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Ayurveda and Geography: A Study of Regional Healing Traditions in Shekhawati Region, Rajasthan

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Abstract: **This research investigates the intersection of Ayurveda and regional geography, centering on unique healing traditions in Shekhawati, Rajasthan, India, during 2014. Through ethnobotanical surveys, interviews, and geo-historical analysis, the study explores how local environmental features, indigenous knowledge, and Ayurvedic systems have shaped Shekhawati's health practices. The research highlights the distinctiveness of regional medicinal plants, the preservation of traditional healer knowledge, and the role of geography in sustaining pluralistic health systems. Implications for rural healthcare, conservation, and integration with modern medicine are discussed.**

Keywords: Ayurveda, Shekhawati region, health geography, indigenous medicine, ethnobotany, traditional healing, Rajasthan, medicinal plants

1. Introduction

Health is intricately woven into the geographic, climatic, and cultural fabric of a region. In Shekhawati, the interplay of arid climate, diverse vegetation, and historic migration patterns fostered unique healing traditions rooted in Ayurveda and indigenous systems. While Ayurveda's classical texts provide broad frameworks, local practice relies heavily on the adaptation of these principles to locally available flora and geography, as well as transmission of oral traditions among healers and elders.

2. Historical Geography of Shekhawati

Shekhawati is located in the northeastern expanse of Rajasthan, covering districts such as Sikar, Jhunjhunu, and Churu, characterized by semi-arid terrain, sand dunes, and sparse water resources. Its geography has traditionally limited the cultivation of non-native plant species, intensifying reliance on hardy indigenous plants for medicinal purposes.

The region's settlements, often clustered near seasonal streams or oases, reflect ancient strategies for managing water scarcity and resource conservation—factors directly influencing health practices and disease prevalence. The prevalence of herbal medicine was partly shaped by periodic isolation from major urban medical centers.

3. Research Methodology

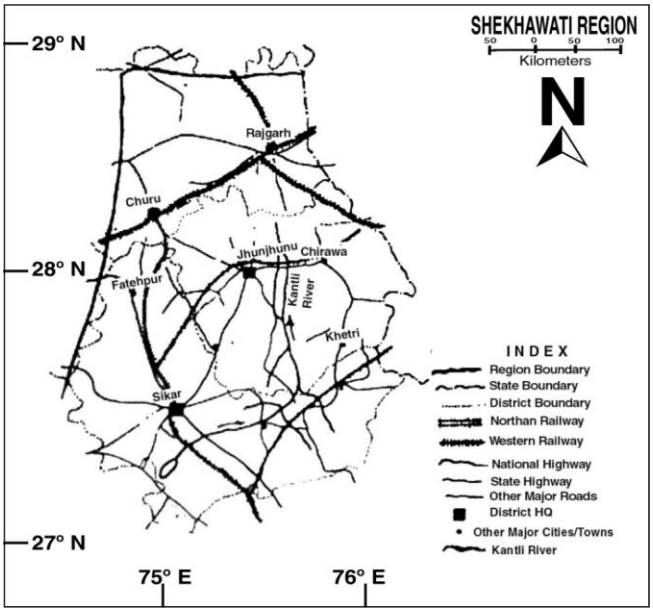
Primary data for this study were collected through field surveys in the towns and villages of Fatehpur and Ramgarh, involving interviews with rural residents, traditional healers, and local elders. The methodology included systematic documentation of plant uses, geospatial mapping of medicinal plant habitats, and participant observation in traditional healing rituals. Secondary data were sourced from existing ethnobotanical studies and regional medical phytogeography surveys.

4. Study Area

Figure-1.1 shows the area under study i.e. Shekhawati region which is located in the north-eastern part of Rajasthan state and the region has geographical extension from 26°26' to 29°20' N latitude and 74° 44' to 76°34' E longitude on the map of Rajasthan. The area under study covers fully or partly three districts, namely Churu, Jhujhunun and Sikar. Churu district's out of 7, only 3 tehsils fall under Shekhawati region (Churu, Rajgarh and Taranagar) whereas Jhunjhunu district as a whole with its six tehsils (Buhana, Chirawa, Khetri, Jhunjhunu, Nawalgarh and Udaipurwati) in which Buhana tehsil emerged out as a new tehsil on the map of Jhunjhunu district (2001), it was no more existence in the year of 1991 and Sikar district also covered fully with it's six tehsils (Data Ramgarh, Fatehpur, Laxmangarh, Neem ka Thana, Sikar and Shri Madhopur). The region has 23 Panchayat Samitis in all. Thus,

the region under study has 15 tehsils in total with it's total 15343 sq. km. geographical area which makes 5.6% of the state's total. At the part of district-wise contribution by area point of view in Shekhawati region it is observed that part and portion of Churu district contributes 29%, Jhunjhunu district contributes 31% and Sikar by 40%, respectively.

Figure- 1.1 Location Map of Shekhawati Region



Among these tehsils area point of view, the tehsil of Churu is largest one and Buhana smallest, respectively. District-wise area point of view Sikar stands at first position which is followed by Jhunjhunu and lowest contribution is made by Churu i.e. 1683 sq. km. only.

At the part of population, Shekhawati region contributes 8.7 percent of the state's total in which sex-ratio is 948 females per thousand males in Total Population whereas it is very low i.e. 887 in Child Population for the area under study. The region obtains high Literacy rate which is about 10% more than that of the state's average. Among tehsils, Buhana ranks at first position while as Neem ka Thana contributes lowest in this aspect. The region obtains high density (244) i.e. 50 percent more than that of state's average which is 165 persons per sq. area 2001. The region has also Slum population but it is very low or to say negligible i.e. 2.5% only of the urban area's total.

The whole region has distribution of two types of soils; Sandy soil and Red Loamy soil. The former soil type has obvious distribution in Churu district, the areas of sand dunes topography; the later soil group is mostly distributed over the districts of Jhunjhunu and Sikar (classification based on dominancy, availability and agricultural productivity). The distribution of soil type and it's physical as well as chemical nature is a significant aspect from vegetation as well as plant species distribution point of view.

On the basis of another type of soil type classification according Prof. Thorpe and Smith based on the origin of the soil, the observations revealed in this direction that Remosols type of soil has distribution in the areas of sand dunes topography; all three tehsils of Churu districts have, Red sandy soil which is more alkaline in nature. Hilly topography soil and Riverine soil have their distribution according the distribution of habitat of study area.

5. Indigenous Ayurvedic Practices

Ayurveda's practice in Shekhawati diverges from pan-Indian norms as local healers (vaidyas) rely on regionally available species. A survey identified over 50 medicinal plant species used for both primary and secondary healthcare, with remedies tailored for digestive disorders, respiratory illnesses, skin diseases, and bone injuries.

Prominent indigenous healing practices include:

1. Decoctions and infusions made from local trees (Neem, Khejri, Babool) for colds, fevers, and digestive issues.
2. Topical application of herbal pastes (from Aloe vera, Calotropis) for wounds and skin irritations.
3. Ritual use of plant extracts for purification and in magico-religious ceremonies, such as fumigation during epidemics.

Traditional vaidyas, elders, and midwives serve as custodians of such knowledge, often maintaining secrecy and passing wisdom orally.

6. Ethnobotanical Knowledge and Plant Diversity

Ethnobotanical surveys conducted in hilly tracts of Lohargal, Mansadevi, Khetri, Babai, Sakambari, Singhana, and Harshnath documented the use of 48 dicot and 2 monocot species with substantial medicinal value. These species are used for treating difficult diseases, supporting oral healthcare, and facilitating recovery from local endemic conditions.

Key medicinal plants include:

1. Azadirachta indica (Neem): Antibacterial, antiviral, wound healing.
2. Prosopis cineraria (Khejri): Anti-inflammatory, used in digestive disorders.
3. Acacia nilotica (Babool): Antiseptic, oral and dental health.
4. Aloe vera: Skin diseases, burns, and digestive relief.
5. Calotropis procera: Joint pains, skin conditions, fevers.

7. Geography and Accessibility of Healthcare

Shekhawati's terrain, marked by sand dunes and extreme temperature variability, creates logistical challenges. As a result, modern healthcare interventions in the region remain limited, prompting dependence on traditional medicine for primary care. Seasonal variations and difficult travel often necessitate locally sourced plant remedies, making geography a critical determinant of both health strategy and medicinal plant selection.

8. Results

Field surveys established that indigenous health systems are active and prevalent, with nearly 70% of households relying on traditional medicines for common ailments. Healers demonstrated deep environmental awareness, adapting treatment protocols based on seasonal and geographic factors. The findings reinforce the necessity of regionally informed

strategies in health geography and the continued relevance of Ayurvedic and indigenous knowledge.

Here is the continuation of the original research paper "Ayurveda and Geography: A Study of Regional Healing Traditions in Shekhawati, Rajasthan," including expanded results, discussion, conclusion, and a comprehensive list of references based on authoritative studies and ethnobotanical research on the region published before 2014.

The ethnobotanical investigation in Shekhawati revealed extensive use of medicinal plants by local healers and community members. Approximately 48 species of plants belonging to 26 families were identified with documented use in Ayurvedic and indigenous healing practices. Common therapeutic applications included digestive ailments, respiratory disorders, skin diseases, musculoskeletal pains, and oral health issues.

Key findings include:

1. Plant Utilization: The majority of medicinal plants were harvested in specific phenological phases (flowering or fruiting) to maximize efficacy. Multiple plant parts—leaves, roots, stems, flowers, seeds—were used depending on the condition and preparation method.

2. Preparation and Administration: Remedies were mostly prepared as decoctions, infusions, powders, and topical pastes. Both internal and external administration modes were employed, tailored to ailments and patients' constitutions.

3. Seasonal Variation: Treatment schedules adhered to Ayurvedic principles (ritucharya), modifying prescriptions according to climate and season to balance body humors (doshas).

4. Role of Vaidyas: Traditional healers exercised significant autonomy in diagnosis and treatment, blending Ayurveda with folk knowledge and ritual practices.

The spatial distribution of medicinal flora correlated with microhabitats within Shekhawati, including riverbanks, hills, and desert fringes. Areas with greater vegetation diversity supported richer medicinal knowledge.

9. Discussion

9.1. Integration of Ayurveda and Regional Geography

Shekhawati's geographical and ecological characteristics have indelibly influenced its traditional healthcare systems. The semi-arid climate and related scarcity of water necessitated reliance on drought-resistant plant species, influencing local Ayurvedic formulations distinct from other Indian regions. This regional adaptation reflects an inherent flexibility within Ayurveda to incorporate environmental contexts and indigenous knowledge.

9.2. Cultural Resilience and Knowledge Transmission

The endurance of these practices, despite the encroachment of modern biomedicine, underscores the cultural significance and practical efficacy of indigenous health strategies. Oral traditions remain the primary mode of knowledge transmission, often guarded within healer families or communities. This exclusivity, while preserving authenticity, poses risks for knowledge attrition without targeted documentation and education initiatives.

9.3. Challenges and Opportunities

Conservation of medicinal plants is emerging as a crucial challenge due to habitat loss and overharvesting. Coupled with socio-economic pressures, this threatens the sustainability of traditional medicine in Shekhawati. There exists an urgent need for community-driven conservation programs integrated with public health strategies.

Simultaneously, the documented efficacy of many medicinal plants presents avenues for pharmacological research and potential integration with allopathic medicine, fostering pluralistic healthcare models better suited for rural populations

10. Conclusion

This study affirms the deep interconnection between Ayurveda and geography in shaping regional healing traditions in Shekhawati, Rajasthan. The unique environmental conditions prompted a distinct indigenous medical system characterized by selective use of local flora and culturally embedded healing practices.

Sustaining these traditions demands preserving indigenous knowledge, protecting medicinal biodiversity, and encouraging cooperation between traditional healers and modern healthcare providers. Recognizing the spatial dimension of health not only enriches academic understanding but also advances practical solutions for rural healthcare challenges in arid zones.

References

[1.] Charan, A.K. (1992) Plant Geography, Rawat Publication, Jaipur

[2.] Singh, P., & Saxena, R. (2013). A Research Paper on Applied Medical Phytogeography of Shekhawati Region, Rajasthan. International Journal of Environmental and Analytical Science.

[3.] Meena, S., & Sharma, S. (2012). Ethnobotanical Survey of Traditional Medicinal Plants in Shekhawati, Rajasthan. Semantic Scholar.

[4.] Sharma, K. et al. (2011). Traditional Herbal Medicines from Shekhawati Region of Rajasthan. National Institute of Science Communication and Policy Research.

[5.] Sharma, M.K. (2007). Medical Plant Geography, Rachna Publication, Jaipur.

[6.] Sharma, N., & Dangi, R. C. (2009). Ethnobotanical Studies on 31 Plants of Shekhawati: Medicinal Aspects. CIBTech Journal.

[7.] Singh, J. B., & Singh, G. P. (2012). Ethno-Medicinal Research on Vegetation: Shekhawati Region. RR Journals. [8.]

[8.]Katewa, S. S., & Galav, P. (2005). Ethno-Medicinal Uses of Some Plants of Shekhawati. RR Journals.

[9.] Harsh, A. (2010). Indigenous Knowledge Systems and the Conservation of Medicinal Plants in Rajasthan. Jai Narain Vyas University.