, Chhattisgarh.

CORRESPONDING AUTHOR:

Swapan Kumar Kolay, Professor & Head, School of Anthropology and Tribal Studies, Dean, Faculty of Life Science, Saheed Mahendra Karma Vishwavidyalaya, Jagdalpur, Bastar, Chhattisgarh.

E-mail: kolay.swapan@gmail.com

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children. The prevalence of nutritional indicators [wasting (χ^2=16.37; p<0.05) and underweight (χ^2=15.46; p<0.05)] and anthropometric failure (χ^2=24.52; p<0.05) was found significantly higher among Birhor children than Kawar children. The study concluded that the nutritional status of studied children was disastrous and the primitive tribal group are more deprived, facing severe nutrition insecurity.

KEYWORDS

• Composite Index of Anthropometric Failure • Nutritional Indicator • Particularly Vulnerable Tribal Group • Stunting • Underweight • Wasting, etc

INTRODUCTION

The future strength of every developing country is judged by the wealth and health of its people, hence investment in children's health indicates forthcoming manpower of the nation (Acharya *et al*., 2013). Nutritional inequality contributed to other forms of social, physical, mental and educational inequalities especially between or within underprivileged communities. Hence, nutritional inequalities have great importance in the public health dimension (Kochupurackal *et al*., 2021). To eliminate the social burden of under-nutrition and food insecurity, the global community and central government designed various nutritional-specification plans or schemes or projects such as Millennium Development Goal (2000), Sustainable Development Goal (2016), Balwadi Nutrition Program (1970) Integrated Child Development Scheme (Late 1970) and Midday Meal (1995) etc. As a result, the prevalence of nutritional indicators is reduced in the country level. However, in spite of the long-running of these programmes, India is still categorised as 'serious' in the Global Hunger Index (GHI) (Grebmer *et al*., 2022). In rural India, 37.3%, 19.5% and 33.8% under-five children were reported stunted, wasted and underweight respectively in the fifth round of the National Family Health Survey (2019-21) (NFHS-5, 2019).

Adequate nutritional intake is compulsory during preschool ages not only for development but also for tissue replacement and growth (Acharya *et al*., 2013; Biswas *et al*., 2009; Goswami, 2016) for complete developmental feasibility; stable and strong immune system (Boregowda *et al*., 2015). Because inadequate nutrition increases the infectious susceptibility (Das & Bose, 2009), delayed growth and development (Acharya *et al*., 2013), cognitive and health impairment (Biswas *et al*., 2009), affected labour productivity and economic growth in later life (Biswas *et al*., 2018), lastly decreases the life quality of children and increases the rate of mortality and morbidity among them. Thus, preschool children or under-five children seek more attention in the period of rapid growth and development. Children's chronic hunger deficiency or under-nutrition is the worst negative cause of poverty (Das & Bose, 2009).

Determining the prevalence and severity of nutritional health status of any marginalised groups is germinal step to ensure healthy and secure foundation of future society. Thus, the anthropometric parameter is a widely accepted, non-invasive, and cost-effective tool to determine the dispersion of under-nutrition (Acharya *et al*., 2013). In this context, stunting, underweight and wasting are very commonly used nutritional indicators that reflect linear growth retardation, low body weight with respect to chronological age and chronic under-nutrition (Acharya *et al*., 2013; Bharali *et al*., 2019; Gupta *et al*., 2015) respectively. However, the Composite Index of Anthropometric Failure (CIAF) is only a method that addresses all nutritional indicators *i.e.* stunting, wasting and underweight together.

Comparison in nutritional indicators between two or more marginalised groups will be new insight to identify the more vulnerable segment *i.e.,* marginalised within a marginalised population. There is no doubt in the notion that tribal communities are among the underprivileged or marginalised sections of Indian society. Mostly, the tribal communities live in remote areas with limited facilities within their natural resources, which shapes their cultural identity and practices. The educational and economic status, awareness

level, embedded cultural norms and beliefs, feeding/care practices and dietary behaviours, living conditions and sanitary habits make tribal communities different from other elite groups.

Assessment of nutritional status among preschool children has its importance in developing countries for their overall growth and development and health improvement (Sen & Mondal, 2012) especially among nutritionally vulnerable or underprivileged sections in urban slums, remote tribal and rural areas. With this brief introduction, the present study aims to assess the prevalence of nutritional indicators among preschool children of two tribal communities *i.e.*, Birhor a particularly vulnerable tribal group (PVTG) and Kawar (non-PVTG) living in the same geographical location of Korba district nearby.

MATERIAL AND METHOD

Study Area and Population

This study was conducted among pre-school tribal children of rural villages located in remote area of Korba district, Chhattisgarh. The study covered available preschool children of Birhor (PVTG) and Kawar (Non-PVTG) tribal communities. Firstly, information regarding the distribution of the Birhor population was taken from the '*Project Office, Integrated Tribal Development Project, Korba*'. Then, children of Kawar tribe from the same gram panchayat of selected Birhor villages were intentionally covered to observe the vulnerability of the tribal group.

Sampling

This was a cross-sectional, comparative and community-based study in which anthropometric characteristics of available preschool children were randomly measured through door-to-door visits. A totalof 209 (102 Birhor and 107 Kawar) children were covered during field work conducted between July 2021 to March 2022 in two phases. Information on age, sex, height and weight of children of both tribal groups was taken in a pre-structured interview schedule. The age was cross-verified by birth certificate, immunisation card or taken from anganwadi centre.

Anthropometric Measurement

Initially, the objective of the study was explained to the villagers, guardians and village authorities. Then prior verbal or written consent was taken from them before commencing the anthropometric measurement. The prior consent was taken from the village authority i.e. *Sarpanch*. Anthropometric measurements were taken by the author using the following standard techniques (Lohman *et al*. 1988). The length/height and weight were measured to the nearest 0.5 cm and 100 g using Martin's anthropometer rod and Omron body composition/spring weighing machine (of nearby ICDS centres) respectively.

Assessment of Nutritional Status

The prevalence of nutritional indicators (stunting, wasting and underweight) of studied children was evaluated with the help of *WHO Z-score* (2006) classification. Then the overall picture of under-nutrition was measured by categorising nutritional indicators in different groups of Nandy *et al*. (2005) popularly named as Composite Index of Anthropometric Failure (CIAF) which was initially proposed by Svedberg (2000). The z-score value was computed in *WHO-Anthro* software, then after other all the required statistical analysis was carried out in the *Statistical Packages for Social Sciences* (SPSS v-25).

Table 1: Classification for Composite Index of Anthropometric Failure (Nandy et al., 2005)

CIAF Group	Description	Wasting	Stunting	Underweight
A	No Failure	No	No	No
B	Wasting only	Yes	No	No
C	Wasting and Underweight	Yes	No	Yes
D	Wasting, Stunting and Underweight	Yes	Yes	Yes
E	Stunting and Underweight	No	Yes	Yes
F	Stunting only	No	Yes	No
Y	Underweight only	No	No	Yes

RESULT

Table 2: Anthropometric Characteristics of Studied Children

Age Group	Tribal Group	Weight (kg)	t-values (Sig.)	Height (cm)	t-values (Sig.)	BMI (kg/m2)	t-values (Sig.)
0-12	Birhor (28)	5.54±1.64	-2.105(0.041)*	60.29±6.90	-1.944(0.059)	14.88±1.89	-1.509(0.139)
	Kawar (17)	6.62±1.68		64.41±6.86		15.70±1.56	
13-24	Birhor (10)	9.02±1.12	-0.579 (0.561)	76.25±4.41	0.444 (0.660)	15.54±1.84	0.191 (0.850)
	Kawar (21)	8.79±0.97		75.50±4.34		15.43±1.25	
25-36	Birhor (16)	10.41±2.33	-0.458 (0.649)	86.45±7.75	0.716 (0.478)	13.78±1.47	-2.165 (0.036)*
	Kawar (26)	10.66±1.22		84.93±5.96		14.84±1.56	
37-48	Birhor (17)	11.98±1.64	-0.011 (0.991)	92.74±5.13	2.426 (0.021)	13.87±1.01	-3.025 (0.005)*
	Kawar (18)	11.98±1.30		88.73±4.63		15.25±1.59	
49-60	Birhor (31)	13.28±1.25	-3.223 (0.002)*	100.51±5.06	0.389 (0.699)	13.18±1.20	-3.609(0.001)*
	Kawar (25)	14.22±0.83		100.06±3.18		14.22±0.88	
Total	Birhor (102)	10.07±3.48	-1.453 (0.148)	83.59±17.15	-0.193 (0.847)	14.09±1.68	-4.282 (0.000)*
	Kawar (109)	10.71±2.82		83.99±12.86		15.02±1.45	

(*Significant; $p< 0.05$)

The anthropometric characteristics of the studied children's of Birhor and Kawar tribes of Korba district are shown in the above table number 2. The mean (±SD) weight, height and BMI of Birhors children were 10.07±3.48 (kg), 83.59±17.15 (cm) and 14.09±1.68 (kg/m^2). Similarly, the mean (±SD) weight, height and BMI of Kawar children were 10.71±2.82 (kg), 83.99±12.86 (cm), and 15.02±1.45 (kg/m^2) respectively. Pooled analysis showed that there was a significant difference in BMI (t=-4.282; p<0.05) of Birhors and Kawar children. However, the weight and height of given children was found more or less similar as there is no significant statistical difference observed. The age and tribe combined average (±SD) weight, height and BMI were 10.61±3.05 (kg), 84.25±14.38 (cm) and 14.75±1.60 (kg/m^2) among male children; while it was 10.20±3.28 (kg), 83.38±15.73 (cm) and 14.39±1.65 (kg/m^2) among female children respectively. There was no significant difference observed for any of the anthropometric characteristics between males and females.

Table 3: Prevalence of wasting, stunting and underweight [N (%)]

Age Group	Tribal Group	Wasting			Stunting			Underweight		
		Severe	Moderate	Normal	Severe	Moderate	Normal	Severe	Moderate	Normal
0-12	Birhor (28)	2 (7.1)	3 (10.7)	23 (82.1)	5 (17.9)	6 (21.4)	17 (60.7)	7 (25.0)	1 (3.6)	20 (71.4)
	Kawar(17)	1 (5.9)	0 (0.0)	16 (94.1)	0 (0.0)	0 (0.0)	17 (100)	0 (0.0)	1 (5.9)	16 (94.1)
13-24	Birhor (10)	0 (0.0)	2 (20.0)	8 (80.0)	2 (20.0)	4 (40.0)	4 (40.0)	0 (0.0)	4 (40.0)	6 (60.0)
	Kawar(21)	1 (4.8)	2 (9.5)	18 (85.7)	4 (19.0)	5 (23.8)	12 (57.1)	1 (4.8)	3 (14.3)	17 (81.0)
25-36	Birhor (16)	2 (12.5)	5 (31.3)	9 (56.3)	3 (18.8)	4 (25.0)	9 (56.3)	6 (37.5)	4 (25.0)	6 (37.5)
	Kawar(26)	2 (7.7)	0 (0.0)	24 (92.3)	9 (34.6)	7 (26.9)	10 (38.5)	2 (7.7)	8 (30.8)	16 (61.5)

table cont....

Age Group	Tribal Group	Wasting			Stunting			Underweight		
		Severe	Moderate	Normal	Severe	Moderate	Normal	Severe	Moderate	Normal
37-48	Birhor (17)	3 (17.6)	1 (5.9)	13 (76.5)	1 (5.9)	8 (47.1)	8 (47.1)	3 (17.6)	3 (17.6)	11 (64.7)
	Kawar(18)	0 (0.0)	2 (11.1)	16 (88.9)	8 (44.4)	6 (33.3)	4 (22.2)	2 (11.1)	5 (27.8)	11 (61.1)
49-60	Birhor (31)	5 (16.1)	8 (25.8)	18 (58.1)	1 (3.2)	11 (35.5)	19 (61.3)	3 (9.7)	16 (51.6)	12 (38.7)
	Kawar25)	0 (0.0)	1 (4.0)	24 (96.0)	0 (0.0)	5 (20.0)	20 (80.0)	0 (0.0)	2 (8.0)	23 (92.0)
Total	Birhor 102)	12 (11.8)	19 (18.6)	71 (69.6)	12 (11.8)	33 (32.4)	57 (55.9)	19 (18.6)	28 (27.5)	55 (53.9)
	Kawar(107)	4 (3.7)	5 (4.7)	98 (91.6)	21 (19.6)	23 (21.5)	63 (58.9)	5 (4.7)	19 (17.8)	83 (77.6)
Chi-square Value *(df)*		16.37 (2)			4.42 (2)			15.46 (2)		
Significance		0.00*			0.11			0.00*		

(*Significant; $p<0.05$)

Above table 3 showed that the prevalence of nutritional indicators [wasting ($\chi2=16.37$; $p<0.05$) and underweight ($\chi2=15.46$; $p<0.05$)] were found significantly greater among Birhor children than Kawar children. The prevalence of severe wasting; stunting and underweight was 11.8%, 11.8% and 18.6% among Birhor children, while 18.6%, 32.4% and 27.5% of children were moderately wasted, stunted and underweight respectively. Similarly, among Kawar children the prevalence of severe wasting, stunting and underweight was 3.7%, 19.6% and 4.7%; whereas 4.7%, 21.5% and 17.8% of children were moderately wasted, stunted and underweight respectively. The age and tribe combined prevalence of wasting; stunting and underweight was 19.2% (11.5% moderate and 7.7 % severe), 42.6% (26.8% moderate and 15.8% severe) and 34% (22.5% moderate and 11.5% severe) among male children; while it was 20.8% (12.5% moderate and 8.3% severe), 46.4% (29.2% moderate and 17.2% severe) and 37% (24.5% moderate and 12.5% severe) among female children respectively.There was no sex-specific statistical difference was found in the measure of nutritional indicators [wasting ($\chi2=1.24$; $p>0.05$), stunting ($\chi2=0.79$; $p>0.05$) and underweight ($\chi2=0.35$; $p>0.05$)]. However, the prevalence of severe wasting and moderate stunting was found greater among female than male children.

Table 4: Prevalence of Anthropometric failure [N (%)]

Age Group	Tribal Group	CIAF							
		A	B	C	D	E	F	Y	B-Y
0-12	Birhor (28)	16 (57.1)	0 (0.0)	0 (0.0)	5 (17.9)	2 (7.1)	4 (14.3)	1 (3.6)	12 (42.9)
	Kawar (17)	15 (88.2)	1 (5.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (5.9)	2 (11.8)
13-24	Birhor (10)	2 (20.0)	0 (0.0)	2 (20.0)	0 (0.0)	2 (20.0)	4 (40.0)	0 (0.0)	8 (80)
	Kawar (21)	10 (47.6)	1 (4.8)	1 (4.8)	1 (4.8)	2 (9.5)	6 (28.6)	0 (0.0)	11 (52.4)
25-36	Birhor (16)	6 (37.5)	0 (0.0)	2 (12.5)	5 (31.3)	2 (12.5)	0 (0.0)	1 (6.3)	10 (62.5)
	Kawar (26)	7 (26.9)	2 (7.7)	0 (0.0)	0 (0.0)	9 (34.6)	7 (26.9)	1 (3.8)	19 (73.1)
37-48	Birhor (17)	8 (47.1)	0 (0.0)	0 (0.0)	4 (23.5)	2 (11.8)	3 (17.6)	0 (0.0)	9 (52.9)
	Kawar (18)	3 (16.7)	0 (0.0)	1 (5.6)	1 (5.6)	5 (27.8)	8 (44.4)	0 (0.0)	15 (83.3)
49-60	Birhor (31)	7 (22.6)	3 (9.7)	9 (29.0)	1 (3.2)	9 (29.0)	2 (6.5)	0 (0.0)	24 (77.4)
	Kawar (25)	18 (72.0)	1 (4.0)	0 (0.0)	0 (0.0)	1 (4.0)	4 (16.0)	1 (4.0)	7 (28.0)
Total	Birhor (102)	39 (38.2)	3 (2.9)	13 (12.7)	15 (14.7)	17 (16.7)	13 (12.7)	2 (2.0)	63 (61.8)
	Kawar (107)	53 (49.5)	5 (4.7)	2 (1.9)	2 (1.9)	17 (15.9)	25 (23.4)	3 (2.8)	54 (50.5)
Chi-square Value *(df); Sig.*		24.52 (6); 0.00*							

(*Significant; $p<0.05$)

The prevalence of anthropometric failure is shown in the above table (4). Overall, the prevalence of one or multiple anthropometric failure (B-Y) was observed significantly ($\chi 2$=24.52; p<0.05) higher among Birhor (61.8%) children than Kawar (50.5%) children. Age and tribe combined, a total 3.8% (2.9% Birhor and 4.7% Kawar) children were only wasted (group B), 7.2% (12.7% Birhor and 1.9% Kawar) were wasted and underweight both (group C), 8.1% (14.7% Birhor and 1.9% Kawar) were wasted, stunted and underweight all (group D), 16.3% (16.7% Birhor and 15.9% Kawar) were stunted and underweight (group E), 18.2% (12.7% Birhor and 23.4% Kawar) were only stunted (Group F) and 2.4% (2% Birhor and 2.8% Kawar) children were only underweight (group Y). Again, there was no sexually significant difference ($\chi 2$=1.21; p>0.05)] was observed in the prevalence of one or multiple anthropometric failure (B-Y) between males (58%) and females (54.1%). The prevalence of CIAF from category B to Y was 4.0%, 7.0%, 10.0%, 17.0%, 18.0% and 2.0% among male children; whereas it was as follows among other counterparts *i.e.,* female 3.7%, 7.3%, 6.4%, 15.6%, 18.3% and 2.8% respectively.

DISCUSSION

The prevalence of stunting, wasting and underweight are used as indicators of under-nutrition in children. However, these indicators are unable to reveal aclear picture of undernutrition due to varying degrees of overlapping of these indicators. Thus to overcome this problem the CIAF is highly recommended to measure the prevalence of overall under-nutrition (Acharya *et al.*, 2013). Still poor health status and food scarcity are major points of social concern especially among underprivileged tribal groups. Hence, the study tried to compare the nutritional vulnerability between two tribal groups of Korba District, Chhattisgarh.

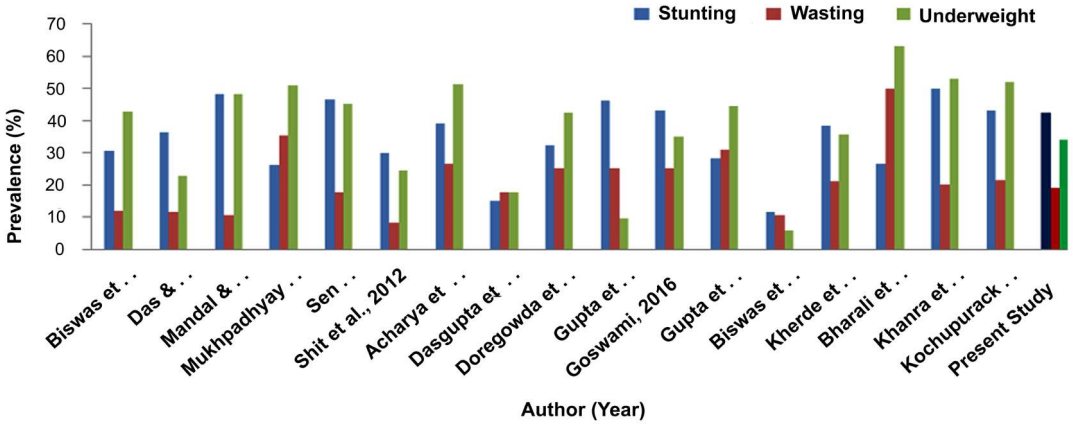

Figure 1: Comparison of Nutritional Indicators of Present Study with Other Studies

The age, sex and tribe combined prevalence of stunting; wasting and underweight was 42.6%, 19.1% and 34% respectively among the studied population.The measure of nutritional indicators (*i.e.* wasting and underweight) was found significantly higher among Birhor (30.4% and 46.1%) community than Kawar (8.4% and 22.4%) children. The above *figure 1* shows the comparison of measures of stunting, wasting and underweight reported in the present study with other previously reported studies. Comparatively, the overall prevalence of stunting in the present study was observed higher than the maximum studied (Acharya *et al.*, 2013; Bharali *et al.*, 2019; Biswas *et al.*, 2009, 2018; Boregowda *et al.*, 2015; Das & Bose, 2009; Dasgupta *et al.*, 2014; Gupta *et al.*, 2017; Kherde *et al.*, 2018; Mukhopadhyay & Biswas, 2011; Shit *et al.*, 2012). While, Goswami, (2016); Kochupurackal *et al.*, (2021); Gupta *et al.*, (2015); Sen & Mondal, (2012); Mandal & Bose, (2009); and Khanra *et al.*, (2020) reported greater stunting rate in their study than the present study. The prevalence of wasting in present study was found nearly medially placed,when it was compared and arranged with other studies from lowest (Biswas *et al.*, 2009, 2018; Das & Bose, 2009; Dasgupta *et al.*, 2014; Mandal & Bose, 2009; Sen & Mondal, 2012; Shit *et al.*, 2012) to highest (Acharya *et al.*, 2013; Bharali *et al.*, 2019; Boregowda *et al.*, 2015; Goswami, 2016; Gupta *et al.*, 2015; Gupta *et al.*, 2017; Khanra

et al., 2020; Kherde *et al.*, 2018; Kochupurackal *et al.*, 2021; Mukhopadhyay & Biswas, 2011). But, the prevalence of underweight in this study was found less than the maximum studies (Acharya *et al.*, 2013; Bharali *et al.*, 2019; Biswas *et al.*, 2009; Boregowda *et al.*, 2015; Goswami, 2016; Gupta *et al.*, 2017; Khanra *et al.*, 2020; Kherde *et al.*, 2018; Kochupurackal *et al.*, 2021; Mandal & Bose, 2009; Mukhopadhyay & Biswas, 2011; Sen & Mondal, 2012). The comparison showed that the linear growth (reflected through stunting) of study population in this study was more affected than the other studies. Comparatively, the body weight status of the study population is better than the other studies. But overall, the study revealed an unsatisfactory nutritional status of the study population as more than thirty percent of children were found underweight.

In the present study, the prevalence of overall CIAF was 56% (61.8% among Birhor and 50.5% among Kawar). The above *figure 2* shows the comparison of the prevalence of CIAF reported in this study with other reported studies throughout the nation. Tribe combined prevalence of CIAF (56%) expressed that the study population were nutritionally less failure in comparison with other studies. The measure of overall CIAF (61.8%) among Birhor children of this study was higher than the result of maximum studies (Acharya *et al.*, 2013; Agarwal *et al.*, 2015; Bharali *et al.*, 2019; Biswas *et al.*, 2009, 2018; Dasgupta *et al.*, 2014; Dhok & Thakre, 2016; Goswami, 2016; Khan & Das, 2020; Khanra *et al.*, 2020; Kochupurackal *et al.*, 2021; Kramsapi *et al.*, 2018; Nandy *et al.*, 2005; Roy *et al.*, 2018; Savanur & Ghugre, 2015; Sinha & Maiti, 2012). However, the result was found lower than other good numbers of studies (Boregowda *et al.*, 2015; Das & Bose, 2009; Dewan *et al.*, 2015; Gupta *et al.*, 2017; Kumar *et al.*, 2010; Mandal & Bose, 2009; Mukhopadhyay & Biswas, 2011; Rasheed & Jeyakumar, 2018; Seetharaman *et al.*, 2007; Sen & Mondal, 2012; Shit *et al.*, 2012; Talapalliwar & Garg, 2014; Mukhopadhyay *et al.*, 2009).

In comparison, the prevalence of CIAF (50.5%) among Kawar children was found lower than most of the studies (Agarwal *et al.*, 2015; Biswas *et al.*, 2009, 2018; Boregowda *et al.*, 2015; Das & Bose, 2009; Dewan *et al.*, 2015; Dhok & Thakre, 2016; Goswami, 2016; Gupta *et al.*, 2017; Khan & Das, 2020; Khanra *et al.*, 2020; Kochupurackal *et al.*, 2021; Kramsapi *et al.*, 2018; Kumar *et al.*, 2010; Mandal & Bose, 2009; Mukhopadhyay & Biswas, 2011; Nandy *et al.*, 2005; Rasheed & Jeyakumar, 2018; Seetharaman *et al.*, 2007; Sen & Mondal, 2012; Shit *et al.*, 2012; Sinha & Maiti, 2012; Talapalliwar & Garg, 2014; Mukhopadhyay *et al.*, 2009), which is almost opposite to the Birhor children. Thus, the comparison of this study with other previously reported studies shows that Birhor children were more vulnerable than the Kawar children.

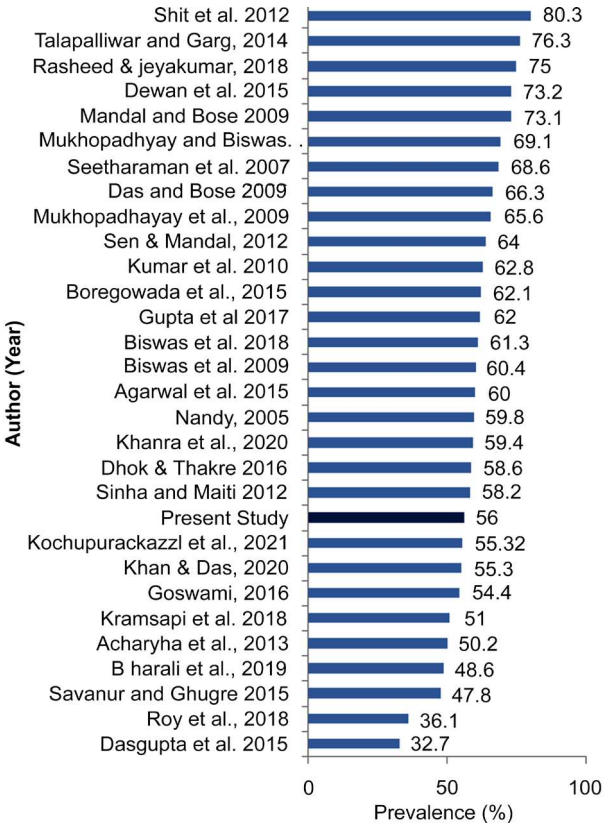

Figure 2: Comparing Prevalence of CIAF with Other Studies

CONCLUSION

The study revealed the nutritional situation of preschool tribal children of Korba district Chhattisgarh by prevalence of nutritional indicators *i.e.,* stunting, wasting, underweight and CIAF. Hence, the study concluded that the nutritional status of the studied children was disastrous; where nutritional standing of Birhor children was more disappointing than Kawar preschool children as the prevalence of nutritional indicators and CIAF was found greater among Birhor children. This shows that primitive tribal group faces double marginalisation *i.e.,* weakest among weaker

sections nutritionally. Thus, result of this study again attracted the attention of reader toward social inequalities in the form of nutritional insecurity. At last, such a cross-sectional study will have its own significance in generating new data to identify the group at risk and to revise existing policies or schemes; and also, for comparing matrices in national and global contexts.

Conflict of Interest:

There is no conflict of interest with respect to the publication of this work.

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