



The status of tribal medical system and practices in the Jungle Mahals, Eastern India, 1947–2000

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Abstract

This study deals with the collection, preparation and practice of medicine by the tribals (Santals, Munda, Oraons, Sabar and Birhors) of Jungle Mahals in eastern India. This study finds low levels of overlap in medicinal floras even in the case of tribal communities, who are linguistically, culturally, and ecologically very closely related. Thus, the knowledge about many medicinal floras of the healers is greatly local. This medical practice is very popular among the tribal communities who could not afford facilities of western medicine because of their poverty and the high cost of allopathic medicine.

Keywords Indigenous medical knowledge · Healers/medicine man · Medicinal plants · *Kaviraji talān* (kaviraj's ingredients)

1 Introduction

This work seeks to focus on the medical system of the tribals (Santals, Munda, Oraons, Sabar and Birhors) of Jungle Mahals in eastern India. Though it does not denote any administrative unit, the woodland region of south west Bengal is culturally known as Jungle Mahals. In terms of disease, medicine and health, recent scholars have been keen to realize the interactive process of the western and non-western counterparts (Arnold, 2000). The 'folk' medical practices (Bodding, 1986; Hembrom & Goel, 2005), as Mark Harrison notes, have been least discussed, though a few researches have been done on medical 'systems' of Ayurveda and Unani (Pati & Harrison, 2001, pp. 9–10). Following the line of anthropologists, the social historians of medicine seek to explore the non-western medical practices (Samanta, 2018) by studying the ethno-medicine of the tribals. The rich cultural heritage of the tribals which is very closely linked with the ecosystem, they live in, added much to the ethno-botanical reputation of Jungle Mahals.

Valentine Ball (1869) for the first time had given the details of the flora of Manbhum and their ethno-medicinal uses. The existing studies have focused on traditional uses of plants in some of the specific diseases. But the ethno-botanists in their works, provide socio-cultural and ecological information and interpretation, which at times appear to be inadequate. Though the medical anthropologists provide systematic list of medicinal plants but their works are insufficient. Roy Ellen comments, '...many accounts of folk medicinal uses still lack serious consideration of local ethnographic context' (Ellen, 2006, S10). There is huge list of medicinal plants in the vast body of literature. In this literature, as Elizabeth Hsu argues, there is a lack of technical details of drug preparation, social context of application, the reason for which these were collected. It also lacks detailed information and even does not acknowledge the sources (Hsu and Harris, 2010, p. 1). This study deals with the indigenous system of knowledge about the collection, preparation and practice of medicine and sheds light on the socio-cultural and ecological context of the medicinal plants. It further explores the process through which the tribal medical systems of culturally variegated groups meet and influence each other. The study was carried out under the sections like introduction; socio-geographical setting of Jungle Mahals; environmental changes and health hazard during colonial period; tribal concept of body, disease and methods of treatment; case studies in the Jungle Mahals region; termites, earth worms and mud daub wasps and their medicinal importance; veterinary

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diseases and medicine, inter- textuality between texts and oral accounts and findings and conclusion.

2 Results and discussion

The information about traditional medicinal floras was collected from 60 informants (healers) during the period of July 2019 to February 2021. The informants were both females and males, and they played an important part in the activities of collecting and using traditional medicinal plants. Females only had the special knowledge about leucorrhoea and child diseases. Some of the healers are specialist as bonesetters. They are traditional orthopedics specializing in treating broken bones using their traditional indigenous medical knowledge. They are efficient in the management of fracture, dislocation, and congenital deformities. However, they also provide the primary treatment to patient suffering from chronic musculoskeletal conditions, such as, arthritis and post-polio residual paralysis.

The healers generally provide treatment for some of the diseases like cough, fever, cuts, wounds, *dhāt*, arthritis, snake bite, jaundice, tuberculosis, gastrointestinal disorder, dermatological complaints, migraine headache, joint pain, respiratory problems, leucorrhoea, internal parasites, bone fractures and women diseases (pre- and post-delivery cases and pregnancy complaints). Shanta Sabar¹ (60+), a female Sabar healer, informed us about the procedure for preparing the medicine for the treatment of *dhāt* with a combination of 18 plants. These are *nīlkañṭha* {*Polygala arvensis* Wild (Polygalaceae)}; roots of *rāli* {*Piper longum* L. (Piperaceae)}, *rāmdātan* {*Smilax ovalifolia* Roxb. ex D. Don. (Liliaceae)}, *kumārīkā* {*Smilax ovalifolia* (Smilacaceae)}; *śweṭ-palāśa* {white variety} (*Butea monosperma* (Lam.) Fabaceae); *śweṭ simula* {*Eriodendron anfractuosum* DC. (Malvaceae)}; roots of *circiṭi* {*Desmodium triflorum* (L) DC. (Fabaceae)}; young shoot of *ṭagara* {*Tabernaemontana divaricata* (L.) R. Br. ex Roem & Schult. (Crepe Jasmine)}; *padma* {*Nelumbium speciosum* Gaertn (Nymphaeaceae)}; *sansiyāri*, *pārijāta* {*Nyctanthes arbor-tristis* L. (Oleaceae)}; roots of *kedāra*; root of *caldhuwā*; young shoot of *kurci* {*Holarhena pubescens* (Buch-Ham.) Wall Ex G. Don (Apocynaceae)}; *śweṭ ākanda* {*Calotropis gigantea* L. (Asclepiadaceae)}; white *dūrvā* {*Cynodon dactylon* (L.) Pers (Poaceae)}; root of *khaprāsaka* {*Trianthema monogyna* Linn. (Aizoaceae)}. She also added combinations of *jāyaphala* {*Myristica fragrans* Houtt. (Myristicaceae)}, fried *rābing* {*Piper nigrum* L. (Piperaceae)} and *pīpala* {*Piper longum* L. (Piperaceae)} and it is fried in case of post-delivery mother as *talāna* (kaviraj's ingredients) and two animals

(monitor lizard, earthworm) combinations. After washing the collected ingredients, the medicine man grinds it on a flat stone (*pāṭī*) with the help of cylindrical stone (*larhi*) and makes a paste of big size. It is dried in sunlight for one day and prescribed as pills for one month. During the time of pounding the ingredients a *mantra* (incantation) is chanted three times (See Appendix A). The *talāna* is purchased from weekly market. As species are under extinction due to deforestation in the region, all the plants are not available in the area. If a patient urinates red like colour, red lotus flower and five onions are to be added. There is food restriction during the period of treatment. The patient should take vegetarian food, such as, boiled rice, pigeon peas and ridge gourd. The patient should also avoid fried food like puffed rice. In the case of scorpion bite, the healer prepared a paste from *viśalyakaranī* {*Tridax procumbens* L. (Asteraceae)}.

Santhal healer Bangsidhar Tudu² (50+) diagnoses the *dhāt* by applying the method of urine test and through the observation of the symptoms, such as, feeling of weakness, light fever and white stuff in urine. If ants are attracted to a place where a patient urinates, it implies that the patient is suffering from *dhāt*. He prepares the drug from eight plant species, i.e., leaves of *bel* {*Aegle marmelos* (L.) Corr. (Rutaceae)}; *tuslī* {*Ocimum tenuiflorum* (Lamiaceae)}; turmeric, *mustā* nut grass {*Cyperus rotundus*, (Nutsedges)}; roots of *sāluka* {*Nymphaea nouchali* Willd. (Nymphaeaceae)}; young shoot from *karama* tree {*Haldina cordifolia* Roxb. (Rubiaceae)}; roots from *circiṭi* {*Desmodium triflorum* (L) DC. (Fabaceae)}; bark from *sāhrā* tree {*Streblus asper* Lour. (Moraceae)}. He also adds powder extracted from quartzite rock. Along with these, he used to add thirty two *kavirāji talāna* as ingredients. After washing the collected materials, it is grinded into paste through flat stone (*śila*) and cylindrical stone (*norā*). This way pills are made and prescribed for 9–11 days. There is separate rule for taking the medicine in the first day. The *śila* and *norā* are washed and the washed water is collected and a piece of hot quartzite stone is put into the water. The patient is advised to take this water for the first day and from the next day the pills. The patient is also advised to avoid sour, stale and non-vegetarian food during treatment period.

Another healer belonging to Birhor tribe, Gurupada Shikari (62+),³ prepares drug for the treatment of *dhāt* with the combination of eight plant species i.e., white flower collected from pond; roots of jaundice; *rāmdātan* {*Smilax ovalifolia* Roxb. ex D. (Liliaceae)}; *anantamula* {*Hemidesmus indicus* (L.) R. Br. (Asclepiadaceae)}; bark of *pichāli* {*Ventilago maderaspatana* (Gaertner)}; *laṭāmurgā* (*Dalbergia volubilis* Roxb.) and *goigotra* (monitor lizard). He also adds unrefined brown sugar

¹ Village: Dakatairn, P.O.: Kuda, P.S.: Kenda, Dist.: Purulia, W.B.

² Village: Pandra, P.O.: Kumari, P.S.: Boro, Dist.: Purulia, W. B.

³ Vill- Barodi, P.S.-Bagmundi, Dist- Purulia, W. B.



and thirty two plant combination as *kavirāji talāna*. He prefers to collect it on the day of new moon. He does not generally collect these medicinal plants on Wednesday as this day is believed as the birthday of medicinal plants. After washing the collected ingredients, it is grinded it into paste and made into size of a big pea. It is dried for a day and prescribed as pills for 3 to 7 days twice a day depending on condition of the patients. However, as there is food restriction the patient should take only vegetarian food during the period of treatment.

Haradhan Sabar of Jahanabaid, a well-known healer in the society prepares drug for arthritis with a combination of freshly harvested ten plants such as root of *rāmdātan* (*Smilax ovalifolia*); *barahāmi*; *coṭohāmi*; *tālamūlī* (*Curculigo orchioides* Gaertn. (Hypoxidaceae)); flower of *kālha* (*Salvia uliinosa* Buch-ham (Acanthaceae)); fruits of *śvetaśālmālī* (*Eriodendron anfractuosum* DC. (Malvaceae)); flower or bark of *śvetapalāsa* (white) (*Beuta Monosprma* (Lam.) Kuntze. (Fabaceae)); *śvetajurgundā* (white) (*Chrysopogon aciculatus* (Retz.)); roots of *cāldhuwā* (*Aerva sanguinolenta* (L.) Blum (Amaranthaceae)); flower of *lāl sāluk* (*Nymphaea rubra* (Mymephacea)) and two plants, *jāyaphala* (*Myristica fragrnans* Houtt.) and *pīpala* (*Piper longum* L.)] as *talāna*. Applied as ointment (external use), he prepares the medicine from oil extracted from freshly harvested banyan and *gāub* (*Diospyros malabarica* (Ebenaceae)) tree and fat extracted from cow or buffalo, hen and *dhāminā* snake (*Ptyas mucosa*). In case of leucorrhoea, they prepare the drug from freshly harvested 21 plant species and eight types of salt. The combination is boiled till it is reduced to an amount of 1/5th of its original. The patient is advised to take the juice twice daily (morning and evening) for one week. The medicine is given to the patient after dedicating it to the Goddess Manasā. The medicinal plants are collected during night or *amāvaśya* (new moon). However, Lushu Murmu of Kashipur prepares the medicine for arthritis with combination of four medicinal plants *bhuikambala* (*Pygmaeo premna herbacea* (Roxb.) (Moldenke Verbenaceae)); *kāṅṭakambala*; *sweṭsaiya*; root of *khunṭ*; salt and sulfur. Shanti Murmu, a Santhal woman has learned the medicinal knowledge from Laxmikanta Sabar, a Sabar healer. Shanta Sabar's grand teacher, late Patu Sabar learned some of the *mantras* from a Brahmin. The efficacy of the medicine depends on how much a healer followed the rules and regulations for collecting and preparing the medicine. If the *mantra* fails, they applied medicine or if the medicine fails, they applied *mantrās*.

3 Process of collecting medicinal floras

As the plants are supposed to take rest or sleep after sunset till sunrise, the healers would not disturb them by harvesting them at night. They used to uproot some herbs in one

breath. Accordingly, it indicates the will force of the ailing person. During the period of harvest, the healers prefer to collect the exposed roots only near the water-channel. They cut it by a single stroke in the absence of any person. The healers collect some rare medicines in early morning so that the work could be executed in absence of any person. The medicine men used to debark from a tree at one breath after cutting a branch from bottom to top, i.e. in an upward direction (Mahato, 2020, p. 75). Most of the informants generally belonged to age group of 51–60 years. The study recorded one hundred and eleven medicinal floras which are used for the treatment of thirty one ailments. The healers in the study area used different plant parts for the preparation of traditional drugs. Based on the data from informants, the majority of the traditional medicinal floras were harvested as a whole plant, followed by the roots, leaves, stems, bark, fruits, flowers and other parts.

4 Drug preparation

Like the pharmaceutical drugs, the usage of medicinal plants is a culture specific process. Their therapeutic efficiency depends on the timing of collection of plants, the technique of persuading plants to be effective, sometimes through spells and charms, sometimes by cunning actions and their mode of preparation (Mahato, 2020, p. 75). The modes of preparation may involve culturally specific forms of cutting, drying, cooking, fermenting and often mixing with culture specific products (Hsu and Harris, 2010, p. 5). Hsu writes, 'Plant materials applied in medical practice are after all material culture: due to culture-specific preparations, they are turned into cultural artifacts' (Hsu and Harris, 2010, p. 21). The healers prepare the medicine through the combination of plants, animals, lime, honey, soil from termite heaps, soil produced by earthworm and minerals ingredients. The medicine man prepares different types of drugs: pills, paste, powder, infusion, decoction, mixture, syrup and extracts them both in water and in alcohol, fresh juice by squeezing fresh materials, fermentation, medicated oil both from plant parts and from animal fats, massage balm, fumes, burning ash, plaster etc.

The mode of application of medicine is an important aspect of their healing process. Also the dosages and timing of application of medicine play an important role. Some of burning issues that they deal are, for example, at which period they apply the medicine during the course of illness and at which rate a medicine is applied in a day. These procedures need what Ignold (2000a, b) referred to as 'enskillment' and also take into account aesthetic aspect, cultural dispositions, culture-specific drug preparations and local-history.



Due to poverty, lack of medical and transport facilities, the tribal people are dependent on the medical services from traditional healers. The healers were very efficient in identifying the plants from the forest, cultivated areas, sacred groves and home gardens. Thus, the healers were not only concerned for the individual health but for the community as a whole. Foster and Anderson rightly argue that efficacy of such system could be assessed in such way that their ‘ability to successfully play roles that lie far beyond the cure of illness and maintenance of health’ (Quoted in Mathews, 1992, p. 9).

5 Conclusion

The Jungle Mahals region faced excessive pressure of over exploitation and the growing demand for forest resources resulting in biodiversity loss and species extinction. Though the Sabar became Hinduised, but their belief in animism help protect their sacred groves. This study found that there is low level of overlap in medicinal floras, even in the case of tribal communities however, they are linguistically, culturally, and ecologically closely related. Thus, the knowledge of the healers about many medicinal floras is greatly local. The efficacy of the medicine depends how much the healers properly followed the rules for the collection of the plants, drug preparation and application. The knowledge transmission about medicinal floras among different tribal communities is very healthy. The traditional system of medicine is very popular among the tribal communities as they could not access the facilities of western medicine because of their poverty and high cost of allopathic medicine. The traditional medicine is practiced at low cost in poverty stricken areas. Tarachand Hansda (40 years), a traditional tribal healer records the list of patients and case history of treatment episode. Like modern doctors, he gives prescriptions. According to his written records, he has treated more than 12 thousands patients during last ten years. This points to the fact that how much both the healer and the medical system are popular among the tribal communities.

Appendix A

ek silāi bāṅṭli, tin silāi bāṅṭli
Mahādever baner le ānli cāl
prasāde bale Rām Rām, i cāl cāl re
ek donā khāwāli, du donā khāwāli
tin donā i rog nāikho ār
Mahādeber prasāde bole Rām Rām
 Pounding it on one flat (*śil*) and cylindrical stone
 (*norā*) and also on three

Collecting the bark from the forest of Lord Mahadev
 Remembering Ram Ram to the food offered to Lord
 Mahadev, this is bark, this is bark
 Given one dose, given two dose
 After giving three doses, there is no such disease
 Remembering Ram Ram to the food offered to Lord
 Mahadev
 (Translation mine)

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Data Availability Data sharing not applicable to this article as no datasets were generated during the present study.

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