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Assessment of Oral Health Beliefs & Oral Hygiene Practices Among Tribal Gypsies in Tamil Nadu

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Abstract **Introduction:** Oral health beliefs and practices have changed over the years for humans. Despite adequate advancements in global oral health, problems persist in many communities worldwide, particularly among the underprivileged. The tribal gypsies are one among the underprivileged group without any knowledge of oral health & hygiene. The present study explores oral health beliefs and behavior among the tribal gypsies of Tamil Nadu. **Aim & Objectives:** The objective of the present study was to assess the oral health beliefs and behavior among the tribal gypsies of Tamil Nadu. **Materials and Methods:** The list of tribal gypsy colonies was obtained from the " Department of tribal welfare," and tribal gypsy colonies of certain areas in Tamil Nadu were identified for the study. A total of 458 subjects were selected. Informed consent was obtained from each participant, and ethical approval was obtained from the Research and Ethical Committee / IRB. The survey instrument, a questionnaire, was designed and reviewed many times to produce a questionnaire that would be friendly and easy to follow. **Results:** The perceived severity and perceived benefits are high, and the perceived barriers and perceived importance are low, which increases the cues for action and increased participation. **Conclusion:** The study results suggest that the tribal gypsies might have favorable compliance for oral health promotional programs. Further research is needed to investigate the oral health of the various ethnic tribes of Tamil Nadu.

Key Words Beliefs, Tribal gypsies, Oral health, Oral hygiene, Practices

1. Introduction

Members of a society that lack a permanent residence and travel from place to place in search of work are referred to as nomads (derived from "Greek"). Romani, also known as Gypsies or Roma in some countries, are another name for them [1]. They are Indo-Aryan and typically come from Rajasthan, Haryana, and Punjab on the Indian subcontinent. Genetic research has shown that the Romani are descended from a single tribe that migrated from northwestern India around 1,500 years ago. About 30-40 million nomads were thought to be living in the world in 1995. Anthropologists have recognized the existence of 5 nomadic communities in India, of which 1 million people live there. The predominant ethnic group found in most of Tamilnadu is "Toda" [2]–[4].

There are numerous research on cultural beliefs, myths, values, and behaviors connected to oral health among various cultural groups; however, there are none on the beliefs of ethnic minorities who are unaware of oral health issues [5]–[7]. According to research on the American population, racial and ethnic minorities had the worst oral health conditions. They are not in bad health because they belong to a nomadic tribe; rather, it is due to cultural practices and beliefs that are common to these cultures and impact oral health [8], [9].

A population's race or ethnicity is viewed as a predictor of oral health because the underlying cultural beliefs, attitudes, and practices impact health-seeking behavior and ultimately result in poor oral health [10]. In addition to the ideas they hold, their oral health is significantly impacted by their need for oral hygiene knowledge and awareness. In South Tamilnadu, a study of the Jackal people revealed poor oral health conditions, including a 96% and 45% prevalence of dental caries and periodontitis, respectively. The study also revealed that these conditions were caused by the groups' lack of knowledge and awareness of oral health issues [11], [12].

So, to determine how beliefs affect oral health in these groups, this research analyzes the traditional practices followed by nomadic or tribal gypsy communities, their perceived beliefs about oral health, and their oral health status.

2. Materials and Methods

The "Department of Tribal Welfare" provided a list of tribal gypsy colonies, and for the study, tribal gypsy colonies in particular regions of Tamil Nadu were chosen. 458 subjects in total were chosen. Each participant provided their informed agreement, and the IRB's Research and Ethical Committee approved the study. Excluded from the study were those who refused to participate or give their consent, needed help comprehending the local language, or were unable to understand the questions. The survey tool, a questionnaire, was created and evaluated numerous times to build a form that would be user-friendly and simple to understand. A sample of 20 individuals served as the pre-test population for a closed-ended questionnaire that contained items about oral health behaviors and beliefs. When the questionnaire's internal consistency was evaluated, a Cronbach's alpha value of 0.86 was discovered. The final data analysis did not include these samples.

The questionnaire consisted of a series of 10 questions and socio-demographic information; questions 1-7 were based on the respondents' perceptions and attitudes regarding oral health and their treatment-seeking habits. A subset of 7 questions about generally held views about oral health were included in the eighth question. The materials used to clean teeth and their perceived efficacy were two topics covered in the ninth and tenth questions about oral health practices. Due to the interviewees' inability to read or write, the information was gathered through face-to-face interviews. The information regarding their oral health status was gathered using the WHO proforma 2013. A single trained examiner performed an oral health examination (ADA Type III examination), and training, calibration, and intra-examiner repeatability were done.

Statistical Analysis

The IBM SPSS (software statistical package for social sciences) version 21 was used for the statistical analysis. There were percentages and frequencies included in the descriptive statistics used. Significant differences were determined using the Chi-Square test with a P value 0.05.

3. Results

The study included 458 participants aged 18 to 60-year-old, and majority of them belonged to 18-30 year-old Table 1. There were a more number of female (65.72%) participants than male (34.27%) participants.

From the Table 2 and Figures 1-4 we were able to interpret that the awareness of retaining natural teeth throughout life has not yet gained importance in this gypsy community people.

Only few people use toothpowder and toothpaste to clean their teeth and nearly majority of the population (60.7%) don't use any substance to clean. Only very few people (2.2%) use toothbrush as a cleaning aid majority of the people use twigs and fingers for cleansing purpose.

Demographic variable	Frequency	Percentage
Age group		
18-30	198	43.23%
31-45	186	40.61%
46-60	74	16.15%
Total	458	100%
Gender		
Male	157	34.27%
Female	301	65.72%
Total	458	100%

Table 1: Demographic Distribution

	Beleifs and attitudes of oral hygiene practices and oral health amon		
Variables n(%)	Belief about dental can get serious if neglected	Is it important to retain natural teeth throughout life?	Af
Yes	321(70)	146(31.9)	
No	137(30)	312(61.1)	

Table 2: Showing beliefs and attitudes of oral hygiene practices and oral health among tribes of South India

People who use toothbrush in our study changes their brush only if the bristles got frayed up and periodic change of toothbrush was not noticed in this population.

67.4% of the population brush once a day whereas still 30.1% of people don't even brush their teeth once.

The perceived severity , perceived benefits are high and the perceived barriers, perceived importance are low , which increases the cues for action and increased participation .

4. Discussion

Culture determines how people identify ailments and get care, as well as the laws governing life from conception to death. These myths can either facilitate access to healthcare services or act as obstacles on their [13]. Evidence from a number of research suggests an association between ethnicity and oral health practices and status, which are influenced by

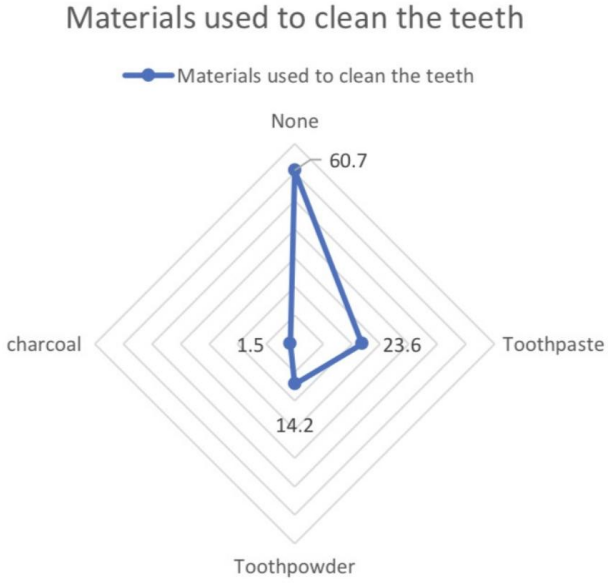

Figure 1: Material used to clean the tooth

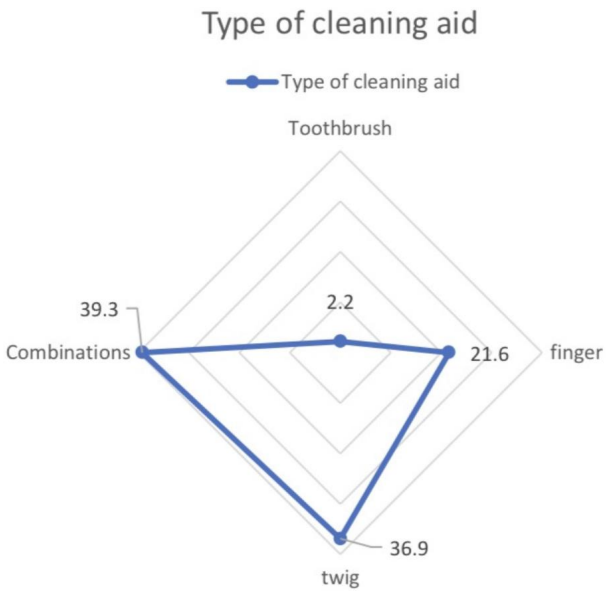

Figure 2: Type of cleaning aid used

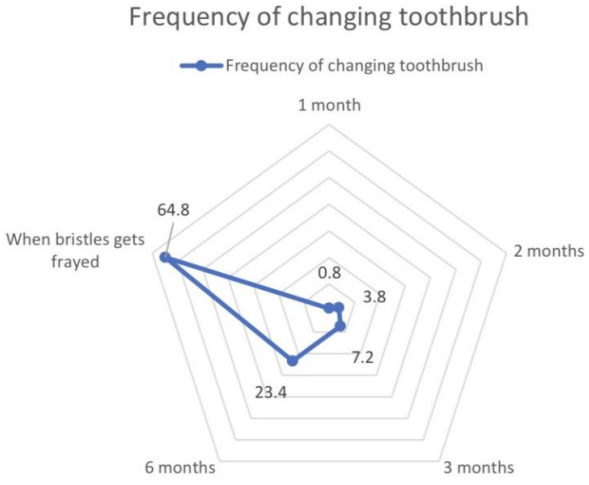

Figure 3: Frequency of changing toothbrush

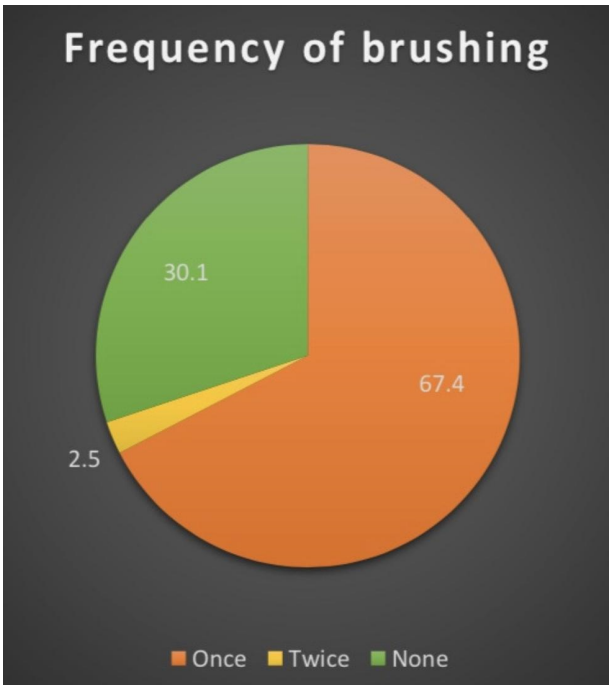

Figure 4: Frequency of brushing

cultural beliefs. Investigational findings reveal the epidemiological underpinnings of the relationship between ethnic minorities [13], [14]. The Health Locus of Control (HLOC) paradigm, developed by Rotter in 1954, assesses personal beliefs and ideals in light of past encounters with health-related issues. It has a major impact on forming health ideas and behaviors by linking an individual's social standing and their health practices [15].

The World Health Organization has set improvements to health and a healthy lifestyle as one of its top priorities [16]. There are several ethnic minorities and cultural groupings in the world, some of which are natives of the same nation, while others are immigrants. Like most plural societies, India has a sizable, diverse population of many different ethnic groups [17]. This particular ethnic group was chosen for the study since it was discovered that cultural beliefs influenced how they behaved with regard to oral health. In the study, there were more female participants than male ones [17], [18]. It was clear that nomads, regardless of the ailment, see dignity as a criterion when seeking dental healthcare. This resulted from the Western ideology of "Stoicism" being practiced by this population since ancient times when they have endured suffering because it is seen as a sign of weakness [19]–[21].

Only a small minority of people were willing to seek or undertake treatment after being diagnosed with any ailment, even though the majority of people were afraid of being diagnosed with life-threatening conditions [19], [22]. This was related to "fatalism," which leads people to believe that nothing can change the load because everything happens for a purpose. It was also due to the reluctance to talk about or contemplate feared diseases like mouth cancer, which may be related to ignorance of the available treatment options [19], [22], [23].

Nearly one-fourth of the population treated their dental health issues by themselves and claimed that doing so was more effective than visiting a dentist. This may have occurred due to "Self-reliance," in which people believe they can care for themselves without help even when ill. Most nomadic respondents cleaned with their fingers and twigs, toothpaste, or toothpowder, while a few even used charcoal. It is clear from this that while toothbrush use among the gypsy community has not yet improved, awareness of brushing teeth has [24].

Despite these health outcomes, the survey unequivocally demonstrates that nomads (30% of the participants in this study) continue to be irresponsible when obtaining medical care. It is clear that barriers to healthcare, such as those about

administration, geography, economy, and culture, as well as the gap between the indigenous population and medical professionals, must be eliminated [25]. Primary care is the first point of contact for all healthcare services, including medical personnel and patients. Coordinated primary care delivery requires a whole suite of health services to be easily available to the public. Supporting such effective primary care is feasible by enabling referrals from primary care to additional care and services. For this reason, this indigenous gypsy group needs access to primary care.

It is important to note the study's limitations; the current research does not address all oral health beliefs, so further investigation is needed to learn more about the most common myths among nomads. More extensive research on a wide population is required to overcome the limitations of existing research.

5. Conclusion

False attitudes about oral health are frequently held by nomads, which makes it difficult for them to access dental care. Lack of knowledge about reality and the conventional philosophies they adhere to are to blame for such views. It is advised to increase access to oral healthcare, raise awareness of oral health among nomads, and repeat suggestions to dispel myths.

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Conflict of Interest

The authors declare no conflict of interests. All authors read and approved final version of the paper.

Authors Contribution

All authors contributed equally in this paper.

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