

Ethno pharmacological assessment of oral care plants in Sendhwa of Barwani district (M. P.)

Dr. Jeetendra Sainkheidya¹, Dr. Priya Trivedi ², Prof. Suresh Rawat³

¹Department of Botany, Govt. P. G. College Sendhwa Dist. Barwani, M.P., India

²Department of Botany, Indore International College, Indore, M.P., India

³Department of Botany, Raja Bhoj Govt. College Katangi, Balaghat, M. P., India

Abstract

Oral healths are common in our countries where most victims dwell in rural areas. Among the management options alter Oral health in India Badwa - Baba (Badwa - Baba in Nimadi language) are the first contact following an Oral health for more than 90% of the victims and they are treated mostly with the help of some medicinal plants. Our aim of the study is to compile plants used for the treatment of Oral health occurrence in study area. Fieldwork was undertaken in a period of almost one year in chulgiri hills, Barwani district. Open-ended and semi structured questionnaire was used to interview a total of 110 people including traditional healers and local people. A total of 31 species of used for Oral health which might be dispensed in 30 genera belonging to 24 households maximum of the species have been belonging to Leguminosae own family. Chances of various growth forms are Herbs are 29% shrubs are 26% and tree are 45 % discovered inside the study region. Leguminosae are maximum dominant circle of relatives. 2 species bark, 1 species branch node, 1 species flower, 3 species fruit, 2 species leaf, 5 species root, 6 species seeds, and 11 species stem are used for oral care. Stem were the most cited plant part used against oral care. Most of the said species have been timber in nature and stem by and large used externally. Our survey represents the preliminary statistics of certain medicinal plants having neutralizing results in opposition to oral care though in addition phytochemical investigation, validation, and medical trials ought to be carried out before the usage of these plants.

Keywords: Chulgiri hills, Sendhwa, Oral health, pharmacological, Nimadi.

Introduction

The recipes used within the traditional medicinal drug of India had been passed down from the forefathers by means of oral lifestyle and this as disappeared from our modern-day society (7). The measurement of oral fitness has been accelerated together with the concept of properly being after WHO broadened the definition of health by way of using the inclusion of social properly being. Given that then oral health too is considered to make a contribution to conventional nicely being and now not mere absence of ailment. Each day sports like eating, speak me, smiling and revolutionary contributions to society are determinants of a person's properly being. So now its miles understood that oral health is crucial to popular fitness and well being. We are taught from an early age that right oral fitness is keeping healthful teeth. The easy acts of brushing and flossing are instilled in us so that we hold our "pearly whites;" but, oral health is a good deal extra than easy teeth. It entails the gums and their supporting tissues, the palate, the lining of the

mouth and throat, the tongue, the lips, the salivary glands, the chewing muscle groups, the nerves, and the bones of the higher and decrease jaws. Oral fitness refers back to the health of our mouth and, in the end, helps and reflects the fitness of the complete frame (2). Largely preventable, dental caries are the most important threats to oral health. Dental caries is the most not unusual chronic disorder in kids: it's far about five instances as not unusual as bronchial asthma and 7 instances as commonplace as hay fever. The maximum commonplace purpose of enamel loss amongst adults is untreated periodontal disease. Fifty three million human beings live with untreated teeth decay in their permanent teeth (3). Strikingly, one-region of adults elderly sixty five years and older have misplaced all of their teeth because of untreated oral sickness (14).

Numerous ethnobotanical investigations had been accomplished at specific components of the sector to explore the herbal treatment against Oral care. But there are very few ethnobotanical surveys executed in Barwani district of Madhya Pradesh to discover the medicinal plants used right here in the remedy of Oral care (24; 19; 17; 1; 20). Our present take a look at became carried out so one can document the conventional knowledge of the medicinal flowers used by the conventional healers of in Barwani district of Madhya Pradesh for treating in opposition to Oral care.

Materials and Methods

Study Area.

Our study turned into performed in Barwani districts in Culgiri Hill Tracts in Madhya Pradesh, India that's positioned in Western Madhya Pradesh and bordered by way of Madhya Pradesh and Maharashtra state (21.996° N and seventy four.862° E) with population of Barwani is 1385881 (census 2011) having number of smaller agencies of indigenous people have residing (determine 3). Narmada River paperwork its northern boundary and the Satpura tiers lie to its south component. The district is bordered via Maharashtra nation to the south, Gujarat to the west, Dhar district to the north and Khargone district to the east and overall region of the district is 5427 km². Plants type of the examiner location falls beneath tropical evergreen and semi evergreen forests. Climate and soil of the region is very fruitful for cotton producer like chili, cotton has end up the lifeline of the people of Barwani district chili saplings from Rajpur are famous within the entire Barwani and have been Nimar place and these people usually depend upon the sources coming from the hilly regions. The district is about 583 ft. MSL.

Ethnomedicinal data collection

The survey was performed within the Nimadi language of Barwani from January 2021 to December 2021. Objectives of the survey have been defined to the nearby communities throughout social gatherings organized via neighborhood people acquainted with traditional health practitioners (THPs). even as assembly with indigenous populations who had mom language distinctive from the nation language, assist from nearby bilingual translator became taken for indigenous languages like bhili, bareli etc. unique emphasis was given in looking for those who had the empirical information on medicinal vegetation and revel in the use of conventional medicinal plant life. Personally administered approach changed into accompanied throughout the survey. Open-ended and semi structured questionnaire changed into used for this survey (5) searching for for the facts nearby call, vegetation element used, medicinal makes use of. After of entirety of survey, consultation with local as well as country plant life (4,6,8,9,11,12,13,22,23,25) became consulted for getting identity, clinical names, circle of relatives names, dependency, habitat,

nature, relative abundance, and maintenance of the species. For the herbarium training preferred technique (10) had been followed.

Data analysis

All of the species were indexed in alphabetical order through their scientific name, family, local name, well-known name, vegetation components used, addiction, and habitat. All of the records had been calculated with the aid of the usage of SPSS 16.0.

Results

Most of the 110 interviewees, fundamental informants have been male (65%), aged (regardless of gender) 50–60 years (31%), on the whole with 5 years of institutional training (forty four%), and having 10–20 years of applicable level in (34%) (Table 2). Oral fitness is commonplace in our nations where maximum sufferers live in rural areas. among the control options modify Oral fitness in India Badwa - Baba (Badwa - Baba in Nimadi language) are the first contact following a Oral health for more than 90% of the sufferers and they're handled generally with the assist of some medicinal flora. Fieldwork became undertaken in Chulgiri hills, Barwani district (Figure 3). Open-ended and semi based questionnaire became used to interview a complete of one hundred ten human beings such as conventional healers and local humans. 31 plant species belonging to 24 plant families have been identified as being used within the remedy of oral care via conventional healers in Barwani district of Madhya Pradesh (Figure 2). The largest variety of species changed into noted from the own family Leguminosae. Chances of numerous increase paperwork are Herbs are 29% shrubs are 26% and tree are 45 % determined inside the study place (Figure 1). Leguminosae are maximum dominant circle of relatives. 2 species bark, 1 species branch node, 1 species flower, 3 species fruit, 2 species leaf, 5 species root, 6 species seeds, and eleven species stem are used for oral care. Stem have been the most stated plant element used against oral care. Most of the stated species were wood in nature and stem through and big used externally. Our survey represents the initial statistics of certain medicinal vegetation having neutralizing effects in competition to oral care though similarly phytochemical investigation, validation, and scientific trials must be accomplished before using this plant life.

Table 1: Oral care plants of the Sendhwa of Barwani district

sn	Family	Botanical name	Life forms	Plant part
1.	Acanthaceae	<i>Barleria cristata L.</i>	H	Stem
2.	Amaranthaceae	<i>Achyranthes aspera L.</i>	H	Seed
3.	Annonaceae	<i>Annona squamosa L.</i>	S	Fruit
4.	Apocynaceae	<i>Calotropis gigantea (L.) Dryand.</i>	S	Stem
5.	Arecaceae	<i>Phoenix sylvestris (L.) Roxb.</i>	T	Seed
6.	Burseraceae	<i>Commiphora wightii (Arn.) Bhandari</i>	S	Stem
7.	Cyperaceae	<i>Cyperus rotundus L.</i>	H	Root
8.	Ebenaceae	<i>Diospyros melanoxylon Roxb.</i>	T	Leaf
9.	Euphorbiaceae	<i>Jatropha curcas L.</i>	S	Stem
10.	Euphorbiaceae	<i>Jatropha gossypifolia L.</i>	S	Stem
11.	Lamiaceae	<i>Ocimum basilicum L.</i>	H	Stem
12.	Leguminosae	<i>Acacia auriculiformis Benth.</i>	T	Stem
13.	Leguminosae	<i>Tamarindus indica L.</i>	T	Seed

14.	Leguminosae	<i>Glycyrrhiza glabra L.</i>	S	Root
15.	Leguminosae	<i>Butea monosperma (Lam.) Taub.</i>	T	Root
16.	Leguminosae	<i>Pongamia pinnata (L.) Pierre</i>	T	Stem
17.	Leguminosae	<i>Abrus precatorius L.</i>	CH	Leaf
18.	Lythraceae	<i>Woodfordia fruticosa (L.) Kurz</i>	S	Flower
19.	Malvaceae	<i>Bombax ceiba L.</i>	T	Bark
20.	Meliaceae	<i>Azadirachta indica A.Juss.</i>	T	Stem
21.	Moraceae	<i>Ficus benghalensis L.</i>	T	Root
22.	Myrtaceae	<i>Syzygium cumini (L.) Skeels</i>	T	Seed
23.	Nyctaginaceae	<i>Boerhavia diffusa L.</i>	H	Stem
24.	Phyllanthaceae	<i>Phyllanthus emblica L.</i>	T	Fruit
25.	Poaceae	<i>Bambusa bambos (L.) Voss.</i>	H	Branch
26.	Rhamnaceae	<i>Ziziphus jujuba Mill.</i>	T	Seed
27.	Salvadoraceae	<i>Salvadora persica L.</i>	T	Stem
28.	Sapotaceae	<i>Mimusops elengi L.</i>	S	Seed
29.	Sapotaceae	<i>Madhuca longifolia var. latifolia (Roxb.) Chev.</i>	T	Bark
30.	Zingiberaceae	<i>Curcuma angustifolia Roxb.</i>	H	Root
31.	Zygophyllaceae	<i>Tribulus terrestris L.</i>	H	Fruit

Table 2: Informants' demographic data

Variable	Categories	Frequency (N=110)	Percentage
Gender	Male	72	65
	Female	38	35
Age in years	<30	16	15
	30-40	25	23
	40-50	23	21
	50-60	34	31
	>60	12	11
Education in years	0‡	20	18
	5	48	44
	8	21	19
	10	15	14
	12	12	11
	16	10	10
	>16	4	4
Experience	>2	18	16
	2-5	25	23
	5-10	18	16
	10-20	37	34
	>20	12	11
Profession	THP	42	38
	IP	68	62

‡Do Not have any formal educational training, THP= Traditional health practitioners, IP=indigenous people

Discussion

Leguminoaceae is the maximum dominant circle of relatives in the modern ethnobotanical investigation. That is possibly because of worldwide prevalence of the species from Leguminoaceae circle of relatives (25). Stem is most prominent plant element used for oral care. Ease of series of leaves is the top purpose in comparison to roots, flower, and culmination in conjunction with seed and bark (15, 16, and 21). Tree is the most dominant species at the side of herbaceous and shrubby vegetation on this area which is probably attributed to the huge variety of timber clearly ample in the Barwani district hilly place (18).

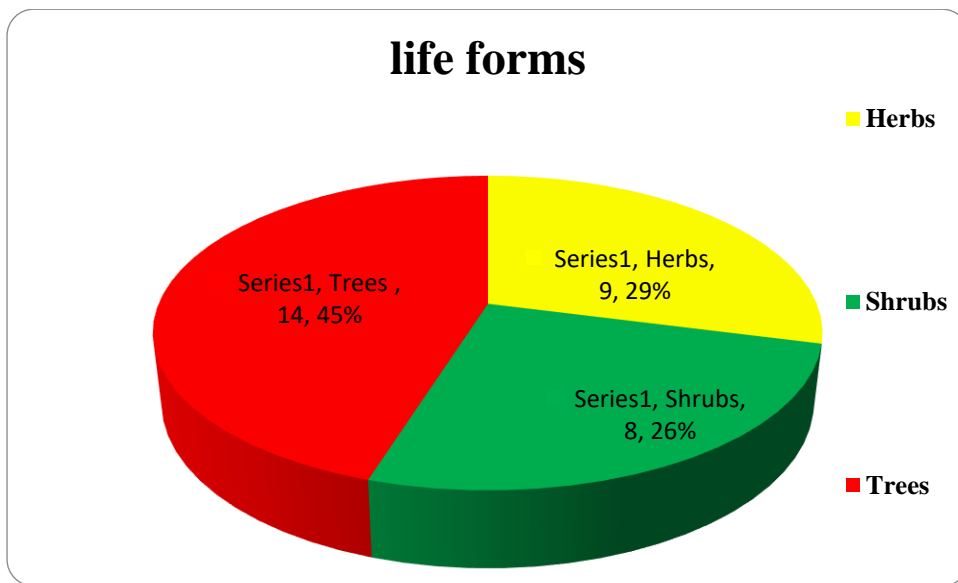


Figure-1: life forms of Wild plant used for Oral cure in Barwani (M.P.)

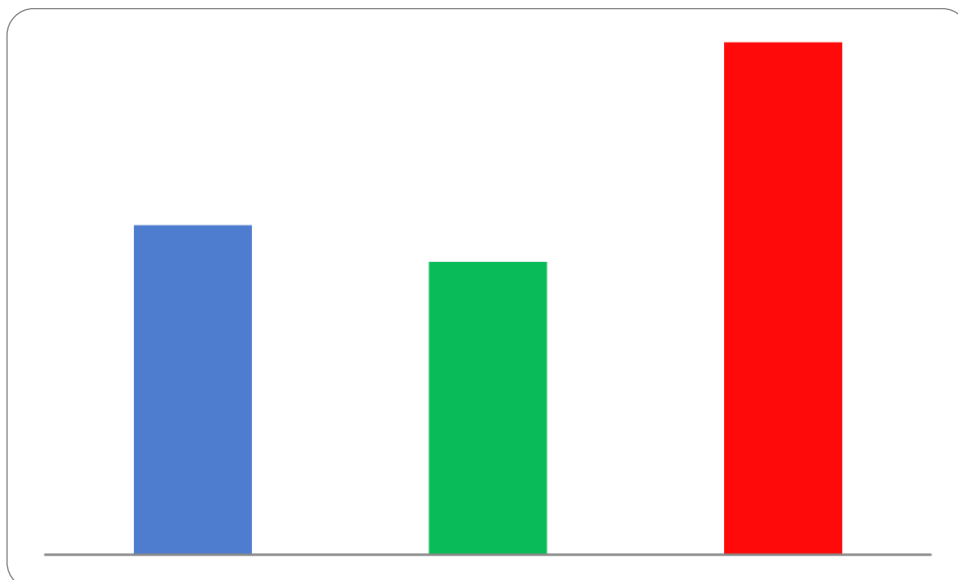


Figure-2: Distribution of family genera and species in Barwani (M.P.)

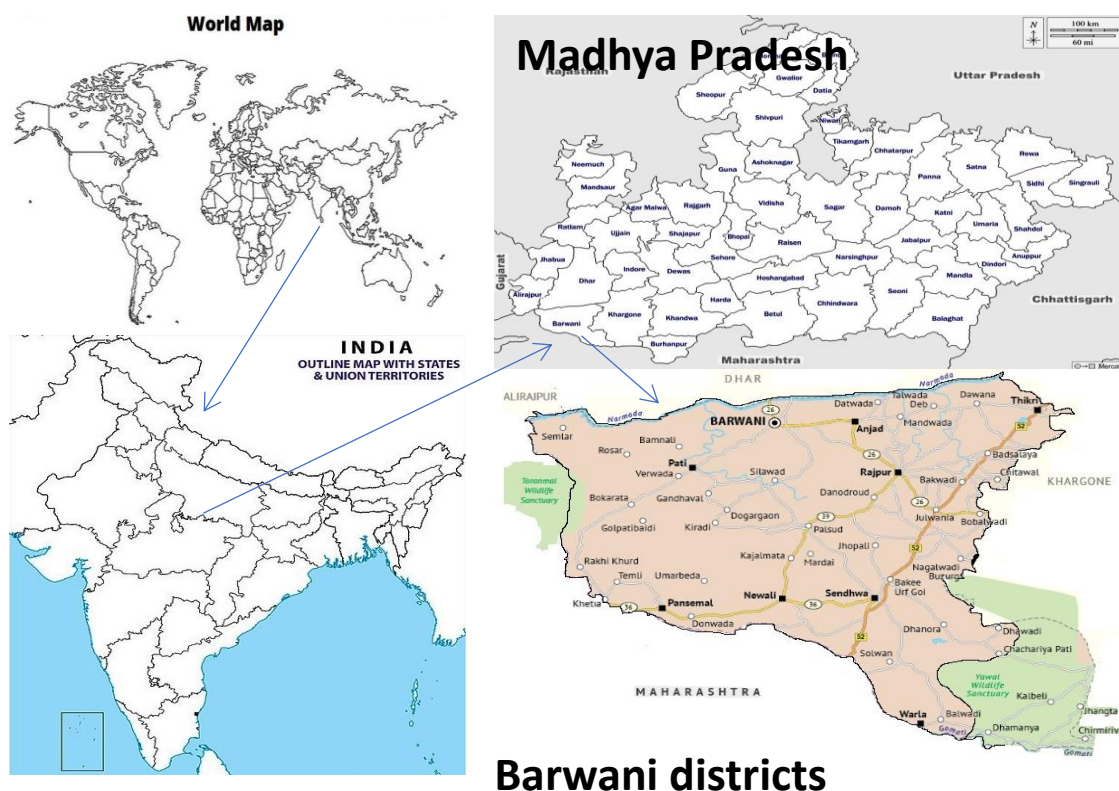


Figure-3: study area maps

Conclusion

This study turned into carried out in Barwani districts in chulgiri Hill Tracts in Madhya Pradesh, from January 2021 to December 2021. In our take a look at the contribution of natural plant life of Barwani district to the kingdom in conjunction with worldwide approaches inside the control of oral occurrences. The know-how documented on this examine probable supported the improvement of novel plant primarily based treatment. In addition investigation ought to be executed particularly in Oder to make sure secure remedy concerning medicinal plants. Our finding concerning natural remedy would be useful in making plans and formulating strategies and precise interventions to indigenous people associated health troubles in our regions.

Conflict of interest

The authors claim that there may be no conflict of interest regarding the publication of this paper.

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Authors' Biography

Dr. Jeetendra Sainkhediya has completed M.Sc. (Botany), in 2009 with specialization in Taxonomy from Holkar Science College, Indore DAVV M.P. and M. Phil. (Botany) from Vikram University, Ujjain (M.P.) in the year 2010. He has been awarded her Ph.D. degree from Botany in “Flora of Harda district of Madhya Pradesh, India” in DAVV, Indore, M.P. He has successfully completed her Minor Research Project of three years during Ph.D. research work funded by M.P. State Biodiversity, Bhopal. He has her credit of more than 55 research/review papers in various national and international Journal of repute, and 7 Book chapters and in various reputed national and International Journal, including Three Indian Patent Published. Written articles in various Magazine related to environment and serving as Editor of IRWJMSR (International Research World Journal of Multidisciplinary Scientific Research). He has been awarded youth teacher award 2019 and best research paper presentation award 2019 and best researcher award and many others. He is writing many books e.g. “sendhwa kile ka etihās” in 2018 and “some medicinal plants of Barwani district of Madhya Pradesh, India utilization and conservation”. etc. Her Research ID is orcid.org/0000-0001-7135-8665.

Dr. Priya Trivedi pursued M.Sc.(Botany), M.Ed., and Ph. D. (Botany) from DAVV, Indore in, 2003, 2010 and 2019 respectively. She is currently working in Indore International College, Indore, Madhya Pradesh, India. She is a member of VIBHA and General Secretary in SHAKTI at state level (Malwanchal Shakti). She is Life member, Editorial and reviewer of many reputed Journal. She has published more than 20 research papers in reputed national and international journals and 02 patents from Indian patents office. Her main research work focuses on Ecology, Food and Nutrition and Medicinal Plants. He has 20 years of teaching experience and 10 years of research experience.

Prof. Suresh Rawat is a distinguished Professor of Ethno-botany at department of botany in Raja Bhoj Govt. College Katangi, Balaghat, M. P., India, since 2020. He has completed M.Sc. (Botany), in 2012 from PMB Gujarati Science College, Indore. Prof. Suresh Rawat overall phytochemical research output has culminated in more than 04 publications in internationally respected journals, 03 abstracts in national and international conferences, 01 patents from Indian patents office. He is the author of 03 books chapter and written articles in various newspaper related to environment etc.

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