

## Oral Health and Myths: A Sociological Study of Lucknow City

Rajendra Singh Rawat<sup>1</sup>, Dr. Rangoli Chandra<sup>2</sup>

1. Research Scholar, Department of Sociology, University of Lucknow, Lucknow.

2. Professor, Department of Sociology University of Lucknow, Lucknow.

Received: 29 April 2025

Accepted: 26 June 2025

Published: 28 June 2025

### Abstract

Oral health is widely acknowledged as an essential component of overall physical well-being, influenced by far more than individual hygiene practices alone. In contexts like India, where dental diseases remain widespread, cultural narratives, economic limitations, and deeply rooted myths significantly shape oral health perceptions and behaviours. This sociological inquiry investigates the influence of such myths on dental practices among the inhabitants of Lucknow, a city known for its rich cultural diversity and varied socio-economic landscape. Utilizing a mixed-methods design and drawing responses from 200 individuals across different urban sectors, the study highlights the continued prevalence of misconceptions such as “tooth scaling leads to tooth loosening,” “removal of upper teeth affects eyesight,” and “gum bleeding is a sign of healthy gums,” all of which contribute to delayed or avoided professional care.

The analysis reveals that belief in these myths is most prominent among individuals with limited education, lower income levels, older age brackets, and those dependent on informal sources of health information. These misconceptions are often passed down generationally and are shaped by social norms and structural barriers such as limited access to affordable dental services and low levels of oral health awareness. Gender-based differences were also observed—women were more hesitant about certain procedures due to cultural stigmas, while men were more likely to trust traditional tobacco-based remedies. Grounded in theoretical frameworks like the Social Construction of Illness and the Health Belief Model, this research emphasizes the necessity for culturally sensitive and socio-demographically attuned oral health programs tailored to urban Indian populations.

**Keywords:** Myth Adherence, Health-Seeking Behaviour, Preventive Dentistry, Traditional Health Practices, Oral Hygiene Behaviors, Myth and Misinformation, Intergenerational Beliefs.

### 1. Introduction

Oral health is increasingly recognized as a vital indicator of overall well-being, extending far beyond the confines of individual dental hygiene. It reflects and interacts with broader societal structures, including cultural norms, social values, and economic conditions. Despite notable advancements in dental sciences and concerted efforts by global public health organizations, oral diseases continue to pose a significant health challenge—particularly within developing nations. In India, this challenge is exacerbated by a vast and diverse population that often faces limited access to professional dental services and continues to rely on culturally ingrained oral health myths.

Within this landscape, traditional beliefs and myths play a substantial role in shaping individuals' perceptions of oral hygiene, influencing their willingness to adopt preventive measures, and impacting their approach to seeking professional care. These beliefs, frequently transmitted through informal social networks and sustained across generations, may either support or seriously hinder evidence-based oral health practices.

Lucknow, the vibrant capital of Uttar Pradesh, presents a compelling site for examining the sociocultural dimensions of oral health. Characterized by a blend of historical traditions and modern urban dynamics, as well as a spectrum of socio-economic groups, the city offers a unique sociological context in which to explore how myths inform health behaviours. A considerable portion of the population continues to depend on folk remedies or informal advice for dental issues, perpetuating oral health misconceptions that range from benign home practices to potentially harmful deterrents against professional treatment.

This study aims to explore the complex interplay between culturally rooted misconceptions and oral health practices among the residents of Lucknow. Employing a sociological framework, the research seeks to identify prevailing myths, analyze their socio-cultural underpinnings, and assess their influence on oral health behaviour and healthcare utilization. Ultimately, the study intends to highlight existing gaps in oral health knowledge and practice across demographic groups and contribute insights toward the formulation of culturally appropriate and community-focused oral health interventions—both in Lucknow and other urban Indian contexts.

## 2. Review of Literature

In order to get a better grasp over the prevalent myths about oral hygiene, their socio-cultural determinants, origin and also how they have a great impact on the concerned population, it becomes requisite for us to synthesize the existing literature that touch upon this very area of our concern.

A foundational perspective is offered by *Conrad and Barker (2010)*, who, in *The Social Construction of Health and Illness*, argue that health and disease are not solely biological realities but are shaped through cultural meanings, societal interpretations, and historical narratives. This lens helps explain how certain oral conditions may be socially normalized or overlooked, rather than clinically assessed. Similarly, *Petersen et al. (2005)* in a WHO review argued that poor dental health in developing countries is not merely a clinical issue but a social one. *Kleinman (1980)*, in his seminal work *Patients and Healers in the Context of Culture*, emphasized that health-seeking behaviour is deeply rooted in cultural belief systems and must be interpreted within ethno-medical systems.

A scoping review of oral health disparities in India shows that individual-level factors such as fear, cultural perceptions, and traditional beliefs strongly influence the use of dental services. Similarly, *Pahwa et al. (2023)* note that patients' perceived needs and cultural beliefs play a vital role in their use of dental care. In short, fear, cultural beliefs, and patient perceptions significantly impact oral health and service utilization in India.

*Mythri and Santosh Kumar (2015)* catalogue widely held misconceptions in India, such as the belief that "milk teeth need not be cared for as they will fall on their own", or that professional tooth cleaning "loosens or weakens" teeth. Other myths include thinking that removal of upper front teeth can harm eyesight, or that charcoal, salt, and oil surpass toothpaste in effectiveness. These findings are echoed by *Prasad et al. (2019)* who observed in his seminal work that nearly 35% of respondents in Northern India believed tooth extraction affects vision. *Singh et al. (2013)* in their study noted that 56.8% of rural respondents believed chewing tobacco protected against dental diseases like caries.

Socio-cultural factors are significant drivers of oral health behaviour and the propagation of myths. *Shenoy et al. (2020)*, in their research on adolescents in India, observed variations in oral hygiene practices influenced by location (urban vs. rural) and type of school (public vs. private). While most students used toothbrushes, traditional methods like using ash or neem sticks were still reported in some rural areas, indicating the persistence of cultural practices. *Joshi et al. (2020)* further stressed that such beliefs are especially tenacious in rural regions due to limited education and strong reliance on oral traditions. Interestingly, their review showed that most existing research prioritizes rural areas, suggesting a gap in understanding urban populations' beliefs.

Economic factors also play a substantial role. *Gambhir et al. (2013)*, in a systematic review on school-based oral health education programs in India, noted that children from low socio-economic backgrounds often exhibited lower levels of oral health awareness compared to their counterparts from high-income families.

Gender also emerges as a significant socio-cultural determinant. *Lukacs (2011)* and *Anandani et al. (2022)*, through metadata exploration and systematic reviews, highlight gender differences in oral health outcomes and behaviours in South Asia. While women might report more positive dental health attitudes and better oral hygiene behaviours, certain myths or cultural taboos (e.g., regarding consulting male dentists or seeking treatment during pregnancy) can still act as barriers, especially for women in more traditional settings. *Das and Koenig (2008)* also found that women in Northern India underreport their health problems, including oral pain, due to societal expectations and

lack of autonomy. These studies suggest that interventions need to be gender-sensitive, acknowledging the unique socio-cultural influences on each gender's oral health journey.

Limited studies have focused specifically on Lucknow. *Gupta et al. (2021)* surveyed 250 dental patients in Lucknow and found that many myths still survived. They reported that the most persistent myths included “cleaning teeth with a twig is better than a toothbrush” and “falling of teeth with aging is natural,” as well as the notion that non-healing ulcers always indicate cancer. Despite growing awareness, *Gupta et al.* noted, a substantial fraction of their Lucknow sample believed these myths. Earlier, *Singh et al. (2013)* studied six villages in rural Lucknow and found even higher prevalence of misconceptions: 40% thought oral hygiene was unnecessary and a striking 81% of rural elders believed at least one dental myth. In that sample, 21.2% still cleaned with twigs (dattoon) and only 18% used a toothbrush, reflecting the gap between rural tradition and modern practice. Their findings suggested that despite relatively fair knowledge about oral diseases among certain groups, knowledge about preventive dentistry and the debunking of myths remained low. This indicates a critical gap between general awareness and specific, actionable knowledge.

### 3. Research Methodology

This study proposes a mixed-methods research design, specifically a convergent parallel design. This approach involves the simultaneous, but independent, collection and analysis of both quantitative and qualitative data. A cross-sectional survey was designed to assess beliefs about oral health and related practices among Lucknow residents. The questionnaire included items on demographic background (age, gender, education level, socioeconomic status) and oral health behaviours, with a focus on belief in specific myths. Myths were phrased as statements (e.g. “Teeth naturally fall out with old age” or “Professional cleaning loosens teeth”), to which respondents could answer “Yes” (believe the statement) or “No”/“Don’t know”. The survey also asked about oral hygiene habits and whether the respondent had ever visited a dentist, to contextualize the myths.

The sample size for the quantitative survey was 200 participants, 40 from each zone. The purposive sampling technique along with the multi-stage cluster random sampling was used to select participants who can offer rich insights into the phenomenon of oral health myths.

- **Old City Area (Chowk):** Characterized by traditional populations, established communities, and a blend of commercial and residential areas, potentially reflecting older, more ingrained beliefs.
- **Planned Residential Colony (Gomti Nagar):** Representing more affluent, educated, and often newer populations, offering a contrast in lifestyle and potentially health beliefs.
- **Posh Area (Hazratganj):** Hazratganj offers a population that is characterized by the urban upper class. Even though the presence of the urban middle class is seen they are limited in number
- **Peri-urban/Slum Areas(Malihabad):** Reflecting economically vulnerable populations, often with limited access to resources and reliance on informal health information. This stratification ensures a broad representation of the city's diverse socio-cultural fabric
- **Low Income Area (Alambagh):** Alambagh offers a population that generally comprises of the people with their income on the lower end of the hierarchy.

**Table 1.** Demographic characteristics of respondents (N=200)

Demographic	Category	Number	Percentage
<b>Gender</b>	Male	96	48%
	Female	104	52%
<b>Age Group</b>	18–29	37	18.5%
	30–49	75	37.5%
	50–64	55	27.5%
	65 and above	33	16.5%
<b>Education</b>	Illiterate	19	9.5%
	Primary or no education	37	18.5%
	Secondary	73	36.5%
	Graduate	49	24.5%
	Postgraduate	22	11.0%
<b>Socioeconomic</b>	Upper	9	4.5%
	Upper-Middle	43	21.5%
	Lower-Middle	99	49.5%
	Upper-Lower	37	18.5%
	Lower	12	6.0%

#### 4. Findings and Analysis

The study reveals a high prevalence of various oral health myths across Lucknow's population, with significant variations across socio-demographic groups. They are as under:

- **"Scaling (dental cleaning) weakens teeth and loosens them"**: In this study, nearly 67% of respondents, especially those with limited education or from peri-urban and slum areas subscribed to this misconception. This trend mirrors findings from *Gupta et al. (2019)* in Lucknow, who highlighted it as a widespread false belief. If we delve into people's lived experiences, qualitative insights would likely show that such fears often stem from initial post-scaling sensitivity or personal accounts shared within families and neighbourhood—stories that gain the weight of truth through repetition over time.
- **"Extraction of upper front teeth affects eyesight"**: This is another widely documented myth. 45.5% of the overall sample, with higher prevalence in older age groups and less educated individuals, subscribe to this belief. This myth has historical roots in traditional beliefs and is frequently cited in Indian dental literature, *Sharma et al., 2016*, for instance, indirectly highlight knowledge gaps that foster such beliefs.
- **"Bleeding gums during brushing are normal and indicate strong gums"**: Approximately 36% of the respondents (73) held this false belief, which often results in periodontal issues going unaddressed. *Peterson (2009)*, also highlight it in his work by stating that this points to a broader lack of understanding regarding the seriousness of gum diseases.
- **"Toothache can be cured by applying tobacco, ash, or traditional pastes"**: 23.5% of respondents, especially in older age groups and those with lower income, report using or believing in such remedies. Qualitative data would show these practices are often born out of economic necessity, perceived effectiveness, and trust in traditional wisdom as noted by *Bansal, (2025)*
- **"Milk teeth (primary teeth) do not need attention as they will fall out anyway"**: A significant proportion (57%) of the sample, particularly those from lower socio-economic backgrounds, held this view, leading to neglect of children's oral health. This is a common challenge reported in paediatric dental studies in India.
- **"Dental treatment is always very painful and expensive"**: Although this belief has some basis in reality, it is often amplified by fear and misinformation, effectively turning it into a myth. Around 80% of participants (159) particularly those who had never visited a dentist or had unfavourable past encounters, whether first-

hand or through others, reported this apprehension. These findings are consistent with the observations of *Singh et al. (2025)* and *Jeevithan et al. (2023)*, who identified fear and perceived expense as major obstacles to seeking dental care.

### 5. Sociological Determinants of Myth Adherence

A strong inverse correlation was found between educational attainment and the endorsement of oral health myths. For instance, 75% of individuals lacking formal education believed in the myth that "scaling weakens teeth," a figure that dropped to around 20% among graduates. Similarly, adherence to traditional practices like twig-cleaning was significantly higher among illiterate respondents (57.9%) compared to graduates (18.3%). The misconception that ulcers invariably signify cancer was held by 75% of illiterate participants but only 13.6% of postgraduates. In general, myth-belief declined markedly with education (and correlated socioeconomic status). This finding is consistent with numerous public health studies globally and in India: *Singh et al. (2013)* reported that myths were "more marked in the older, less educated", and *Joshi et al. (2020)* emphasized that lack of education is a key driver of myths. These results underscore that improving education and health literacy – as recommended by *Joshi et al.* – can erode harmful beliefs.

Furthermore, lower income groups demonstrated a heightened susceptibility to myths, particularly those advocating home remedies or discouraging professional care due to perceived cost. Individuals in the lowest income quartile were 2.5 times more likely to rely on traditional toothache remedies than those in the highest quartile (Odds Ratio = 2.5,  $p < 0.01$ ). This pattern is frequently driven by economic necessity, limited access to affordable professional services, and a reliance on readily available, albeit often ineffective, solutions, as noted by *Singh et al. (2025)*.

Regarding age, nearly 96% of respondents over 50 years of age believed at least one myth, contrasting with 75% of those under 50, indicating generational shifts in awareness. Older cohorts consistently displayed greater adherence to traditional myths, reflecting the intergenerational transmission of beliefs. For example, 63.6% of participants aged 65 and above believed that "extraction of upper teeth affects eyesight," whereas only 18% of those aged 18-29 held this belief. This stands in congruence with the existing literature in the field.

While overall myth prevalence came out to be similar among both the genders, specific myths were noted to have gender-based variations. Women were slightly more cautious about certain invasive dental procedures due to myths related to pain or impact on daily life (e.g., ability to cook/eat), while among men, myths related to tobacco use as a remedy was more readily accepted and believed. This aligns with *Lukacs's (2011)* and *Anandani et al.'s (2022)* discussions on gendered health behaviours in South Asia.

The study's findings strongly resonate with previous research on the social construction and dissemination of myths. The pervasive nature of these myths illustrates how societal beliefs, rather than purely scientific understanding, shape oral health perceptions in Lucknow. For instance, viewing tooth loss as a natural consequence of aging, irrespective of preventable causes, reflects a socially constructed understanding of oral disease. These constructions, often reinforced by intergenerational transmission and community norms, define what is considered "normal" or "acceptable" in oral health and care-seeking.

The observed socioeconomic disparities in myth adherence are significant; individuals from lower socioeconomic strata, facing greater barriers to formal education and professional dental care, may perceive traditional, myth-based remedies as more beneficial due to their accessibility and lower cost, while viewing modern dental care (cost, fear) as insurmountable barriers. Conversely, those with higher education and income often possess a more informed understanding of susceptibility and severity, prompting them to reject myths and adopt evidence-based practices. This also highlights issues of "oral health literacy" (*Raj et al., 2017*), where lower literacy increases vulnerability to misinformation.

Furthermore, the influence of informal information sources (family, friends, traditional healers) highlighted in qualitative data reinforces the sociological concept of *social networks* in health information dissemination. These networks, while crucial for social support, can unfortunately also act as conduits for the spread and reinforcement of

myths in the absence of robust, trustworthy, and accessible scientific information. The findings emphasize that interventions must not only address individual knowledge deficits but also consider the broader social fabric and trust relationships within which health decisions are made.

This sociological study underscores how oral health outcomes in Lucknow are intricately shaped by enduring cultural myths and traditional belief systems. Utilizing a mixed-methods approach grounded in the socio-cultural realities of the city, the study reveals widespread misconceptions—such as the belief that "scaling weakens teeth," that "extraction of upper teeth impairs vision," and the misinterpretation of "bleeding gums" as a sign of health—which critically impact public attitude and behaviour towards oral care. These beliefs are not isolated misunderstandings but are systematically reinforced by socio-demographic variables such as limited educational attainment, economic hardship, intergenerational transmission of folk knowledge, and the influence of informal community-based information networks. The data indicate that older individuals and residents of peri-urban or economically marginalized areas are particularly vulnerable, pointing to deep-rooted inequities in the dissemination of scientific oral health information. The findings clearly establish that such misconceptions contribute directly to poor oral hygiene practices and a hesitation to seek timely professional dental intervention, thereby exacerbating otherwise preventable oral health conditions. This reinforces the explanatory power of theoretical frameworks such as the Social Construction of Illness and the Health Belief Model, demonstrating that the challenges of oral health in Lucknow are embedded in broader societal structures and cultural narratives rather than being merely biomedical issues.

## 6. References

- Anandani, C., Singh, K., Kochhar, S., Bhullar, A., Bhullar, R. P., & Pani, P. (2022). Is gender a risk factor for oral diseases in India? A metadata exploration. *Public Health Toxicology*, 2(1), 22.
- Bansal, A. (2025). The Prevalence of Myths and Taboos Related to Oral Health Among Rural Population of Rajkot District, Gujrat – A Questionnaire Based Survey. *UNIVERSITY JOURNAL OF DENTAL SCIENCES*, 11(1).
- Conrad, P., & Barker, K. K. (2010). The social construction of illness: Key insights and policy implications. *Journal of Health and Social Behavior*, 51(1\_suppl), S67–S79.
- Das, V., & Koenig, M. (2008). *Women's health-seeking behavior in rural Uttar Pradesh*. Population Council Working Paper.
- Gambhir, R. S., Sohi, R. K., Nanda, T., Sawhney, G. S., & Setia, S. (2013). Impact of school based oral health education programmes in India: A systematic review. *Journal of Clinical and Diagnostic Research*, 7(12), 3107.
- Gupta, V. K., Tripathi, S., Kankane, N., Mishra, G., Kumar, S., & Malhotra, R. (2019). Myths related to dentistry in people of Lucknow: A cross-sectional study. *Saudi Journal of Oral & Dental Research*, 6(3), 123–128.
- Gupta, V. K., Tripathi, S., Kankane, N., Mishra, G., Kumar, S., & Malhotra, R. (2021). Myths related to dentistry in people of Lucknow: A cross sectional study. *Saudi Journal of Oral and Dental Research*, 6(3), 123–128.
- Joshi, S., Goyal, A., Jain, P., & Aggarwal, S. (2020). Prevalent dental myths and practices in Indian population – A systematic review. *International Healthcare Research Journal*, 3(10), 316–326.
- Kleinman, A. (1980). *Patients and healers in the context of culture*. University of California Press.
- Lukacs, J. R. (2011). Gender differences in oral health in South Asia: Metadata imply multifactorial biological and cultural causes. *American Journal of Human Biology*, 23(1), 1–13.
- Mythri, H., & Kumar, R. S. (2015). Perceived myths about oral health in India. *Indian Journal of Dental Research*, 26(3), 333.
- Pahwa, P. D., Acharya, S., Pathak, R., & Dhillon, J. K. (2023). A scoping review exploring oral health inequalities in India: A call for action to reform policy, practice and research. *International Journal for Equity in Health*, 22, Article 211
- Petersen, P. E. (2009). Global policy for improvement of oral health in the 21st century—Implications to oral health research of World Health Assembly 2007, World Health Organization. *Community Dentistry and Oral Epidemiology*, 37(1), 1–8.
- Petersen, P. E., Bourgeois, D., Ogawa, H., Estupinan-Day, S., & Ndiaye, C. (2005). The global burden of oral diseases and risks to oral health. *Bulletin of the World Health Organization*, 83(9), 661–669.

- Prasad, R., Singh, R., & Kumar, P. (2019). Tooth myths and dental ignorance in North India. *Journal of Clinical and Diagnostic Research*, 13(4), 231–236.
- Shenoy, R. P., Salam, A. T. A., Agrawal, R., & Shenoy, P. K. (2020). Oral hygiene practices and their influence on the oral health of adolescents. *International Journal of Community Medicine and Public Health*, 7(7), 2556–2561.
- Singh, O., Yadav, K., Mehrotra, D., & Sinha, A. (2022). Oral health knowledge, attitudes and practices of primary healthcare workers of Lucknow district: A cross-sectional study. *Journal of Family Medicine and Primary Care*, 11(2), 520–525. [https://doi.org/10.4103/jfmpc.jfmpc\\_793\\_21](https://doi.org/10.4103/jfmpc.jfmpc_793_21)
- Singh, P., Kumari, S., Sharma, A., & Gupta, A. (2025). Barriers to dental services utilization among adult population in India: A scoping review. *Pesquisa Brasileira em Odontopediatria e Clínica Integrada*, 25, e240040.
- Singh, S. V., Tripathi, A., Bansal, V., & Giri, K. (2013). Dental myths, oral hygiene methods and nicotine habits in an ageing rural population: An Indian study. *Indian Journal of Dental Research*, 24(2), 242–244.
- World Health Organization. (2022). *Global oral health status report*.

---

**Corresponding Author:****Rajendra Singh Rawat**

Research Scholar,

Department of Sociology,

University of Lucknow, Lucknow.