Prevalence of Perceived Myths Regarding Oral Health and Oral Cancer-causing Habits in Kashmir, India

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Abstract

Background: Through years, dental professionals have faced many myths inculcated in the minds of patients which pass from one generation to another. In today's evolving environment of evidence-based dentistry, these anecdotal observations do not withstand scrutiny.

Aim: The aim of this study was to assess the prevalence of myths associated with dentistry and oral cancer-related habits among outpatients visiting different hospitals in Kashmir, India.

Materials and Methods: A cross-sectional study was carried out among the outpatients visiting 3 district hospitals of Kashmir, India. All the patients reporting to these hospitals; between the age group of 25 and 50 years, mentally sound, and those who were willing to participate were included in this questionnaire-based study. The study was carried out for a period of 3 weeks (1 week in each hospital) with 20-25 subjects per day, making a final sample of 520 subjects. A self-administered, pre-tested questionnaire was hand-delivered to the subjects and the duly filled questionnaire was collected on the same day from the respondents. The questionnaire consisted of 16 questions related to myths in dentistry in addition to the demographic data such as age, gender, and qualification of the respondents.

Results: Most of the respondents were found to be the strong believers of various myths irrespective of their qualification level.

Conclusion: The results of this study show that generally people believe in various myths in dentistry which results in poor oral health. This might be due to lack of knowledge and awareness about dental health and its importance.

Key words: Myths, Oral health, Teeth

INTRODUCTION

As is known to everyone, a myth is commonly held but a false belief, a misconception, or a fictitious or imaginary understanding of a thing or a person and has no relevance with reality. Innumerable myths are associated with many things and persons all around in the world. Myths breed on human's ignorance, superstitiousness, and imagination

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about what he/she does not know. Reasons for harboring a myth vary from an individual's ignorance to a society's cultural, quasi-religious, educational, and overall setup. Myths being generally deep-rooted invariably form part and parcel of a society life for longer periods and often are very difficult to be separated apart; thus these inflict predominant effect on their attitude, behavior, and practice followed in a populace. This is a phenomenon of greater menace than that of sheer ignorance and thus calls for sustained, strenuous efforts needed to be undertaken for total awareness so as to inch ahead in the jungle of myths to uproot them out or otherwise, awareness about the facts with their positive result will continue to be the victim of myths thus harming the myth victims in multi-dimensional spectrum, thereby deteriorating our societies at large.

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This is true in every sphere of our life, but it is more prominent having far greater intrinsic importance in case of our health-care domain and, as such it is indispensably required to fully ward off the myths for the obvious reason of our health being the most important and prominent of our all priorities in the life of every individual.

The underlying cultural beliefs and practices influence the conditions of the teeth and mouth, through diet, care-seeking behavior, or use of home remedies. Myths related to oral diseases and oral health-related practices are very common in Indian population. It is difficult to break this chain as it is deep-seated in the society and understanding them becomes essential to provide a good care. Hence, importance should be given for public health awareness regarding myths about oral health at the individual as well as community level.

As systems are becoming more complex and people's expectations of health care are rising dramatically, understanding the myths and misconceptions about oral diseases is important in providing excellent care and health education to both patients and healthy individuals. The high prevalence of these myths will prevent such population from attaining proper dental care even if it could be made available to them. Hence, a questionnaire-based study was carried out among the outpatients in various hospitals of Kashmir, India.

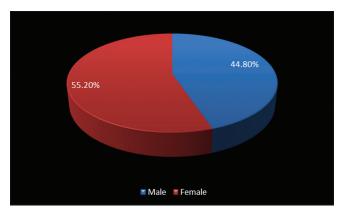
MATERIALS AND METHODS

A cross-sectional study was carried out among the outpatients visiting 3 district hospitals of Kashmir, namely, Government Gousia Hospital (Srinagar), District Hospital Pulwama, and Sub-District Hospital, Ganderbal. Ethical clearance was taken from the Directorate of Health Services, Kashmir. All the patients reporting to these hospitals between the age group of 25 and 50 years, mentally sound, and those who were willing to participate were included in this questionnaire-based study. The study was carried out for a period of 3 weeks (1 week in each hospital) with 20-25 subjects per day, making a final sample of 520 subjects. A self-administered, pre-tested questionnaire was hand-delivered to the subjects and the duly filled questionnaire was collected on the same day from the respondents. The questionnaire consisted of 16 close-ended questions related to myths in dentistry in addition to the demographic data such as age, gender, and qualification of the respondents. The identity of the persons participating in the study was kept anonymous. The questionnaire was designed based on the most commonly prevalent myths among the general

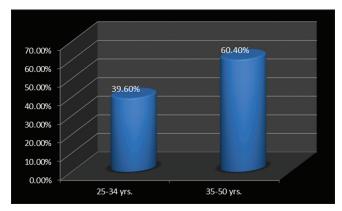
population. The Cronbach's alpha was used to assess the internal reliability of questionnaire which was found to be satisfactory. The questions were in English as well as in the local language (Kashmiri) for easy understanding. The collected data were subjected to statistical analysis.

RESULTS

A study was conducted for 3 weeks among 520 subjects who reported to the OPD of 3 district hospitals of Kashmir, namely, Government Gousia Hospital (Srinagar), District Hospital Pulwama, and Sub-District Hospital, Ganderbal, who voluntarily accepted to participate. Out of the total 520 subjects; 233 (44.8%) were male participants and 287 (55.2%) were female participants (Graph 1). The age range of subjects was between 25 and 50 years; with 206 participants (39.6%) of age 25-34 years and 314 participants (60.4%) of age 35-50 years (Graph 2). The educational qualification of the subjects ranged from illiterate to postgraduate (Graph 3). The frequency of subjects as per their responses for all the questions is shown in Table 1. For all the questions, the difference between the subjects saying "Yes" to those saying "No" was found to be statistically significant (Table 1).



Graph 1: Frequency of male and female subjects

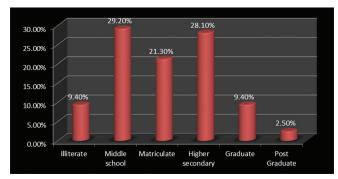


Graph 2: Frequency of subjects according to age group

Table 1: Frequency of subjects according to their responses to questionnaire

| Questions | Yes (%) | No (%) | df | P value |
|---|------------|------------|----|---------|
| Teeth get loosened if they are cleaned professionally by dentists | 378 (72.7) | 142 (27.3) | 1 | 0.000* |
| Extraction of teeth under local anesthesia may cause impairment of patient's vision | 383 (73.7) | 137 (26.3) | 1 | 0.000* |
| No treatment is required for milk teeth as they are going to fall anyway | 334 (64.2) | 186 (35.8) | 1 | 0.000* |
| Tooth decay cannot be treated as it is a hereditary disease | 133 (25.6) | 387 (74.4) | 1 | 0.000* |
| Oral health is related to general health | 215 (41.3) | 305 (58.7) | 1 | 0.000* |
| Teeth can be cleaned at home using tree sticks (neem, etc.), coal, and brick powder | 224 (43.1) | 296 (56.9) | 1 | 0.002* |
| rather than toothpaste | | | | |
| We should stop brushing teeth if our gums are bleeding | 320 (61.5) | 200 (38.5) | 1 | 0.000* |
| We should visit dentist only during pain and not for routine checkups | 313 (60.2) | 207 (39.8) | 1 | 0.000* |
| Placing clove in the decayed tooth is more than enough to relieve tooth pain | 391 (75.2) | 129 (24.8) | 1 | 0.000* |
| Toothache is caused due to punishment from God for one's sins | 194 (37.3) | 326 (62.7) | 1 | 0.000* |
| Teething causes fever, loose motions, etc. | 331 (63.7) | 189 (36.3) | 1 | 0.000* |
| It is better to go for extraction of a tooth rather than other treatments such as | 310 (59.6) | 210 (40.4) | 1 | 0.000* |
| restoration and RCT | | | | |
| Good oral health can be achieved by chewing tobacco | 296 (56.9) | 224 (43.1) | 1 | 0.000* |
| I will not be a victim of oral cancer as my friend, who smokes more than me, is healthy | 331 (63.7) | 189 (36.3) | 1 | 0.000* |
| Smoking can be replaced safely by smokeless tobacco | 329 (63.3) | 191 (36.7) | 1 | 0.000* |
| A child does not need cleaning of milk teeth | 407 (78.3) | 113 (21.7) | 1 | 0.000* |

^{*}Significance at P<0.05. RCT: Root canal therapy



Graph 3: Distribution of subjects according to qualification

DISCUSSION

Myth is a belief among people which has no relevance with reality. Myths exist due to a variety of reasons such as lack of knowledge and awareness, cultural beliefs, and social fallacy. They are usually passed on from one generation to the next. It is difficult to break this chain as it is deep rooted in the society. Change is to be made in the attitude, thinking, and behavior of the people to eliminate the myths which is possible only after understanding these myths and misconceptions so that good care as well as health education is provided to the people at both; the individual as well as at community level.

In today's evolving environment of evidence-based medicine and dentistry, these unreliable observations do not withstand scrutiny. Especially, a developing country like India faces many challenges in rendering oral health care needs. Myths are part and parcel of everyone's lives. However, one has to be aware of some of the myths that are floating around on issues related to health that includes dental health because it could result in dangerous

consequences if followed without understanding the principles behind it. There are many dental myths, some are child related, some of them are adult related, and the rest are superstitious.³

India has a low budget to meet the general populations' oral health treatment needs, a high disease burden and a low literacy rate. All these factors predispose the general population to poor oral healthcare, false treatment need assumptions, and false beliefs.⁴

In the present study, 72.7% of the respondents believed that teeth get loosened if they are cleaned professionally by dentists. This response may be due to the fact that the calculus would have been filling the gaps, masking the mobility, preventing the exposure of dentin for its sensitivity; and only after removal of calculus by ultrasonic scaling, the patients have an erroneous feeling of loose teeth. This response was in accordance with previous studies wherein many respondents believed that professional scaling leads to sensitivity, mobility, and also creates gap in-between them.^{5,6} Nearly 73.7% of the subjects thought that extraction of teeth under local anesthesia may cause impairment of patient's vision. This kind of misconception is inherited due to false exaggerated information promulgated by those who had previous personal negative dental experiences.⁷ This might be attributed to lack of awareness, low educational levels, anxiety, apprehension, and myths about dental treatment entrenched in their minds.8 The fact being that there is no relation of vision with tooth extraction. The result is a contrast to the study done by Saravanan and Thirineervannan where only 20% believed in the myth.9 Around 59% of the respondents did not agree that oral health is related to general health. This finding was in

accordance with the previous study conducted in Bareilly, India.4 It is contrary to what was being proposed by the World Health Organization who have mentioned that the masses should be made aware of the relationship between oral health and general health. 10 In the present study, around 57% of the respondents preferred using tree sticks, coal, and brick powder whereas 43.1% were using toothpaste for cleaning teeth. The disadvantages include gingival trauma and occlusal wear, but extracts of many sticks have yielded potent antimicrobial and antiplaque substances. Charcoal powder is coarse and it could abrade the enamel and damage the periodontal ligament. 4,11 Majority (63.7%) of the subjects believed that they would not fall victim to oral cancer as people who smoke more than them were still healthy. This is because that the general population still follows the belief that if nothing happens to their close ones, it does not happen to them either. This shows their ignorance regarding the susceptibility of different individuals and unaware that most relatives of patients with oral cancers are at the same risk for cancer as the general population.⁵ A high percentage (64.2%) of respondents believed that milk teeth need no treatment/care as they are going to fall anyway. The most widely believed myths about oral health in India are milk teeth need not be cared for because they last only for a few years and these teeth will anyway be replaced by permanent teeth.² This is not entirely true as early loss of milk teeth will interfere with chewing and affect the child's nutrition, leads to drifting of the adjacent teeth and closure of some of the space that is required for the succeeding permanent teeth to erupt into. Such a loss of space will cause the permanent teeth to erupt in irregular position and result in crowding. Therefore, milk teeth need to be cared for as much as permanent teeth. Hence, it is sensible to clean the infant's teeth soon after they appear in the mouth. In fact, the child's gum pads should be cleaned everyday by gentle massage even before the teeth erupt.¹²

Majority (63.7%) of the respondents believed that teething causes fever and loose motions. This finding was similar to the results of previous studies wherein majority of the parents had false beliefs or myths regarding the signs and symptoms of teething such as fever and diarrhea. 13,14 The fact is that poor personal and environmental hygiene practices can contribute to the incidence of diarrhea in children, and it can be life-threatening if not promptly attended to. Around 64% of the subjects believed that smoking can be replaced safely by smokeless tobacco. Quite a number of respondents believed that smokeless tobacco can be less harmful and a better alternative to smoking. The people are unaware of the increased ill effects of smokeless tobacco; overall nicotine exposure is higher than that achieved by cigarette smoking 15,16 and it can be assumed that smokeless tobacco is less harmful may be

because of the traditional use of beetle nut in many Indian communities. Many respondents thought that good oral health can be achieved by chewing tobacco. This belief is still prevalent in villages and among deprived people who expect a cleaner oral cavity after chewing tobacco being unaware of its harmful ill effects leading to abrasion.¹⁷

CONCLUSION

It was concluded that majority of the respondents believe in various myths associated to dentistry and oral cancerrelated habits. Hence, it becomes the role of public health dentist as well as all the dental surgeons (specialized/ general) to counsel the people about the consequences of adhering to such myths.

RECOMMENDATIONS

- Comprehensive public health awareness, particularly about the myths related to oral diseases, their preventions, and treatment is imperatively to be assured at individual as well as community level.
- For effective and long-lasting prevention of the disease, coordinated efforts among the dentists, public health specialists, social workers, and NGOs have to be indispensably taken such that proper education forms an integral part of the related development programs.
- 3. There is no substitute to the best evidence-based dentistry needed to dispel the myths which advances the use of research evidence effectively in dental practice and improves the dental health professionals' knowledge regarding patient counseling and aids in clearing misconceptions toward various oral health issues.
- 4. A dental professional needs to educate the patient so inclusively and in proximity with his (patient's) thinking such that no reservation is left with the latter to open his/her mind with all its hazes to the dentist and thus misconceptions are easily and fully rectified at the chairside.
- 5. Approaching the public with simple worded but precise pamphlets is a very effective tool for health education to the masses regarding the myths and dispelling them with facts.

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