



A STUDY OF MALNUTRITION AMONG CHILDREN FROM KORKU TRIBES IN MELGHAT REGION OF MAHARASHTRA

Milind Bharambe¹, Parshuram Kale² & Ashish³

¹PhD Scholar, Tata Institute of Social Sciences, Mumbai, India.

²PhD Scholar, Tata Institute of Social Sciences, Mumbai, India.

³PhD Scholar, Tata Institute of Social Sciences, Mumbai, India.



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Introduction:

The level of child undernutrition remains unacceptable throughout the world, with 90 per cent of the developing world's chronically undernourished (stunted) children living in Asia and Africa. Detrimental and often undetected until severe, undernutrition undermines the survival, growth and development of children and women, and diminishes the strength and capacity of nations. With persistently high levels of undernutrition in the developing world, vital opportunities to save millions of lives are being lost, and many more millions of children are not growing and developing to their full potential. Nutrition is a core pillar of human development and concrete; large-scale programming not only can reduce the burden of undernutrition and deprivation in countries but also can advance the progress of nations.

According to national Family and Health survey 2015-2016, In India 22 per cent of children under five years of age suffer from wasting due to acute undernutrition. More than one third of the world's children who are wasted live in India. Forty-three per cent of Indian children under five years are underweight and 48 per cent (i.e., 61 million children) are stunted due to chronic undernutrition, India accounts for more than 3 out of every 10 stunted children in the world. Undernutrition is substantially higher in rural than in urban areas. Short birth intervals are associated with higher levels of undernutrition. The percentage of children who are severely underweight is almost five

times higher among children whose mothers have no education than among children whose mothers have 12 or more years of schooling. Undernutrition is more common for children of mothers who are undernourished themselves (i.e., body mass index below 18.5) than for children whose mothers are not undernourished. Children from scheduled tribes have the poorest nutritional status on almost every measure and the high prevalence of wasting in this group (28 per cent) is of particular concern. India has the highest number of low-birth-weight babies per year at an estimated 7.4 million. Only 25 per cent of newborns were put to the breast within one hour of birth. Less than half of children (46 per cent) under six months of age are exclusively breastfed. Only 20 per cent children age 6-23 months are fed appropriately according to all three recommended practices for infant and young child feeding. 70 per cent children age 6- 59 months are anemic. Children of mothers who are severely anemic are seven times as likely to be severely anemic as children of mothers who are not anemic. Only half (51 per cent) of households use adequately iodized salt. Only one third (33 per cent) Indian children receive any service from an anganwadi center; less than 25per cent receive supplementary foods through ICDS; and only 18 per cent have their weights measured in an AWC.

Review of Literature:

Sex of the child, birth order ,place of residence, mothers education, religion, caste, exposure to mass media, availability of toilet facility, type of fuel used for cooking and standard of living, mother's tetanus immunization during pregnancy, birth interval were considered as the main determinants of infant and child mortality in the Indian states(Pandey and Tiwary 1993). Apart from the above factors, the tribal children, in fact, face certain adverse realities like insufficient food intake, frequent infections, and lack of access to health services. They also have lack of awareness about environmental sanitation and personal hygienic practices, proper child rearing, breast-feeding and weaning practices (Reddy 2008).

Malnutrition is a persistent problem in India, though it is often confused with hunger. According to the Food and Agriculture Organization (FAO), about 18% of India's population was undernourished in 2012. Undernourishment is the main cause of children's deaths, and according to the United Nations Children's Fund (UNICEF, 2006), India houses one-third of the stunted, wasted and malnourished children of the world. Different rounds of the National Sample Survey (NSS) suggest the proportion of households in rural areas, getting enough food every day of the year increased from

94.5% in 1993-94 (NSS 50th round) to 99% in 2009-10 (NSS 66th round). The proportion of rural households not getting enough food every day for some months of the year declined from 4.2% to just 0.9%, while those not getting enough food every day for all months of the year declined from 0.9% to 0.2%. In the urban areas, where, to begin with, shortage was much less, a similar story has unfolded. Food availability has reached a large segment of the population and the gap between the rural and urban percentages has narrowed appreciably.

Nutrition is the total of the processes involved in the intake and utilization of food substances by living organisms, including ingestion, digestion, absorption, transport and metabolism of nutrient found in food. Adequate nutrition during early childhood is fundamental to the development of the child's potential. It is established that the period from birth to two years of age is a critical window for the promotion of optimal growth, health and overall survival of the children. (Ali, et al. 2006).

Malnutrition can be operationally defined as a lack of essential nutrients or failure to use available foods to best advantage (Barasi, 1997). Malnutrition affects physical growth, morbidity, mortality, cognitive development, reproduction and physical work capacity and it consequently impacts on human performance, health and survival. A well-nourished child is one whose weight and height measurements compare very well with the standard normal distribution of heights and weights of healthy children of the same age and sex (Salah, 2006).

There is growing evidence of the benefits to mother and child of early initiation of breastfeeding, preferably within the first hour after birth. Early initiation of breastfeeding contributes to reducing neonatal mortality. Even though breast milk is rich in high quality protein (Monckeberg, 1991; Torún and Chew, 1994; Golden and Golden, 2000; Torún, 2006), prolonged breastfeeding causes a delay in the introduction of complementary foods and can result in micronutrient deficiencies, as human milk is low in iron and zinc (Kalanda et al, 2006).

Household food security is seen as all people in the household having access to food at all times. The food must be safe and of high quality and the environment should be hygienic enough to use the food so that all members can lead healthy, productive lives. Food security concentrates on four aspects: availability of food, stability of food supply, access to food and utilization of food (Food and Agriculture Organization (FAO), 1996).

Objectives:

The objectives of the study are:

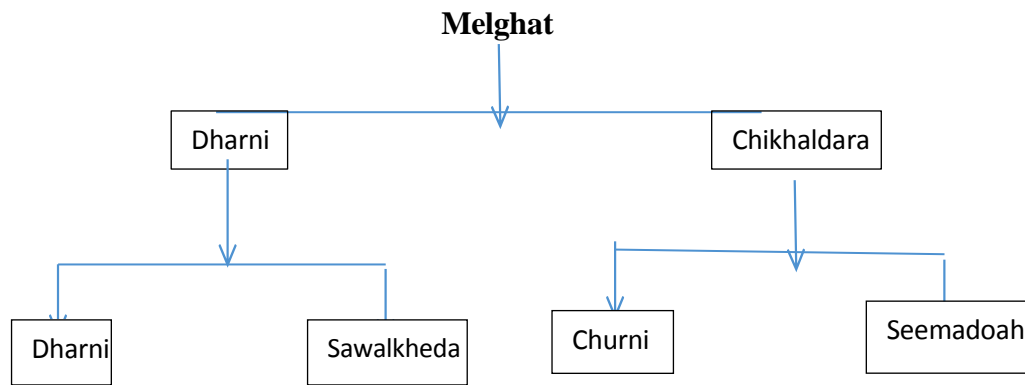
1. To examine the level of Malnutrition among children from Korku tribes.
2. To understand the role of socio-cultural practices in malnutrition among the Korku Children.

Data Source and Methodology:

This is an exploratory study based on the primary data collected in the field among the tribal Korku population in Maharashtra and is limited to its spatial distribution. To get the holistic picture of the situation, in-depth interviews were conducted across the following domain namely.

- 1 Household Level
- 2 Women in Household

The questionnaires were mainly open ended in nature. Along with questionnaire field observations were noted to support the study. The data collected is then recoded into various categories for quantitative as well as qualitative analysis. The analysis of the data is presented along with results and discussion in the following chapter. For quantitative analysis the SPSS software package has been used and qualitative data analysis has been done by incorporation of field observations and the common theme from the in-depth interviews after through study and analysis of these interviews. Melghat region encompasses 312 villages spread across the two blocks of Chikhaldara and Dharni and they form 153 gram panchayat in the region. Four villages with population in the range from 15000 to 900 were selected. Out of the four villages three have independent grampanchyat institution and the other is part of group grampanchyat. From each block two villages were selected. The selected villages are as shown below. There is only one urban locality in Melghat and it is Chikhaldara, which is statutory town. The Korku people do not reside in this town hence it was not selected for the study.



The sample of four villages was selected and ten household were interviewed with the criteria were at least one child was below five years of age. The selection was purposive as well as random.

Korku Tribe a brief Introduction:

The Korkus fall in Munda or Kolarian tribal group. The term Korku means group of men. Kor-Man and Ku is used for plural. As per the Korku myth, Mahadev sent a crow to fetch Kavi clay from Maalik to the world with it. Mula-Muli was the first human couple created by him, from whom all the tribes originated in course of time. The crow informed Mahadev that the Maalik had given the Kavi maati (clay) on the condition that it would be returned. Mahadev gave an herb also to the crow-one for Mula-Muli and the other for itself. He exchanged the herbs and consumed the herb meant for the humans and gave to human the one meant for it.

Results & Findings:

The Melaghat block of Amravati district located in North Central Maharashtra is known for severe malnutrition and it is frequently in news for Maharashtra whenever we talk Malnutrition status in the state. This case study is an attempt to see what the status of nutrition among the Korku tribe of Melaghat is and to explore the reasons behind the perpetuation of the malnutrition. This region of Melaghat is dominated by this Korku tribe. Around 80 per cent of the population belongs to this tribe. The sample for the study is 40 households. Nearly 70 per cent of the household head belongs to the age group of less than 35 years and all of them lives in the remote rural areas. Most of the women in the tribe get married very early in their life. More than 95 per cent of women are married before attaining the age of 20 years. This shows that most of the women are not physically prepared for pregnancy. The society of the tribe is very liberal with related to sex and there is both pre-marital as well as extramarital sex for the women of the tribe.

Table 1: Descriptive statistics of the sample by various demographic, socio-economic, environmental and nutritional characteristics of Melaghat.

Covariates	Percentage	Frequency	N
Demographic variables			
Age of the household head			
less than 35	67.5	27	40
more than 35	32.5	13	40
Age at marriage of women in the household			
below 15	30	12	40
16 to 18	40	16	40
19 to 20	27.5	11	40
above 20	2.5	1	40
Socio-economic variables			
Education			
Illiterate	80	32	40
Literate	20	8	40
Occupation			
labour	42.5	17	40
agriculture and labour	55	22	40
not working	2.5	1	40
Income			
Rs 800-2000	32.5	13	40
Rs 2100-20500	67.5	27	40
HH living environment			
Separate room for cooking			
No	57.5	23	40
Yes	42.5	17	40
Open defecation			
No	12.5	5	40
Yes	87.5	35	40
Electricity			
No	40	16	
Yes	60	24	
Water facilities			
Tap water	17.5	7	40
well	32.5	13	40
Handpump	35	14	40
lake/river	15	6	40
Mass media exposure			
Television			
No	82.5	33	40
Yes	17.95	7	40
Mobile			
Awareness /Informational Variables			
ICDS			
No	15	6	40
Yes	85	34	40

Table 1 continue....

Knowledge about malnutrition			
No	70	28	40
Yes	30	12	40
Awareness about colostrums			
No	90	36	40
Yes	10	4	40
About Anganwadi			
No	2.5	1	40
Yes	97.5	39	40
About ANM centre			
No	2.5	1	40
Yes	97.5	39	40
Initiation of breastfeed			
immediately	41.03	16	40
within 1 hour	25.64	10	40
within 24 hour	20.51	8	40
after 24 hour	7.69	3	40
after 3 days	5.13	2	40
Expenditure on cereals			
0 to 500	20	8	40
500 to 1000	40	16	40
1000 to 1500	25	10	40
1500 to 2000	2.5	1	40
2000 +	2.5	1	40
home	10	4	40

Around 80 per cent of the household head are illiterate but still and around 70 per cent have income ranging between Rs. 2000 to 20000 and most of them work as labour and Agricultural labourer. Household environment is like a typical rural household. Around 60 per cent of the household do not have separate room for cooking and near about 90 per cent go for toilet and defecation in open field with more than 60 per cent population is using either well or hand pump for drinking water. The other sources are lake, rivers and tap. The good part is that nearly 60 per cent of the household of the tribes have electricity. Though they live in rural areas but still around 73 per cent is having mobile connection and nearly 18 per cent is having Television. The main reason may be the availability of electricity in the region. So they have good mass media exposure in terms of mobile connections. More than 85 per cent of the household have the knowledge about the government programmes like ICDS, ANM services and Anganwadi worker services, still more than 70 per cent do not have any knowledge about Malnutrition and around 97 per cent did not heard the word colostrums. Around 40 per cent women start breastfeeding immediately after birth and more than 80 per cent start feeding within 24 hours of delivery. This shows that there are good numbers of

women who are feeding breast milk to the new born and hence decreases the risk of death to a large extent.

Results and Discussion:

Table 2 shows Children under five ages were classified into two group for studding malnutrition. The first group contested of children born between 0 to 23 months, and the rest of them were placed in the second group. Among children placed in the first group stunting was observed to be 83 percent, while wasting 17 percent and underweight was calculated to be 50 percent. In the second group 37 percent children were found to be stunted while wasting was 25 percent and underweight 37 percent. When we look from sex differential point of view 57 percent male were stunted while 63 percent female were stunted, in terms of wasting female were 37 percent and male 31 percent while when it comes to underweight 59 percent male underweight as compare 63 females. When we look at education variable there is mark difference in terms of stunting and wasting between literate and non-literate population while underweight remain almost the same. In terms of occupational distribution of malnutrition both category are found to be at same platforms when it comes to stunting and underweight while laborer are found to be at severe disadvantage when it comes to wasting. When we look at malnutrition from place of delivery there is not much difference in the statistics. This may be attributed to the daily chores performed by women even when they are pregnant and lack of proper healthy diet.

Table 2. Malnutrition indices for the sample population of the study

Background Characteristics	Percentage of children under age five years classified as malnourished by			N
	Height for age	weight for height	weight for age	
	Percentage	Percentage	Percentage	
	below -2 SD	below -2 SD	below -2 SD	
Age group of Child				
0-23 months	83	17	50	22
24 - 59 months	37	25	37	38
Sex				
Male	57	31	59	39
Female	63	37	63	21
Education				
Literate	36	26	58	8
Non-literate	67	53	69	32
Occupation				
labour	50	50	61	18
Agriculture labour	65	21	60	22
Delivery				
Institutional	60	28	58	9
Home	59	34	68	31

Table 3 presents body mass index of mothers who were not pregnant when measurement was taken. Out of the total number 22 of them are in low BMI category which amount to almost 55 percent and has serious implication when they get pregnant on the health of both child and mothers.

Table 3. BMI of the household Women

Body Mass Index according to Income Group			
Income Group	BMI		N
	16 to 18	18.01 to 22.5	
below 1500	3	4	7
Above 1501	19	14	33

Table 4 shows the availability of ration card and the frequency of ration that is delivered. Around 13 people are not in position of ration card, and out of the total population 19 have BPL card, 8 of the total ration card holders were not deliver ration regularly, this has serious implication of food security for the people.

Table 4. Availability of ration and percentage of household having ration card

Type of ration Card	Frequency of Getting Ration		
	Regular	Not Regular	N
BPL	14	5	19
APL	5	3	8

The survey results showed that there is a high level of undernutrition among the tribal children of Melghat region. The study had sample size of forty; the selected sample was representative of the study population. A sharply focused effort needs to be made to identify the hungry and calorie-deficient households, who may be living in remote and hilly areas, or families with dysfunctional male heads (drugs, alcoholism), aged or with serious disabilities or female-headed households. Study has pointed out that there exists a positive association on how resources are allocated between food and non-food items, the quality of food purchased, and the distribution of food within households. Lack proper sanitation and toilet facilities, can be considered as a major problem in combating malnutrition. Widespread child stunting is a human development tragedy. In some household it was found that they have television and mobile but no toilet facility. The issue is why people prefer to spend on entertainment and not on food and sanitation. The paradox that we have more households with mobile phones than with toilets is very similar. This is not just a matter of individual choice, but is fundamental to understanding why some interventions work and others do not.

This lack of awareness is the reason that increases in income alone are less likely to be effective in reducing malnutrition or improving access to better sanitation and

hygiene. And this is also the answer to why direct cash transfers are less likely to have an impact on malnutrition outcomes than other direct interventions that ensure that children eat food at school and at day care centers. This is also the reason why direct delivery of food grain through the public distribution system is more likely to have an impact on malnutrition outcomes than cash transfers. This is simply because the food grain once purchased by the household is more likely to be consumed whereas cash transfer of the same amount may not lead to any increase in food intake. Empirical evidence from the national sample survey data also shows that if the implicit subsidy on food grain is given as cash, it is only half as likely to increase the food grain consumption compared with the delivery of the same transfer as food grain. To fulfill the required micronutrients, need of household fortified food can be introduced through the PDS and it is more likely to have effective outcome rather than direct benefit transfer which is being implemented by the government.

The intergenerational effect of child malnutrition is well established among social scientists; a mother's birth weight and poor growth in early infancy not only determines her survival and long-term health, but also increases the likelihood of her child having a low birth weight and decreases the child's chances of survival. With persistent malnutrition among the adolescent girls in the region and nearly marriage is more likely to affect the phenomenon of malnutrition. Government should make conscious efforts towards encouraging late marriages in the Korku society and by effective implementation of Kishori Shakti Yojna the problem of malnutrition among adolescent mothers can be reduced. The access to health facility by the needy is one of the major causes why people do use the public health services. Less than half of the Severe Acute Malnourished (SAM) children fail to reach the government managed Nutrition Rehabilitation Centers (NRCs). This is due to parental reluctance based on the argument that mothers cannot leave home or farm works and other siblings and children for a fortnight. Sizeable number of children is looked after by elder siblings during mother having gone for wage earning in the field or for agricultural work. These children are not fed properly and receive food only two times a day i.e., in morning and evening.

World Bank economist Monica Das Gupta traced the neglect of public health in India to the decisions of policymakers in post-independent India, who focused on disease-specific interventions rather than on an overarching public health network focused on prevention. India is one of the few Asian economies that did not invest in an integrated public health system involving food safety, water management, waste

disposal, vector control, sanitation systems, health education and other health regulations. The study comes to the same conclusion that we need to use our health resources for holistic development of the community as well as better health outcomes. These factors are highly interdependent and chain reactions needs to be initiated as there would be large scale interactions among various social dimensions through the mechanism of reverse causation. It is well known that in social milieu, demonstrative effect has larger role in initiating actions which raise individual social status. Public functionaries would have to understand the process to harness this power for achieving better health outcomes in the region.

Conclusion:

The problem of malnutrition is not isolated one; it is a complex interdependent event which occurs due to various factors acting in complex socio-cultural, political and economic milieu. To effectively address the problem state needs to take into considerations local beliefs and socio-economic structure at regional level. The local leaders need to be empowered through knowledge dissemination about health problems and their vital role in eliminating the inter-generational problem of malnutrition. The policy formulation should be decentralised for its acceptance among the people and strict implementation and monitoring with the help of community members is more likely to improve health outcomes.

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