

Journal of Biodiversity and Environmental Sciences (JBES) ISSN: 2220-6663 (Print) 2222-3045 (Online) Vol. 24, No. 5, p. 153-158, 2024 http://www.innspub.net

RESEARCH PAPER

OPEN ACCESS

Indigenous varieties of plant based food and dietary habits of tribal women in Chhattisgarh

Poonam Xess, Garima Tiwari*

Department of Forestry, Wildlife and Environmental Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur, (C.G.), India

Article published on May 13, 2024

Key words: Dietary habits, Food choices, Tribal women

Abstract

Human progress has been directly linked to the development of traditional culinary culture. Geographical conditions, climate, seasonal variations, soil type, water source, forest region, agriculture, immigrants, the consequences of invaders, and the work habits of locals all have a role. Generally, at household level, cultural norms, practices, and socio-economic factors determine the extent of dietary habits among women. For women and their families, poor personal hygiene and health habits can have serious consequences. For this purpose, study has been conducted by reviewing relevant articles and research papers through which the study has been carried out to understand relation between the traditional food from forest and dietary habits of tribal women. Among tribal women their food choice and dietary habits are not solely based on biological needs, but it is with relation to the psychological and emotional needs also. Due to the culture dimension, tribal women select their kind of food choices for the connectivity to the society. Therefore, the sociocultural, socio economic condition and customs are essential to the shaping of dietary practices among tribal women.

*Corresponding Author: Garima Tiwari ⊠ gtmidterm@gmail.com

Introduction

Traditional culinary culture is a trial system that develops over many generations. Food has a greater meaning than simply satisfying hunger and is essential to practically every element of tribal women's lives, including family, friends, festivals, and religious rites. Traditional foods are beneficial for sustaining and defending health which is also giving indigenous women the best nutrients possible. Traditional food culture is the good approach to adopt eco-friendly habits and make better utilization of the natural resources at hand to enhance the daily supplement diet of tribal women (Vecchio et al., 2014). After a detailed analysis of how man and the surroundings interact, traditional foods are created depending on seasonal changes. Compared to their peers in rural areas, tribal women are more susceptible to undernutrition. It is not surprising that women's health varies widely from State to State given the wide variations in culture, religion, and degrees of development among the Indian States (Rao et al., 2010). The food habits of tribal women strongly impact their health state. The notions of mind, body, and soul held by local communities have an impact on dietary practices as well. The selection of food also reflects the cultural norms and worldview of the nearby community (Das et al., 2021).

Foods including vegetables, tubers, and wild fruits, all are wholesome and nutritious, are abundant in Chhattisgarh. Secluded region local people also pick fruits, roots, tubers, leaves, and flowers from the forest to supplement their diets, because the state has a broad forest cover and a rich flora. These provide the traditional, distinctive natural flavors and health advantages to tribal women. Using a multitude of naturally occurring resources, Chhattisgarh's modern food culture promotes better nutrition and overall health. Due to the abundance of flora in the state, people have acquired the knowledge necessary to meet their requirements using the forest's resources.

Materials and methods

We have gathered information from the relevant 20 pertinent research papers, articles for review, also

from the Katghora Forest Division's forest office. The data has been collected to understand the relation between the traditional food from forest and dietary habits of tribal women (Fig. 1).

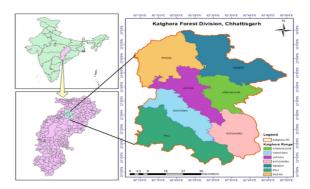


Fig. 1. Study area. (Source: Katghora forest division office)

Results and discussion

Traditional diets of tribal women

Tribal women can manage their health conditions by having a knowledge and understanding of utilizing natural plant resources, even without appropriate access to contemporary medical facilities. Tribal women's food culture aims to meet all of the community's nutritional and health needs, not just to sate people's hunger. The state's extensive forest cover is a fantastic resource for storing a different type of leaves, delicious wild tubers, and roots that the tribal women use to enhance their diets and give their cuisine a special flavor and therapeutic value traditional (Table 1). Numerous nutritional components are gradually disappearing from meal plates around the world, and tribal women's diets are restricted to a small number of ingredient variants.

The state of Chhattisgarh is heavily forested, because rural and tribal areas are where the majority of the state's residents reside. Utilizing wild tubers and plant roots is a skill acquired by tribal women. In Chhattisgarh, tribal women grow a variety of tubers, like *Amorphophallus paeoniifolius, Colocasia esculenta (L.)* Schott, *Curcuma amada* Roxb, *Curcuma angustifolia* Roxb, and others. Commonly, tubers are peeled, boiled in water, and then sliced into little pieces. Then it is fried on a pan in a small

amount of oil with spices like mustard, cumin seed, asafoetida, ginger, and coriander. Additionally, sweet foods are made from tubers like *Curcuma angustifolia* Roxb *and Pueraria tuberosea* (Roxb. ex Willd). These not only add variety to the tribal women's diet, but also, have therapeutic qualities that promote longevity and seasonal immunity.

Tribal women contribute to food systems through forests and fisheries which act as value addition for agriculture. Additionally, this improves the variety and nutritious value of foods, not just for disadvantaged families but also, for all the households (Agarwal, 2018).

Role of tribal women in dietary habits

Dietary diversity, or the consumption of a wide variety of foods, has been recognized as food-based therapies for indigenous women to minimize the complicated impacts of malnutrition. It has really been introduced as the indicators for tribal women in addition to wasting, stunting, nutritional deficiencies, and obesity rates to track the trends of this triple burden of malnutrition. Traditionally indigenous tribal women are decreased in numbers from the populations who were present in a country or geographic area at the time of invasion, colonization, or the drawing of existing state lines. Tribal women have their own beliefs, customs, cultures, dialects, practices, and institutions (Ghosh-Jerath et al., 2018). The certainty that indigenous women still have a thorough historical grasp of the food resources in their native region is perhaps the most crucial factor. Food sources that are usually known as indigenous foods are demonstrated which contains highly nutrient value foods when compared to nonnative versions. Even though the contribution of local foods varies every year and is affected by unanticipated climate changes. These indigenous varieties of foods are essential for household nutrition, food security, and income generation. They additionally diversify regional food systems (Ghosh-Jerath et al., 2018).

Table 1. Some indigenous varieties of plant foods found in Chhattisgarh (Source: Katghora Forest Division)

SL	Common	Scientific	Family	Part used	Uses	Tribes
	name	name				consume
1	Gataran	Caesalpinia crista	Fabaceae	Leaf, root	Dysentery	Gond Korwa
2	Bhuineem	Andrographis paniculata	Acanthaceae	Leaf	Fever	Baiga Gond
3	bhaskataiya	Solanum virginianum	Solanaceae	Fruit	Teeth pain	Gond Kondh
4	Kachnnar	Bauhinia variegate	Fabaceae	Leaf	Vegetable, wound-healing, anti-inflammatory and antioxidant	Oraon Birhor Kharia
5	Bohar	Cordia dichotoma	Boraginaceae	Leaf Fruit	Vegetable, fever, headache, and joint pain	Gond Baiga
6	Aloe vera	Aloe barbadensis	Liliaceae	leaf	Easy in delivery, Amenorrhea, Dysmenorrhea	All tribes
7	Khilbiri		Caesalpiniaceae	Leaf, shoots, young twigs, roots, rhizomes, tubers, flowers, fruits, seeds	Vegetable,	Oraon Kharia Majhi
8	Bael	Aegle marmelos	Rutaceae	Juice	Dysentery	All tribes
9	Palash	Butea monosperma	Fabaceae	Bark	Dysentery	All tribes
10	Peepli	Piper longum	Piperaceae	Root	Fever	Korwa Hill korwa
11	Pathar chitwar	Bryophyllum pinnata	Crassulaceae	Root	Kidney stone, diarrhea, fever	All tribes
12	Arjun	Terminalia arjuna	Combretaceae	Bark	Dysentery	All tribes
13	Guduchi	Tinospora cardifolia	menispermacae	Stem	Immunity	Gond
14	perivinckle	Catharanthus roseus	Apocynaceae	Root	Preventing brain disorders. Tonsillitis. Sore throat.	All tribes

					Intestinal swelling (inflammation). Toothache.	
					Chest pain. Wounds.	
					High blood pressure. micturition	Gond
					or urination,,	Baiga
	Toolshaan	Curcuma	7in aib ana asa a	Dhizomo	gastric reflux disorder, treat	Korwa
15	Teekhur	angustifolia	Zingiberaceae	Rhizome	diarrhea, excessive thirst, liver diseases,	
					asthma, TB, wt. loss,	
					anemia antiatherogenic, anti-	All tribes
		a			inflammatory, antioxidant,	
16	Bhelwa	Semecarpus anacardium	Anacardiaceae	Fruit	antimicrobial, anti- reproductive, CNS stimulant,	
					hypoglycemic, anticarcinogenic	
					and hair growth promoter. bleeding piles, dysentery with	Hill korwa
		_			mucus, irritability of the	TIM ROI WA
17	Nagkesari	Mesua ferrea	Calophyllaceae	Flower	stomach, excessive perspiration, skin infections,	
					cough and indigestion	
				Leaf	Vegetable, inflammatory diseases, diabetes, and cancer,	All tribes
18	Moringa	Moringa oleifera	Moringaceae	Fruit	boost the immune system, and	
					increase breast milk production	All tribes
19	Bachh	Acorus calamus	Acoraceae	Rhizome	neurological, gastrointestinal, respiratory, metabolic, kidney,	All tribes
		Tana			and liver disorders	Gond
20	Shankarjata	Tacca leontopetaloides	Dioscoreaceae	Tuber	diarrhea and dysentery	Baiga
					burning sensation, constipation, lepsory, worm	Gond Majhi
21	Keukanda	Costus speciosus	Zingiberaceae	Roots	infection, skin diseases, fever,	Majiii
					asthma, bronchitis, inflammatians and anaemia	
22	Kathal	Artocarpus	Moraceae	Leaf	diabetes, gall stones and relieve	All tribes
22	Katilai	heterophyllus	Moraccac	Bark Stem	asthma Tooth problem, intestinal pain,	Gond
23	Ramdatun	Smilex perfoliata	Smilacaceae	Shoot	blood purifier	Gona
24	Gulbakavli	Hedychium coronarium	Zingiberaceae	Rhizome	Skin disease, fever	Dhanwar Savri
0.5	Gudmar	Gymnema	Anogymagogo	Leaf	Antidiuretic	Gond
25		sylvestre	Apocynaceae			Birhor
26	Karla	Lepidagathis cristata	Acanthaceae	Leaf	Snake bite	Korwa
27	Charota	Cassia obtusifolia	Leguminosae	Root	TB	All tribes
28	Bhasampatti	Bryophyllum pinnatum	Crassulaceace	Leaf	Kidney stone	Gond
29	Gimmikand	Amorphophallus	Araceae	Tuber	Asthma	All tribes
30	Isabgol	campanulatus Plantago ovata	Plantaginaceae	Husk/Seed	Constipation	Dhanwar
31	Kalmegh	Andrographis	Acanthaceae	Whole Plant	Digestion, intestinal worms,	All tribes
	_	paniculata		Fruit	enhances immunity	All tribes
32	bael	Aegle marmelos	китасеае	Bark	Dysentery, diabetes	0 1
33	Senna	Cassia angustifolia	Fabaceae	Leaf	Constipation	Gond Majhi
	N. 1 .1.	Glycyrrhiza	r. l	G.	Respiratory and digestive	All tribes
34	Mulethi	glabra	Fabaceae	Stem	disorders, blood circulation, cold and cough	
35	Jatamansi	Nardostachys	Valerianaceae	Rhizome	Mental weakness, blood	Gond
00	- 4441141101	jatamansi	. arcranacouc		pressure	

Numerous studies have found a clear link between gender and inequality, especially where the resources are limited, and women's nutritional status is severely compromised. Meals are typically prepared and served by women in traditional families, although the male family member still exercises control over the ladies (Das et al., 2021). The collection of different plant-based remedies from locally accessible sources is more compatible with females than males (Xess et al., 2023). The ideas that people and society hold about food are referred to as food beliefs. This exemplifies how socially and culturally learned information about food is kept by successive generations and transmitted to the following generation (Das et al., 2021).

Conclusion

Traditional knowledge is playing a vital role in tribal women health and dietary habits from generation to generation. Traditional knowledge and dietary practices provide better health and medic facilities to tribal people. It helps to cure various health diseases, issues and helps to maintain tribal women dietary habits and health management system. But in Chhattisgarh tribal women are at a significant disadvantage due to ignorance and literacy rate. Though tribal women are less literate their traditional knowledge and health care activities provide them a better healthy lifestyle.

In tribal areas, proper collection and documentation of tribal knowledge is not done therefore it creates a generation conflict because new generation are not ready to learn and practice the traditional knowledge. So, through proper collection and documentation of traditional knowledge tribal can embrace the interest of learning and practicing the traditional practices and it will create the awareness of traditional knowledge and dietary habits among the new generations and also helpful for the conservation of the indigenous health status.

In this review paper we have pen down the various traditional knowledge and practices in the documentation form so that a proper diet potential can be established. This will help in the economic exploration for the tribal women and it will promote and update the traditional knowledge and practices. It will develop the women folk for poverty reduction, livelihood and socio-economic betterment. It will help indigenous women to learn and make utilization of local natural resources rather than relying on outside sources for sustenance.

For the economic exploration tribal women have to embrace the technical and scientific approaches. The tribal community and self-help groups can be made to create earnings and source of income through processing and marketing of traditional wild foods, knowledge and practices. Various training programs must be conducted to create awareness and conserve traditional knowledge and make tribal women financially capable. And this will be one of the simplest and most effective strategies to build a healthy society and to preserve, revive and adhere the traditional dietary habits.

References

Agarwal B. 2018. Gender equality, food security and the sustainable development goals. Current Opinion in Environmental sustainability 34, 26-32.

Barai R. 2019. Efficacy of Dietary Supplementation in the Form of Multigrain Panjiri in Managing Anaemia among Ethnic Tribal Women of Chhattisgarh. Nursing Journal of India 110(4), 147-149.

Chakravarty M, Venugopal R, Chakraborty A, Mehta SK, Varoda A. 2022. A study of nutritional status and prevalence of anaemia among the adolescent girls and women of reproductive age of baigatribe accessing antenatal clinic in public health sector in Chhattisgarh, India. Research Journal of Pharmacy and Technology 15(2), 598-604.

Das S, Mishra AJ. 2021. Dietary practices and gender dynamics: understanding the role of women. Journal of Ethnic Foods 8(1), 1-7.

Ghosh-Jerath S, Kapoor R, Singh A, Downs S, Barman S, Fanzo, J. 2020. Leveraging traditional ecological knowledge and access to nutrient-rich indigenous foods to help achieve SDG 2: an analysis of the indigenous foods of sauria paharias, a vulnerable tribal community in Jharkhand, India. Frontiers in Nutrition 7, 61.

Ghosh-Jerath S, Singh A, Lyngdoh T, Magsumbol MS, Kamboj P, Goldberg G. 2018. Estimates of indigenous food consumption and their contribution to nutrient intake in Oraon Tribal Women of Jharkhand, India. Food and Nutrition Bulletin **39**(4), 581-594.

Jain AK, Tiwari P. 2012. Nutritional value of some traditional edible plants used by tribal communities during emergency with reference to Central India.

Joshi D, Raghav P. 2021. Food intake and dietary assessement of Bhil tribe children in Suwana Block, Bhilwara. Plant Cell Biotechnology and Molecular Biology, 84-89.

Kareti SR, Rajpoot VS, Ramar HH. 2022. A module for digital conservation of medicinal plants used by tribal communities living in selected villages of Anuppur district, Madhya Pradesh, Central India. VINE Journal of Information and Knowledge Management Systems, (ahead-of-print).

Khan AA, Shukla KML, Khan IM. 2000. Enumeration of wild food plants of ethnobotanical significance in Central India. Advances in Plant Sciences 13(1), 277-281.

Khan I, Nayak JK. 2019. Health status of the Hill-Korwa women in Sarguja district, Chattisgarh: An Anthropological Assessment. Research Journal of Social Sciences 10(3), 46-55.

Mallick SN, Sahoo T, Naik SK, Panda PC. 2020. Ethnobotanical study of wild edible food plants used by the tribals and rural populations of Odisha, India for food and livelihood security. Plant Arch 20(1), 661-669.

Mastiholi SC, Somannavar MS, Vernekar SS, Yogesh Kumar S, Dhaded SM, Herekar VR, Goudar SS. 2018. Food insecurity and nutritional status of preconception women in a rural population of North Karnataka, India. Reproductive Health 15(1), 101-107.

Mishra A, Swamy SL, Thakur TK, Bhat R, Bijalwan A, Kumar A. 2021. Use of wild edible plants: Can they meet the dietary and nutritional needs of indigenous communities in Central India. Foods **10**(7), 1453.

Panda AK, Bisht SS, Lakra S, Kumar A, Kerketta A, Mishra R, Kerketta S. 2022. Folklore use of wild fruits by the Oraon tribe of Sarguja district of Chhattisgarh, India. Ethnobotany Research and Applications 24, 1-16.

Rao KM, Balakrishna N, Arlappa N, Laxmaiah A, Brahmam GNV. 2010. Diet and nutritional status of women in India. Journal of Human Ecology **29**(3), 165-170.

Shukla A. 2021. Ethnic food culture of Chhattisgarh state of India. Journal of Ethnic Foods 8(1), 1-16.

Singh R, Verma V, Varoda A, Venugopal R. 2021. Comparative Study of Dietary Nutrition Index of Players of Sports Authority of India (SAI) and Tribal Schools of Kanker Chhattisgarh India. Current Research in Nutrition and Food Science 9(1), 300.

Vishwakarma KL, Dubey V. 2011. Nutritional analysis of indigenous wild edible herbs used ineastern chhattisgarh, India. Emirates Journal of Food and Agriculture, 554-560.

Xess P, Tiwari G. 2023. Indigenous pattern of collection and utilization of nwfps and socio-economic sustainability for tribal women of central chhattisgarh. Indian Journal Ecology 768-773. of **50**(3),