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### Use of indigenous knowledge and culture in preserving health: A study on tribals in Mayurbhanj district of Odisha

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#### Abstract

The objectives of the present study was to discuss about the use of traditional knowledge and culture in preserving public health nutrition of tribal people of Mayurbhanj district of Odisha. One hundred households were selected by random purposive sampling method for collection of data and information on traditional food and health practices was collected by interview cum questionnaire method. The results of the study revealed that they used different types of locally available foods for their health benefits. Handia was their common beverage and they used it for their better health and getting relief from tiredness. For getting relief from diseased conditions they used various types of things such as Wild ant chutney for cough, Gangasiuli leaves juice for Malaria fever, Amarpoi leaves for Diarrhea, Powder of Black berry seeds for Diabetes, Bhalia for Eczema, Neem leaves and oil for scabies, Handia rasi, Pedipedica leaves and Mehendi roots for Jaundice, Bug with banana for Piles, etc. Palta medicines for son and Babul leaves for fair baby during pregnancy, Kalibahu and Gaichira (one type of root) for recovery after delivery, Bottle gourd and sago dana kheer for better lactation, Even though medical facilities are available in that area still then the people were not utilizing it because of their misconception and lack of knowledge. Therefore Government should give emphasis on nutrition and health education of the tribal people and further indepth scientific research should be carried out in this direction to adopt new strategies for future generation.

**Keywords:** Food habits, babul leaves, pedipedica leaves, traditional knowledge

#### Introduction

Tribals preserve, enrich and enliven the cultural diversity of India besides making up a substantial portion of total population of the country. Odisha has a large number of tribal communities who love to live in nature and maintained their livelihood with their own indigenous / traditional knowledge system specially the disadvantaged ones who are deprived of economical, social and political benefits. Further, abundance of tribal people's access to forest product and indigenous health care system contributes positively to the tribal health. They have their own system of diagnosis and cure. They prepare their own medicine usually using herbs and other items collected from the nature and processed locally. These natural resources and skills are disappearing. Moreover, traditional system cannot treat most of the present new emerging diseases that modern medicine can do. Health and sanitation are often worse in regions where tribal peoples live. The country is placed in a piquant position having succeeded in solving some problems while new ones are emerging. Current development in various dimension has not been able to offer succor of the poor especially the tribal population. Indeed the difference between the tribal people and other population groups is widening. With modernization of the present society, the needs of those disadvantaged populations were brought to the limelight and their knowledge system was given the importance and treated as real knowledge for survival. This paper is intended to unfurl the use of traditional knowledge and culture in improving the public health nutrition of the tribal people of Mayurbhanj district of Odisha.

#### Objectives

The objective of the study were

1. To study the socio-economic conditions of the respondents.
2. To study the types of treatment adopted to improve health condition.

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3. To study the use of indigenous foods in treating some diseases.
4. To analyze practice of indigenous knowledge for reproductive health.
5. To study different myths in treating some health problems.

**Materials and Methodology:** The study was carried out in Mayurbhanj districts of Odisha. One hundred households were selected for the study by random purposive sampling method. The data was collected by questionnaire cum interview method with the help of pretested and modified questions. The head of the family was interviewed for the collection of data. Information on indigenous knowledge for treating different health problems was collected by interviewing the participants. The collected data was tabulated and analyzed with the help of statistical tools and techniques and are discussed below.

**Results and Discussion**

The results of the study were complied and discussed below.

**a) Socio-Economic indicator of the respondents**

The socio-economic conditions of the respondents provides relevant information regarding their family background. It was observed that majority of the respondents belong to the age group 25 to 60 yrs i.e. all of them were Hindu by religion and were scheduled tribe. 95% of them were literate. Nuclear family system was found to be prevalent in that area. All of them like to be in joint family but they preferred to be in nuclear family system to avail government facilities such as ration card, BPL Card, Indira Abas Yojana etc. Primary occupation of the respondents was found to be agriculture (83%) and all (100%) of them belonged to low income group.

**Table 1:** Socio-Economic Indicators

Sl	Socio- economic Indicators	Characteristics	Percentage
1	Age	25 - 60 years	72
2	Religion	Hindu	100
3	Education	Literate	95
4	Marital status	Married	100
5	Types of family	Nuclear	92
6	Occupation	Agriculture	83
7	Types of house	Kucha	82
8	Farm animal	Cow, Goat, Hen, Cock, Pig. etc.	100
9	Income	(Rs. 4000-10000) Month	100

Most of them were staying in their kutchha houses and kept poultry, goat, sheep, cow, pig in their houses for the purpose of meat.

magic treatment, specially for fever, diarrhea, cholera, colic pain etc. They also believe in medical treatment and went to nearby to hospital with ANM, Asha Karmi or Anganwadi worker for their health problem. But in case of severity of the disease, they went to both local gunia as well as consult doctor and follow their treatment.

**b) Types of treatment adopted to improve health condition**

It was observed that 100% of the respondents believe in magic treatment and herbal treatment but only 46% of them practice

**Table 2:** Types of Treatment adopted for improving Health problems:

Sl. No	Health problem	Frequency & %	Treatment adopted
1.	Malaria/Cold/ fever/ cough	88 12	Medical & Herbal/ Magic treatment
2.	Joint pain/Arthritis/ Rheumatism	85	Herbal medicine
3.	Eczema/ Skin problem	72	local treatment/Indigenous medicine
4.	Problems related to reproduction	12 88	Doctor local treatment/Indigenous medicine
5.	Diabetes/Heart Problem	14	Doctor & Indigenous medicine
6.	Diarrhea / Dysentery	100%	Indigenous medicine

**C) Indigenous Knowledge used to treat health problems**

**Table 3:** Indigenous foods taken during disease condition to get recovery

Sl No	Disease	Remedies	Frequency	Percentage
1	Cough	Basanga ( <i>Adhatoda zeylanica</i> ) leaf, wild ant (kurkuti- <i>Oecophylla smaragdina</i> S) chutney.	89	89
2	Cold	Durmstic leaves with masur dal and torani (Soaked water of cooked rice)	73	73
3	Astama	Small pigeon meat cooked with ghee	60	60
4	Indigestion	Black pepper with bael leaves	54	54
5	Diarrhea	Amarpoei ( <i>Kalanchoe pinnata</i> ) leaves and guava leave	83	83
6	Dysentery	Burn skin and ear of goat	59	59
7	Piles	Bug with banana	64	64
8	Malaria	Gangasiuli ( <i>Nyctanthes arbortristis</i> ) leaves juice with black peper, ginger and honey	100	100
9	Jaundice	Handia rasi, mehendi root, Redgram ( <i>Cajanus cajan</i> ) leave, pedi pedika ( <i>Abutilon indica</i> ) leaves.	100	100
10	Mouth disease	Warm discarded water of cooked rice. Pig oil, green chilly	94	94
11	Ear infection	Putting kunduru leave juice in ear	56	56

12	Pimples	Smearing Pigeons stool, masur dal paste on pimples	73	73
13	Scabies	Neem leaves & neem oil	67	67
14	Diabetes	Powder of blackberry seeds	14	14
15	Weakness, Tiredness	Handia	99	99
16	Better health	Mushroom	59	59
17	Minor cut	Marigold leaves juice or sugar powder	90	90
18	High blood pressure	Drumstick leaves juice or boil water of drumstick leaves	50	50

Common household remedies practiced by the respondents were Wild ant (kurkuti) chutney or pickles, one table spoon or Basanga leaves juice with three drops honey branded with hot iron (morning empty stomach) for cough, warm Torani with Drumstick leaves (once or twice a day), and warm Masoor Dal with Drumstick leaves (once or twice a day) for cold, Pigeon meat cooked by ghee or Bat meat for Asthma, five Amarpoi leaves juice with five black peper (morning empty stomach), soak water of Puffed rice (morning empty stomach) and five Guava leaves juice with five black pepper (morning empty stomach) for Diarrhea. Burn skin and ear of goat for Dysentery, chewing 3-5 black peper in indigestion. They also use three bed Bug with banana (morning in empty stomach) and warm fresh milk (morning in empty stomach) for getting recovery from piles. Three Gangasiuli leaves juices with three black pepper/ginger/honey and branded by hot iron (morning 3, 7, and 21 days) were commonly used for malaria and also

used for joint pain. Handia Rasi 2-3 three times in a day, Peditica leaves, Raw rice water with mehendi paste for 15 days was used for getting relief from Jaundice. Scrubbing green chilly and Pig oil on tongue and drinking Peja (warm discarded water of rice) and fresh sheep milk were commonly practiced to get rid of glossitis, cheilosis and angular stomatitis. They also used Kunduru leaves juice, merry gold leaves juice (it also used in minor cut /bleeding) for ear infection, Lentil paste for boil, neem oil for scabies, black berry seeds powder for diabetes, Juice and boil water of Drumstick leaves for high blood pressure.

Handia was their common beverage and they commonly took it to get relief from tiredness and weakness.

#### d) Composition and use of indigenous medicine related to reproductive health

**Table 4:** Remedies related to reproduction

SI No	Causes	Remedies	Percentage
1	For son child	Palta medicine made by local kabiraj, small raw gadisa fish with ripe banana	88
2	For fair baby	Powder of of Babul ( <i>Acacia nilotica</i> ) leaves	10
3	Quick recovery after child birth	Sutika goli made by local kabiraj	99
4	For abortion	Runja ( <i>Abrus precatorius</i> ) seeds	05
5	Mensuration delay	Through Mustard seeds under the bed	80
6	For better milk secretion	Bottle gourd sabjee & sago dana kheer	79

The information on food or remedies adopted by the people of studied area was found to be interesting. 88% of respondents used palta medicine for son where as 10% of the respondents took small gadish fish inside a ripe banana for getting son during pregnancy on full moon day before sun rise after taking bath. Palta medicine is prepared by the local Kabiraj with combination of dung of black female goat having only male calve (8-10 in number), roots of three black brinjal tree and blackgram. They may take it in one dose or in three doses on any day after taking bath in the early morning and praying Gram Devi in one and half month of pregnancy. Non vegetarian food and water rice is restricted for 31 days for

Palta medicine. For fair child they took powder of babul leaves from third month of pregnancy up to nine month. They took one spoon of it in the morning in empty stomach with water for first fifteen days of third month to 9th month. 99% of the respondents found to take sutika goli prepared with Kalibahu and gaichira roots for getting quick recovery after delivery. For better milk secretion, they took sago dana kheer & bottle gourd sabjee during lactation. Telesara (2000) [28] found out Gond Ladoo was given to pregnant & lactating mothers to increase milk output and prevent excessive bleeding.

#### e) Practice of misconception in some health problem

**Table 5:** Practice of myths in some health problems

SI No	Disease	Remedies	Frequency & Percentage
1	Eczema	Putting warm molten Bhalia on affected area	70
2	Migrain	Branding with hot iron rod on head(Nia chenka)	40
3	Colic pain	Branding with hot iron (Nia chenka) on 21 <sup>st</sup> day of birth and on Makar Sankranti	95
4	Pimples	Smearing Pigeon Stool, Lentil paste on pimple	73
5	Eye allergy	Smearing dung of black buffalo on head	43

Melted hot bhalia was used in the effected area of eczema and migrain to get relief. Branding by hot iron (Nia chenka) near umbilical region on 21<sup>st</sup> day of birth and on Makar Sankranti for colic pain was commonly practiced by them. Smearing Pigeon Stool, Lentil paste on pimple and Smearing dung of black buffalo on head for eye allergy was also observed in that area.

**Conclusion:** Despite remarkable worldwide progress in the field of diagnostics, curative and preventive health, still the tribal people of Odisha are living with their own traditional knowledge system, customs, beliefs and myth intact. Thus herculean efforts should be taken in all direction to address the health and nutritional problems of the tribal people by educating them on food safety and security, creating awareness on nutritive value of different food stuffs and about available

health care services at their door step. Emphasis should be given on preserving indigenous knowledge of tribals related to their health benefits & further scientific research should be carried out in this direction to adopt new strategies for future generation.

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