

# SANITATION PRACTICES IN CONNECTION WITH HEALTH: A STUDY AMONG THE MADIA TRIBE OF MARIKODER OF BASTAR, C.G

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Received: 11 Aug 2021 Accepted: 20 Aug 2021 Published: 28 Aug 2021

# ABSTRACT

The interdependence of health consciousness and hygiene are made to be understood by emphasis on school sanitations, low-cost sanitation system with lower subsidies, options for sanitary complexes for women, greater household involvement, range of technology choices, rural drainage system to avoid the diseases, through conducting IEC and awareness campaigns by involvement of NGO's and Local Groups. Also appropriate forms of private participation and public private partnerships, evaluation of a sound sector policy in Indian context and emphasis on sustainability with political commitment are prerequisites to bring the change among the madia tribe of Bastar. The respondents are aware about the communicable disease but they said that still more people needs much more facts about disease management and prevention. Sanitation is large challenge and appears to be nobody's concern. Improved drinking water than unimproved sources. Similarly, improved sanitation facilities are likely to be upgraded. The number of persons using safe drinking water is lower when compared with improved drinking water sources.

KEYWORDS: Madia Tribe, Health, Sustainability, Bastar

# **INTRODUCTION**

The habitants of Bastar are less communicated, lesser known area and a precious wealth of anthropological research. The present study focuses on the sanitation practises among the Madia tribe of Marikoder village, Lohandiguda Block of Bastar, Chhattisgarh. Sanitation refers to principles, practices, provisions, or services related to cleanliness and hygiene in personal and public life for the protection and promotion of human health well being and breaking the cycle of disease or illness. Poor sanitation is an indication of tribal poverty and health issues (Wright 2007). The Madia tribal community is the sub-group of Gond tribe. The Global Progress Report 2023 highlights that an estimated 8 million people die annually in 137 low- and middle-income countries due to poor-quality health care (According to the Report of UNO). Poor sanitation gives many infections the ideal opportunity to spread, plenty of waste and excreta for the files to breed on and unsafe water to drink, wash with or swim in (Sharma, 2013). In many cases, tribal poor lives in remote forest regions which is not government etherized land "deemed unsuitable for habitation," rendering them "officially invisible". In India, urbanisation is characterised by rapid population expansion in tribal centres and civic governments' incapacity to offer basic services such as education and health. Sanitation is linked to livelihoods and earnings. Tribal poverty is generally associated with poor quality housing, overcrowded, unsanitary Tribal Villages, illness caused by the spread of infectious diseases, the threat of exposure to environmental hazards, and the fear of eviction from illegal squatter settlements in dangerous locations (Loughhead, 2000).

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Tribal hardship deserves special attention because it raises difficulties that are not addressed in traditional poverty analyses (Baker and Schuler 2004). Furthermore, tribal hardship affects health and becomes worse with poor sanitation. The Department of Public Health supports essential health standards among the tribal poor. The World Health Organisation (WHO) defines health as a state of complete physical, mental, and social well-being, rather than simply the absence of sickness or disability. The combination of health consciousness, socio-cultural, demographic, economic, educational, and political elements influences the health state of any community.

Tribal poverty and vulnerability differ from rural poverty in three ways: commoditization, environmental danger, and social fragmentation (Moser, Gatehouse, and Garcia 1996). Poverty is a major cause of poor sanitation and has a negative impact on the health of the tribal poor. The Tribal Villages are extremely restricted and poor in the utilization of resources and allocation. Due to inadequate facilities, the poor tribal poor are trapped in a cycle of severe health problems. Tribal poverty was mostly based on undifferentiated findings of income and non-income factors that contribute to poverty. Despite evidence of variety in living standards inside a city, there has been no rigorous research on intra-city inequalities in well-being.

Households in Tribal neighbourhoods that lack drinking water and sanitation confront a daily assault of health dangers. Public health infrastructure is far from satisfactory, since service delivery is limited by a number of policy and administrative restrictions (Mavalankar, Ramani, and Shaw, 2003). There are numerous administrative obstacles in tribal regions to assure availability, accessibility, affordability, and equity when delivering health services to the Tribal poor in an effective and efficient manner. The nature of tribal growth is frequently informal, and it occurs primarily in tribal areas or on the outskirts of cities.

Sanitation aims to improve people's health by providing a clean environment and stopping the cycle of sickness. It is determined by a variety of factors, including the Tribal poor people's hygiene status, the types of resources available, innovative and appropriate technologies based on the needs of the community, the country's socioeconomic development, cultural factors related to environmental sanitation, political commitment, capacity building of the concerned sectors, social factors including behavioural patterns of the community, legislative measures adopted, and others. In the issue of environmental sanitation, India continues to lag considerably behind many other countries (Pandve, 2008).

Regardless of the level of water contamination, inadequate sanitation can make improvements to water quality ineffective. Single-route interventions will have little impact if each transmission pathway is adequate in and of it to maintain diarrheal disease, and an intervention will only be effective if all viable pathways are closed. However, public health initiatives should concentrate on this crucial pathway when it plays a key role in perpetuating the condition (Water, 2011).Building sanitation systems that cater to community needs, especially those of the poor, necessitates making politically challenging and administratively taxing decisions. In addition to being a key factor in economic growth and poverty alleviation, health is a top aim in and of itself. Social and economic progress follows each other.

Poor sanitation has a disproportionate impact on low-income groups and the poor. In the case of air pollution, for example, the poor, who make up the majority of the Tribal population, are often subjected to the highest levels of exposure because many of them (including newborns, the elderly, and the infirm) live and work beside the road, where air pollution levels are often higher than further away. Furthermore, because the poor are in poor health and lack proper nourishment and medical treatment, they are the most affected by, and least capable of coping with, the effects of air pollution. Because

of the synergy between pollution, poverty, and nutritional inadequacy (CSE1996: Faiz et al 1992), as well as limited access to health care. Due to lack of proper health care facilities the most affected are the poor tribal woman and young girls to a large extent in regard to menstrual hygiene, personal security, sexual stalking and violence.

# AREA OF THE STUDY

The selected field area is Marikoder of Bastar region of Chhattisgarh state. With 150 residents, the Panchayat Marikoder is located in a remote area of Jagdalpur. While other castes are present less in this village, the Madia Tribe is the dominant tribe.

The Madia Gonds of Bastar have been studied in detail by W.V. Grigson, who highlighted the two divisions of the tribe existing in Bastar, namely, the Hill Madia (Abhuj Madia) and the Bison-horn Madia (Dandami Madia). The Abhuj Madia reside on the Abhujmad mountain, mostly in Abhujmad (Orchha) block of Narayanpur district whereas the Bison-horn Madia, with a much larger population, occupies the districts of Bastar, Bijapur, Dantewada, Kondagaon and Sukma. They are one of the rare tribals group of India living in this traditional way. They practices shifting cultivation and coarse grain, banana and tobacco are generally grown by them. There is a considerable significance of weekly bazaar in this area. The Abhujmadia still depends upon hunting and collection of forest produce. The Abhujmaria do not plough the earth. Pointed wood pieces are used for the ploughing. Stone implements are used for harvesting produce.

The Bison-horn Madia derives its name from the famous head-dress of bison horns, cowrie shells and a plume of feathers worn by the drummers at the dancing festivals. The Madia, like the other Gond tribes, are a Proto-Australoid people, speaking several Dravidian dialects. The researcher interviewed 100 people from tribal village of Marikoder, Lohandiguda Block of Bastar, Chhattisgarh.

# **OBJECTIVES OF THE STUDY**

Poor sanitation is one of the most accurate indicators of Tribal poverty and health problems. The Tribal poor live in cramped housing structures with a multitude of health hazards such as exposure to extensive rainfall, rats, flies and mosquitoes and all of which can induce infections, diseases, and injuries. Primary objective of the present study is to identify causes and determinants of poor sanitation. Specific objectives of the study are as follows:

- To study sanitation patterns of the respondents and assess the socio-economic conditions related to sanitation
- To find the socio-cultural values, beliefs and practices among respondents related to sanitation and their association between sanitation and practices adopted by different socio-economic groups by social norms.
- To study the type of sanitation problems and justifying techniques used to cure health problems
- To suggest various ways and means for improving the sanitation and health standards
- To investigate into the type and level of poor sanitation and measurements taken-up by the Local Panchayata and Rural Engineering Services and evaluate the effect of Swachh Bharat Abhiyan.

# **RESEARCH METHODOLOGY**

The nature of present study is exploratory, in which cross-sectional descriptive research design is used. In the study the data is collected in both primary (qualitative and quantitative) and secondary data are used in the present study. Documentary data source comprise of census data, government reports on health, sanitation and hygiene, research papers,

books, monographs, journals etc. Primary data was collected from selected respondents. During the study a schedule and questionnaire, interviews, participant observation, group discussions, case studies were used for data collection.

### Findings

Variable	Percent (n=100)
Gender	
Female	36.0
Male	64.0
Age (in years)	
< 25	35.5
25-35	29.5
35-45 4.5-55	21.0
45-55 4.5-55	12.0
>55	2.0
Education	
Illiterate	34.0
1-101h	57.5
Intermediate (10+)	3.5
Degree	5.0

#### **Table 1: Social Characteristics**

It can be observed from the table that a majority of the subjects (64.0%) were male and the rest were female. A majority of the respondents i.e. 65.0 per cent was in the most productive age group between 25 and 35 years. Respondents (35.0%) in the age group of above 35 were also found. It was found that 57.5 per cent had completed High school education. On the other, 34.0 per-cents were illiterate. Rest of the respondents were intermediate (10+) (3.5%), and graduates (5.0%) in that order.

Variable Percent (n=100)				
Marital status				
Married	78.0			
Unmarried	21.0			
Divorced	1.0			
Size of the family				
One	1.5			
Two	9.0			
Three	23.5			
Four	54.5			
Five	10.5			
Six	1.0			

Table 2: Marital status and Size of the Family

It can be observed from the table that a majority of the respondents (78.0%) were married and the remaining (21.0%) were unmarried. As regards the family size 54.5 per cent of the respondents were having 4 persons in the family and little over one-fifths (23.5%) were having 3 persons. A few (10.5%) were having 5 persons in the family, however the family size 1.05 per cent of the respondents were having 6 persons in the family.

Variables	Per cent (n=200)			
Occupation				
Petty Business	5.5			
Auto Drivers	8.0			
Daily Labor	38.5			
Construction Worker	9.0			
Home Maker	30.0			
Private Employee	9.0			
Income (in Rupees Per Month)				
Less than 2000	41.0			
2001 to 5000	45.5			
5001 to 7000	9.5			
above 7000	4.0			

rubic of occupation and income of the rubpondents	Table 3:	Occupation	and Income	of the Re	spondents
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The above table revealed that more than one-fourth of the respondents were Daily Labour (38.5%) in the Jagdalpur Tribal Villages and some others were engaged in construction work (9.0%) and Auto Drivers (8.0%). A sizeable number of the female respondents were found to be home makers (30.0). As regards the earning levels, a majority the respondents (45.5%) were earning between Rs 2000/- to 5000/- per month and two fifths were earning less than 2000/-, The rest were from different earning levels.

Tuble 4. Mature and type of Housing					
Variable Percent (n=100)					
Nature of tenement					
Own	72.5				
Rented	27.5				
Type of House					
Reinforced Cemented Structures (RCC)	65.0				
Concrete	05.0				
Tiled	25.5				
Hutment	9.5				

**Table 4: Nature and type of Housing** 

The table states that 72.5 per cent of the respondents were living in their own houses and 27.5 per cent were residing in rented houses. It was noted that the respondents Live in different types of houses such as Reinforced Cemented Concrete Structures (RCCS) (65.0%) and 25.5 per cent of the respondents were living in tiled and 9.5 per cent were living in huts respectively.

Variable Per cent (n=100)					
Rooms in the some					
One (including Kitchen)	37.5				
Two (including Kitchen)	49.0				
Three (including Kitchen) 13.5					
Toilet & Bath Room Facility					
Yes	39.0				
No	61.0				
Electricity					
Yes	94.0				
No 6.0					

Table 5: Nature and type of Facilities in the Home

The data accentuated that a majority of the respondents (49.0%) stated that they have two rooms (with Kitchen) and 37.5 per cent of the respondents expressed they have one room (with kitchen) in their houses. As regards the toilets a majority of the respondents (61.0%) opined that they did not have toilets and rest of the respondents (39.0%) had toilets in their houses. A majority of the respondents (94.0%) stated they have electricity facility and rest negated.

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Variable Percent (n=100)					
Potable Water					
Municipal Tap	89.0				
Open Well	2.0				
Hand Bore Pump	9.0				
Frequency of Water supply					
Once a Day	68.5				
Once in Two days	19.5				
As and when	12.0				
Quantity of Water					
25 Litters (Insufficient)	10.5				
50 Litters (Sufficient)	75.5				
100 Litters (Excess)	14.0				

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The table reveals that a majority of the respondents (89.0%) were fetched water from Panchayat tap (Public Distribute System) and rest of the respondents from Hand Bore Pump (9.0%) and Open well (2.0%) in that order. As regards the frequency of the water fetching 68.5 per cent of the respondents stated once a day and a sizeable number stated that once in two days. A little over three fifths (75.5%) respondents stated they fetched 50 liters potable water and 14.0 per cent of the respondents opined that they fetched 100 liters.

Sanitary measurements were taken-up by the local Panchayat to protect the public health. The respondents evinced their opinions regarding sanitation intervention.

Table 7. Santary Weasurements					
Variable Per cent (n=100)					
Availability of Garbage BIAS					
Yes	21.5				
No	78.5				
Frequency of Garbage Cleaning					
Everyday	1.5				
Weekly	39.5				
Fortnight	46.0				
Monthly	13.0				
Fumigation & Bleaching					
Monthly On	6.5				
Once in Two Months	15.5				
Quarterly	26.0				
Never	52.0				

 Table 7: Sanitary Measurements

It can be seen from the table a majority of the respondents (78.5%) opined they don't have any garbage bins and rests of them were negated. As regards the cleaning of the garbage more than two fifths of the respondents (46.0%) stated fortnight and a sizeable number of the respondents (39.5%) opined weekly. More than fifty per cent of the respondents negated that the Panchayat was not fumigated and bleached and little over one fourths of the respondents stated the fumigation and bleaching were done by the Panchayat authorities quarterly and 15.5 per cent of them opined once in two months.

Variable	Per cent	Tatal	
variable	Yes	No	Total
Malaria	89.0	11.0	100
Filarial	76.5	23.5	100
Diarrhea	92.5	7.5	100
Gastro Enteritis	7.0	93.0	100
Dengue	63.0	37.0	100

**Table 8: Awareness** 

The data accentuated that majority of the respondents had awareness on communicable diseases (Malaria, Filaria, Diarrhea and Dengue) caused by the poor sanitation and unsafe drinking water. As regards the Gastro Enteritis, 93.0 per cent of the respondents were negated.

**Table 9: Preventive Care** 

Variable	Per cent (n=100)
Spending on Preventive care	
Mosquito Repellant (Coils/Odomus/Liquid/indigenious techniques)	89.0
Bleaching	5.0
Phenol	6.0

The data reveals that, a majority of the respondents (89.0%) were used Mosquito Repellants (Coils/Odomus/Liquid/indigenious techniques) to prevent from the mosquitos and rest of the respondents used phenol (6.0%) and Bleaching (5.0%) to protect form poor sanitary diseases.

# DISCUSSIONS

The data revealed the evident Tribal hamlet characteristics and dynamics. Most of the respondents are in productive age group. The data accentuated that most of the respondents were completed primary education and a significant number are illiterate. In most of the families have four persons and a majority of the respondents' income below RS 5000/- Per month. Most of the respondents living in RCC houses with two rooms.

Similarly, the proportion of the population with access to basic sanitation is an indicator expressed as the percentage of people using improved sanitation facilities. The respondents have no access to improved sanitation. They are obliged to defecate in the open or use unsanitary facilities, with a serious risk of exposure to sanitation related diseases. Few years back, Government has provided mobile sanitation services to the madia tribal people of Bastar but these has been discarded in all most all places because the cultural practices related to sanitation of the madia tribe rejected the said idea of mobile sanitation project. Secondly, the said project was not eco-friendly. Access and frequency of supply of drinking water from an improved source is significantly higher. An important aspect must be considered in this study: the type of access to improved drinking water, most of them were getting water from public water distribution system through Panchayat. Drawing water from a public distribution system will stimulate greater use of water for hygiene purposes and is proven to yield the greatest health benefits.

A major opinion of the respondents informed that the authorities of the Panchayat are not implemented any garbage management tools and moreover the concern Panchayat authorities are not bother about to clean garbage regularly. The respondents are aware about the communicable disease but they said that still more people needs much more facts about disease management and prevention. Sanitation is large challenge and appears to be nobody's concern. Improved drinking water than unimproved sources. Similarly, improved sanitation facilities are likely to be upgraded. The number of

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persons using safe drinking water is lower when compared with improved drinking water sources.

# **RECOMMENDATIONS:**

- The Awarenes Camp's on the importance of Sanitation practises in connection with health should be necessitated with street plays, Local Folks.
- Low-cost toilet systems should be given on subsidiary rates.
- Village level committees should be constituted to monitor and evaluate the Sanitation conditions at the grassroots level
- Selection of Resources persons and Capacity building of the community through various trainings.
- Anganwadi Karmi should be given training in connection with sanitation and health by which she may play a major role in the village.
- A toll free number must be allotted separately for sanitation clearance.
- Providing the Monthly or Weekly Health Camps in the Remote villages to know the Sanitation practises and update with modern practices.

### CONCLUSIONS

The interdependence of health consciousness and hygiene are made to be understood by emphasis on school sanitations, low-cost sanitation system with lower subsidies, options for sanitary complexes for women, greater household involvement, range of technology choices, rural drainage system to avoid the diseases, through conducting IEC and awareness campaigns by involvement of NGO's and Local Groups. District administration has major role to implement and evaluate the programs time to time. Also appropriate forms of private participation and public private partnerships, evaluation of a sound sector policy in Indian context and emphasis on sustainability with political commitment are prerequisites to bring the change among the media tribe of Bastar.

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