

Prevalence of Myths and Taboos Related to Oral Health Among Rural Population of Rajkot District, Gujrat – A Questionnaire Based Survey

Abstract:

Introduction: In India, a country known for its diverse cultures, ethnicities, and religious beliefs, oral health is significantly influenced by various myths and taboos. These myths often stem from traditional beliefs or advice from untrained dental practitioners, sometimes referred to as quacks. Factors contributing to these myths and

Aim: This study aims to assess the prevalence of such myths and taboos related to oral health among the rural population of Rajkot district, Gujarat, using a questionnaire-based survey.

Materials and Methods: A questionnaire-based survey was conducted in the rural population of Rajkot district, Gujarat. Data was gathered through a structured questionnaire about social myths and taboos. The study involved 100 participants, including 56 males and 44 females. Descriptive and inferential statistics were applied, with a p-value of <0.05 considered statistically significant.

Results: A statistically significant difference was observed in females not going to male dentist for treatment. Most of them participants thought that neonatal teeth in infants were a danger to grandparents. Majority of the participants agreed that neem sticks or salt strengthen teeth.

Conclusion: Dental myths and misconceptions are pervasive in India, especially among rural and uneducated populations, impeding effective dental care. Addressing these myths necessitates targeted education programs, government action, and improved dentist-patient communication. Future initiatives must focus on debunking myths and enhancing oral health awareness to ensure comprehensive dental care for all.

Key-words: Taboos, Rural, myths

Introduction:

Oral health is crucial for overall well-being across all age groups.[1] In India, a country known for its diverse cultures, ethnicities, and religious beliefs, oral health is significantly influenced by various myths and taboos.[2,3] The term "myth" is derived from the Greek word "MYTHOS," meaning false beliefs.⁴ These myths often stem from traditional beliefs or advice from untrained dental practitioners, sometimes referred to as quacks.[5] Instead of consulting qualified dentists, many people turn to these unqualified sources, perpetuating misinformation. Cultural practices around the world reflect differing beliefs about oral health. For instance, in Western cultures, the Tooth Fairy exchanges gifts for lost teeth, whereas in Europe, children historically threw their lost teeth into mouse holes, hoping to grow sharp teeth like a mouse. In many Asian cultures, including India, children often

place their lost teeth on roofs or in the ground to ensure their new teeth grow straight and strong.[6,7]

Taboos, which are prohibitions based on social or religious customs, also play a role in shaping health behaviors. These taboos, which are often based on moral judgments or religious beliefs, can negatively impact social well-being.[8,9] Factors

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contributing to these myths and taboos include socio-cultural influences, lack of proper education, and non-scientific knowledge.¹⁰ Despite advancements in education, many myths and taboos persist and continue to affect oral health practices.¹¹ This study aims to assess the prevalence of such myths and taboos related to oral health among the rural population of Rajkot district, Gujarat, using a questionnaire-based survey.

Material and Methods;

Study setting:

This study was conducted in the rural areas of Rajkot district, Gujarat. The focus on a single location allows for a manageable scope and addresses the belief that myths and superstitions often originate in rural communities. Data collection took place in month of December 2023.

Source of data:

Data was gathered through a structured questionnaire.

Study population:

The study involved 100 participants, including 56 males and 44 females.

Ethical clearance:

Approval was obtained from the Institutional Ethical Committee, College of Dental Sciences and Research Centre, Ahmedabad.

Informed consent:

Participants were informed about the study's purpose and provided written consent.

Inclusion criteria:

- Individuals aged 15 years and above.
- Those present at the time of the survey.

Exclusion criteria:

- Non-cooperative individuals.
- Mentally challenged individuals.

Study design:

This was a cross-sectional questionnaire survey.

Questionnaire:

The structured questionnaire had two parts:

- Six questions about oral hygiene practices.
- Ten questions regarding social myths and taboos related to oral health.

The questionnaire was available in Gujarati, Hindi, and English. Each survey took approximately 10 minutes, with data collected from about 12 participants per day over a period of 7 days.

Statistical Analysis:

Data was analyzed using SPSS version 20 (IBM Corp. IBM SPSS Statistics for Windows, Armonk, NY, USA: IBM Corp; 2011). Descriptive and inferential statistics were applied, with a p-value of <0.05 considered statistically significant.

Results:

The study included 100 participants aged between 18 and 72 years. The age distribution was as follows: 46% were aged 46–72 years, 40% were aged 26–45 years, and 14% were aged 18–25 years. Females constituted 53% of the participants, while males accounted for 47%. (Table No. 1)

Table No. 1- Demographic profile

AGE GROUPS	
18-25	14%
26 – 45	40%
46 – 72	46%
GENDER	
MALE	47%
FEMALE	53%

Table No. 2 - myths and Taboos related to oral health

Questions		AGE GROUPS			TOTAL (100)	p-value
		18-25 years n = 14	26-45 years n = 40	46 - 72 years n = 46		
1. Cloves relieves toothache	Yes	11 (78.6%)	20 (50%)	31 (67.4%)	62 (62%)	0.32
	No	2 (14.3%)	12 (30%)	9 (19.6%)	23 (23%)	
	Don't know	1 (7.1%)	8 (20%)	6 (13%)	15 (15%)	
	TOTAL	14 (100%)	40 (100%)	46 (100%)	100 (100%)	
2. There are worms inside decayed tooth	Yes	7 (50%)	21 (52.5%)	28 (60.9%)	56 (56%)	0.26
	No	1 (7.1%)	11 (27.5%)	9 (19.6%)	21 (21%)	
	Don't know	6 (42.9%)	8 (20%)	9 (19.6%)	23 (23%)	
	TOTAL	14 (100%)	40 (100%)	46 (100%)	100 (100%)	
3. Removal of upper tooth leads to loss of vision	Yes	9 (64.3%)	25 (62.5%)	29 (63%)	63 (63%)	0.96
	No	3 (21.4%)	6 (15%)	7 (15.2%)	16 (16%)	
	Don't know	2 (14.3%)	9 (22.5%)	10 (21.7%)	21 (21%)	
	TOTAL	14 (100%)	40 (100%)	46 (100%)	100 (100%)	
4. Tobacco relieves pain due to decayed teeth	Yes	9 (64.3%)	19 (47.5%)	23 (50%)	51 (51%)	0.21
	No	4 (28.6%)	17 (42.53%)	12 (26.1%)	33 (33%)	
	Don't know	1 (7.1%)	4 (10%)	11 (23.9%)	16 (16%)	
	TOTAL	14 (100%)	40 (100%)	46 (100%)	100 (100%)	
5. Professional cleaning of teeth causes loosening of teeth	Yes	12 (85.7%)	15 (37.5%)	27 (58.7%)	54 (54%)	0.03*
	No	1 (7.1%)	7 (17.5%)	6 (13%)	14 (14%)	
	Don't know	1 (7.1%)	18 (45%)	13 (28.3%)	32 (32%)	
	TOTAL	14 (100%)	40 (100%)	46 (100%)	100 (100%)	

6. Females not going to male dentist for treatment	Yes	12 (85.7%)	30(75%)	36 (78.3%)	78 (78%)	0.03*
	No	2 (14.3%)	10(25%)	4 (8.7%)	16 (16%)	
	Don't know	0 (0%)	0(0%)	6 (13%)	6 (6%)	
	TOTAL	14 (100%)	40 (100%)	46 (100%)	100 (100%)	
7. Some people believe that if the child was born with neonatal teeth, it's danger be grandparents	Yes	13 (92.9%)	18 (45%)	15 (32.6%)	46 (46%)	0.00*
	No	0 (0%)	13 (32.5%)	23 (50%)	36 (36%)	
	Don't know	1 (7.1%)	9 (22.5%)	8 (17.4%)	18 (18%)	
	TOTAL	14 (100%)	40 (100%)	46 (100%)	100 (100%)	
8. Teeth becomes stronger when cleaned with neem stick or salt	Yes	10 (71.4%)	25(62.5%)	31 (67.4%)	66 (66%)	0.01*
	No	0 (0%)	11(27.5%)	3 (6.5%)	14 (14%)	
	Don't know	4 (28.6%)	4 (10%)	12 (26.1%)	20 (20%)	
	TOTAL	14 (100%)	40 (100%)	46 (100%)	100 (100%)	
9. Alum or soaked lime provides relief from mouth ulcers	Yes	4 (28.6%)	15 (37.5%)	21 (45.7%)	40 (40%)	0.38
	No	1 (7.1%)	9 (22.5%)	7 (15.2%)	17 (17%)	
	Don't know	9 (64.3%)	16 (40%)	18 (39.1%)	43 (43%)	
	TOTAL	14 (100%)	40 (100%)	46 (100%)	100 (100%)	

Table No.2, In this study, 78.6%Participants aged 18–25 years, said that clove relieves toothache but there is no significant difference ($p= 0.32$) with other age group. Majority of the participants in 46 – 27 years age group i.e. 60.9% said that worms inside decayed tooth and there is no significant difference ($p= 0.26$). When questioned on the removal of upper tooth leads to loss of vision, 64.3% participants in 18 – 25 years age group believed that the removal of upper tooth leads to loss of vision. No significant difference was found ($p= 0.96$). Most of the 64.3% Participants aged 18 – 25 years age group believed that the tobacco relieves pain due to decayed teeth. No significant difference was found($p=0.21$).

In 18 – 25 years age group, 85.7% participants said that professional cleaning of teeth causes loosening of teeth and showed significant difference ($p= 0.03^*$).Majority of the participants 85.7%in 18 – 25 years age group, believed that females not going to male dentist for treatment and showed significant difference ($p=0.03^*$).

Most of them 92.9% participants in18 – 25 years age group, thought that neonatal teeth in infants were a danger to grand parents and showed significant difference ($p= 0.00^*$). Majority of the participants 71.4%in18 – 25 years age group agreed thatneem sticks or salt strengthen teeth.and showed significant difference ($p=0.01^*$).

When the questioned asked about the alum or soaked lime provides relief from mouth ulcers, 45.7% participants agreed

in 46 – 72 years age group. No significant difference was found($p= 0.21$). Surprisingly i.e. 32.6% of participants in 46 – 72 years age group, reported that oral diseases do not lead to other health problems.

Discussion:

The present study provides information on the prevalence of such myths and taboos related to oral health among the rural population of Rajkot district, Gujarat. The results of this study show that there has been increase in knowledge about a range of myths related to dentistry amongst the rural population of Rajkot district.

In the present study, 78.6%Participants aged 18–25 years, said that clove relieves toothache but there is no significant difference with other age group, which is in accordance with a study conducted by Bommireddy, et al. (2023) where there was significant difference between male and female group.

Majority of the participants in 46 – 27 years age group i.e. 60.9% said that worms inside decayed tooth and there is no significant difference. This finding was in accordance with a study conducted by Bommireddy, et al. (2023), where there was significant difference between male and female group.

In this study, 64.3% participants in 18 – 25 years age group believed that the removal of upper tooth leads to loss of vision. No significant difference was found. Similar studies conducted by Vignesh, et al.¹² (2012) and Bommireddy, et al. (2023), showed also there were no significant difference between male and female groupand Kiran, et al. (2016), showed was significant difference regarding extraction of teeth affects eyesight.

Most of the respondents 64.3% Participants aged 18 – 25 years age group believed that the tobacco relieves pain due to decayed teeth. No significant difference was found. This finding was in accordance with a study conducted by Bommireddy, et al. (2023), where there was no significant difference between male and female group and Kiran, et al. (2016), showed significant difference using tobacco or tobacco products as a remedy for tooth pain is effective.

In 18 – 25 years age group, 85.7% participants said that professional cleaning of teeth causes loosening of teeth and showed significant difference. Similar studies conducted by Vignesh, et al.¹² (2012) found significant difference and Bommireddy, et al. (2023), where there was no significant difference between male and female group.

Majority of the participants 85.7% in 18 – 25 years age group,believed that females not going to male dentist for treatment and showed significant difference.

Most of them 92.9% participants in 18 – 25 years age group, thought that neonatal teeth in infants were a danger to grandparents and showed significant difference. Previous studies conducted by Bommireddy, et al. (2023), where there was no significant difference between male and female group.

In this study, Majority of 71.4% participants in 18 – 25 years age group agreed that neem sticks or salt strengthen teeth and showed significant difference. Similar studies conducted by Bommireddy, et al. (2023), where there was no significant difference between male and female group and Kiran, et al. (2016), showed was significant difference between male and female group.

Most of the participants 45.7% in 46 – 72 years age group responded that the alum or soaked lime provides relief from mouth ulcers. No significant difference was found. Similar studies conducted by Bommireddy, et al. (2023), showed also there were no significant difference between male and female group.

More than 32.6% participants in 46 – 72 years age group, reported that oral diseases do not lead to other health problems. No significant difference was found.

Conclusion:

Dental myths and misconceptions are pervasive in India, especially among rural and uneducated populations, impeding effective dental care. Addressing these myths necessitates targeted education programs, government action, and improved dentist-patient communication. However, this study's reliance on a convenience sample limits the generalizability of its findings. Nationwide research is essential to better understand and tackle these issues, promoting accurate knowledge and equitable access to dental services. Future initiatives must focus on debunking myths and enhancing oral health awareness to ensure comprehensive dental care for all.

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