

# Patterns of Morbidity of Under 5 Children Among Kutia Kandha of Kalahandi District, Odisha

Gagan Kumar Behera<sup>1</sup>, Sushreeta Sahu<sup>2</sup>

<sup>1</sup>Research Scholar, Sambalpur University

<sup>2</sup>Student of Master of Arts, Sambalpur University

## Abstract

The Kutia Kandha tribe residing in the Kalahandi district of Odisha faces unique health challenges that impact the morbidity patterns among their children. This study aims to understand these morbidity patterns by examining the specific health issues prevalent among Kutia Kandha children, which are influenced by socio-economic conditions, cultural practices, and environmental factors. A cross-sectional study was conducted among 52 respondents in the field practice area of the Kutia Kandha tribe in the Kalahandi district, using a pretested semi-structured questionnaire. The study reveals that diseases such as skin diseases, diarrhea, malaria, fever, and pneumonia are more prevalent in this region due to a lack of proper knowledge about sanitation and health hygiene.

## Introduction

Infant mortality and morbidity are pressing global health issues that demand strategic policies, programming, and investments. According to a report, 75% of all deaths among children under five occur within their first year (Abegaz et al., 2019). Acute childhood illnesses, such as acute respiratory infections, diarrhea, malaria, and meningitis, are the primary medical causes of these infant and child deaths (WHO, 2015). Despite the global epidemiological transition of diseases, child morbidity continues to be a significant challenge in the developing world (Census, 2011). Children depend on their parents for their health and well-being. Due to their young age, they are susceptible to various infections. In 2006, India had the largest population of children under five years old, with 127 million, and the highest number of deaths in this age group, totaling 2.1 million, globally (Wadgave, 2013). The National Family Health Survey-4 (NFHS-4) assessed childhood diseases such as episodes of diarrhea, acute respiratory infections (ARI), and anemia.

People often choose private practitioners, believing they provide a quicker cure. As a result, infants miss out on the high-quality healthcare services available in hospitals and nurseries. Understanding this behavior might require studying parental behavioral patterns. Some studies (Willis et al., 2009; Malhotra and Upadhyay, 2013) have documented significant gender differences in the perception and treatment-seeking for illnesses.

Odisha has the highest number of Particularly Vulnerable Tribal Groups (PVTGs) with 13, followed by Andhra Pradesh with 12, out of the 75 listed PVTGs in India. In Odisha, the Kandha tribal group constitutes the majority of the population. The name “Kandha” was given to them by non-tribal people, and over time, the tribesmen came to accept it. However, they refer to themselves as “Kui loku,” “Kui

enju,” or “Kuinga,” as they speak the Dravidian language “Kui” or “Kuvi” (Dash & Kumar, 2023) The Kandha can be divided into a number of subgroups based on their sociocultural traits, and the Kutia Kandha is one of the sub groups among them.

However, the Kutia Kandha tribe residing among the Kalahandi district of Odisha have faces unique health challenges that affects the morbidity patterns among children. The study aims to understand these morbidity pattern involves examining the specific health issues prevalent among Kutia Kandha children which are influenced by socio-economic conditions, cultural practices and environmental factors.

### **Review of Literature**

Desai & Alva (1998) posits that health is not merely a component, but rather a reflection of development. Therefore, the health status of a community at any given time is essentially the state of the entire social system when viewed through a health lens. Health, in this context, encompasses both physiological well-being, evidenced by declining mortality and morbidity rates, as well as the capacity for mental and physical productivity.

Rasmussen et al. (2013) established a correlation between ethnicity and morbidity, attributing health disparities in ethnic minority groups to biological, behavioral, and socio-cultural factors.

Sharma et al. (2000) discovered that “It is crucial to prevent iron deficiency during pregnancy and early childhood, as it can result in enduring harm.” In India, the national nutritional anemia control program advocates for iron supplementation to pregnant women starting after the first trimester of pregnancy.

Kleinman (1980) asserts that a healthcare system, akin to other cultural frameworks, intertwines with the health-related facets of society. These encompass belief patterns concerning the origins of illness, norms dictating treatment selection and progression, socially sanctioned statuses, roles, power dynamics, relational intricacies, interactional contexts, and institutional frameworks.

### **Area of Study**

The study was conducted in Kalahandi district of Odisha, where the researcher covers 13 villages among Lanji Panchayat of Lanjigarh Block of Kalahandi district of Odisha. This place is known to be one of the prominent PVTG group’s residence. The researcher covers data on ‘Pattern of morbidity and health seeking behaviour of Under 5 children in Kutia Kandha community’ of 13 villages in Lanjigarh block. The Lanjigarh block, there are 32 villages are there where as the researcher covers data of Kutia Kandha community among 13 villages.

### **Methodology**

The study employed a cross-sectional design and incorporated both quantitative and qualitative approaches. From the 13 villages surveyed, there were 52 children aged 0 to 5 years. The researcher selected 27 diseased children from this group as the sample size for the study. Data was collected using a predesigned and pretested semi-structured questionnaire, which included questions about the respondents' characteristics such as age, gender, family type, literacy level, head of household occupation, socioeconomic status, religion, caste, health status, healthcare facility preferences, and reasons for choosing specific healthcare facilities.

### **Epidemiological profile:**

Generally, at household level, cultural norms and practices and socio-economic factors determine the exte-

nt of health problems among people. Change in socio economic status and various health problems adversely affect an individual’s way of life during old age.

India is home to almost half the tribal population of the world. Tribals are characterized by a distinctive culture, primitive traits, and socio-economic backwardness. Although scheduled tribes are accorded special status under the fifth/sixth schedules of the Indian constitution, their status on the whole, especially their health still remains unsatisfactory. Tribal communities and primitive groups in general highly disease prone. Also, they have not required access to basic or advanced health care facilities. They are the most exploited, neglected and highly vulnerable to diseases with high degree of malnutrition, morbidity and mortality (Balgir, 2010). Their misery is compounded by poverty, illiteracy, ignorance of causes of diseases, hostile environment, poor sanitation, lack of safe drinking water and blind beliefs, etc.

Some of the preventable diseases such as tuberculosis, malaria, gastroenteritis, filariasis, measles, tetanus, whooping cough, skin diseases (scabies), etc. are also high among tribals. Some of the diseases of genetic origin reported to be occurring in the Indian tribal population are sickle cell anemia, alpha and beta thalassemia, glucose 6 phosphate dehydrogenase (G6PD) deficiency etc. (Balgir, 2010). Night blindness, sexually transmitted diseases are well known public health problems of tribals in India.

**Prevalence of Diseases:**

In Kutia Kandha tribe people suffer more from infectious and communicable disease. Fever, Diarrhea, Common headache, Jaundice, Piles, Diabetes, Pneumonia, Hypertension, Scabies, skin diseases, High Blood pressure, Dehydration, Worm infection, malnutrition, etc. are the most prevalent diseases among Kutia Kandha community.

The above manual data is written in the tabulation form below:

**Total population of the age group (0-5) among Kutia Kandha**

Age	Male	Percentage	Female	Percentage	Total
0-5	30	57.69%	22	42.30%	52

**Prevalence of diseases among 0-5years in Kutia Kandha**

Age	Diseased Male	Percentage	Diseased Female	Percentage	Total
0-5	12	23.07%	15	28.84%	27

The above two table shows that, the researcher conducted study throughout the 13 villages and 52 children in total were found to be under 0 to 5 years of age group. Among them, 22 were female children (42.30%) and 30 were male children (57.69%). And among those, 27 children (51.92%) were diseased, which were the samples for the study. Again, 15 of them were female children (28.84%) and 12 of them were male (23.07%). It rationally shows the greater prevalence of diseases in girl child rather than the male child, which reveals the gender biasness in the community. They emphasize more on the boy’s health in order to make them more physically compatible.

In Kutia Kandha community, both communicable diseases and non-communicable diseases were seen in under 5 children. Most communicable diseases found in Kutia Kandha children were mild cold, skin diseases. And non-communicable diseases such as Malaria, Fever, Pneumonia, Jaundice, Worm infections were very much common. Children were very much prone to the skin diseases and diarrhea, especially in

the rainy season. However, seasonal effects as well as the lack of sanitary practices resulted in these kinds of communicable diseases.

**No. of communicable & non-communicable diseases**

Total no. of diseased children	Communicable diseases			Non-communicable diseases				
	Skin disease	Cold	Diarrhea	Malaria	Fever	Pneumonia	Jaundice	Worm infection
27	8	4	5	2	2	3	1	2

The morbidity pattern from the above table reveals that, out of the total 27 diseased children, which are 51.92% of the total under 5 population in Kutia Kandha community; 29.62% were suffering from skin diseases, 18.51% children had diarrhea, 14.81% were suffering from cold, 11.11% children were suffering from pneumonia, 7.40% were having fever. Meanwhile, 7.40% children had worm infections. And last but not the least, 3.70% of the diseased population were suffering from jaundice.

The above study showed that highest prevalent diseases that broke out in under 5 population of Kutia Kandha was variety of skin diseases and diarrhea. These comes under the category of communicable diseases and it spreads through the contact of water and air. In Kutia Kandha community, the researcher found out remarkable absence of sanitary practices as well as the lack of water facilities. And also, these diseases are more prevalent because they use the non-purified water from the streams come down from the mountains. Some villages have been provided with water facilities like taps etc., but water is not coming out from those taps. Some villages do not even have any of those water resources. Hence, these people are bound to use non-purified water. And since, under 5 children’s adaptability to the environmental changes are weak, and they are not so known to the ground rules, regulations of sanitary practices, they become the victims of such communicable diseases. It is also the duties of the parents to be aware of health care practices towards the new born children, since their bodies are sensitive. But, due to their solitary life styles, they lag behind the modern health care practices & health awareness programs. Their superstitious lifestyles also become the hurdle in

**Socio-economic factors: (Barriers to health care, livelihood & health, education and health awareness)**

Socio-economic factors wield significant influence over the health of under-5 tribal children due to their direct impact on access to essential resources and healthcare services. There are many socio-economic factors contributing to diseases among Kutia Kandha under-5 children:

Poverty is a fundamental determinant affecting the health of Kutia Kandha children. Limited financial resources restrict access to nutritional food, clean water and adequate healthcare services, predisposing children to malnutrition and various diseases.

Inadequate housing conditions prevalent in Kutia Kandha community, lack of sanitation facilities create an environment conducive to the spread of infectious diseases among children.

Limited access to healthcare services exacerbates health disparities within their community. Lack of transportation, geographical isolation and cultural barriers hinder timely medical intervention, leading to untreated illnesses and preventable diseases.

Low levels of education and awareness about health and hygiene practices contribute to the burden of diseases among the children. Insufficient knowledge about sanitation, hygiene and preventive healthcare

measures perpetuates the cycle of illness.

Economic constraints, including unemployment and lack of stable income sources, hinder the families' ability to afford healthcare expenses for their children. This financial burden often results in delayed or inadequate treatment, compromising the health outcomes of children.

Socio cultural factors, including traditional beliefs and practices, influence healthcare-seeking behaviors among the communities. Reliance on traditional healers or home remedies may delay modern medical care, allowing diseases to progress unchecked in children.

Discrimination and marginalization faced by the community limit their access to educational and employment opportunities, especially of the women education & rights; which ultimately cause perpetuating the cycle of poverty and poor health outcomes for the children.

Inadequate nutrition stemming from food security and lack of access to diverse food sources contributes to malnutrition and micronutrient deficiencies among the children, weakening their immune systems and increasing susceptibility to diseases.

Limited access to safe drinking water and proper sanitation facilities exposes tribal children to waterborne diseases such as diarrhea, cholera, and typhoid fever, leading to high morbidity and mortality rates.

Insufficient prenatal and postnatal care for pregnant women within tribal communities increases the risk of maternal and neonatal complications, affecting the health of both mothers and their children.

Inadequate vaccination coverage due to logistical challenges, vaccine hesitancy, and lack of awareness about immunization schedules leaves tribal children vulnerable to vaccine-preventable diseases such as measles, polio, and tuberculosis.

Socioeconomic disparities in access to nutritious food and healthcare services contribute to the persistence of stunting, wasting, and underweight among tribal children, impairing their physical growth and cognitive development.

Limited access to quality education and literacy programs among tribal communities hinders their ability to comprehend and adopt health-promoting behaviors, perpetuating intergenerational cycles of poor health outcomes.

Seasonal migration for livelihood opportunities exposes tribal children to changing environments and increased risk of infectious diseases, as they often lack access to healthcare services while on the move.

Gender disparities within tribal societies, including differential access to healthcare and nutrition based on gender, further exacerbate health inequities among children, particularly girls.

Economic exploitation and displacement of tribal communities due to industrial development projects disrupt traditional livelihoods and social networks, leading to heightened stress levels and mental health issues among children.

Limited investment in infrastructure development, including roads, electricity, and healthcare facilities, in tribal areas perpetuates geographic and social isolation, hindering access to essential services for children.

Inadequate disaster preparedness and response mechanisms in tribal regions increase the vulnerability of children to natural disasters such as floods, droughts, and cyclones, exacerbating health risks and disrupting healthcare delivery systems.

Lack of political representation and voice in decision-making processes marginalize tribal communities, impeding efforts to address the underlying socio-economic determinants of health and well-being for children.

## Conclusion

The epidemiological profile of the Kutia Kandha tribe reflects the complex interaction between cultural, socio-economic, and environmental factors shaping their health outcomes. The analysis underscores the importance of understanding the tribe's distinct cultural norms, socio-economic status, and environmental conditions in addressing their health challenges effectively. Their health profile is linked to their cultural practices and traditional way of life. Their unique cultural identity, characterized by primitive traits and distinctive customs, influences their health-seeking behaviors, perceptions of illness, and healthcare utilization patterns. Traditional beliefs and practices, including reliance on traditional healers and home remedies, often intersect with modern healthcare practices, impacting disease management and prevention strategies.

The socio-economic factors emerge as critical determinants of health disparities among the Kutia Kandha tribe, particularly affecting their under-5 children. Poverty, limited access to essential resources, and inadequate healthcare services exacerbate the burden of preventable diseases and malnutrition within the community. Economic constraints, coupled with low levels of education and awareness, perpetuate a cycle of poor health outcomes, further marginalizing the tribe's socio-economic status. Environmental factors significantly contribute to the tribe's health vulnerabilities, with inadequate housing, sanitation, and access to safe drinking water creating conditions conducive to the spread of infectious diseases. Seasonal migration for livelihood opportunities exposes tribal children to additional health risks, highlighting the dynamic interaction between environmental changes and health outcomes.

From an anthropological standpoint, addressing the health disparities among the Kutia Kandha tribe necessitates a holistic approach that acknowledges their cultural identity, socio-economic context, and environmental realities. Interventions should be culturally sensitive, community-driven, and context-specific, fostering collaboration between tribal communities, healthcare providers, and policymakers. There are efforts to improve health outcomes among the community must prioritize empowering the community through education, capacity-building, and advocacy initiatives. Promoting culturally relevant health education, enhancing access to healthcare services, and addressing socio-economic inequalities are essential steps towards achieving equitable health outcomes for tribal populations. The study underscores the need for comprehensive anthropological research and intervention strategies that recognize the complex interplay of cultural, socio-economic, and environmental factors shaping their health status. By addressing these underlying determinants of health, we can strive towards promoting health equity and improving the well-being of tribal communities like the Kutia Kandha tribe.

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