

ASSESSMENT OF CARIES STATUS IN SEXUAL DIMORPHISM AMONG THE SOUTH INDIAN POPULATION

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ABSTRACT

AIM: Assessment of caries status in sexual dimorphism among the South Indian population.

BACKGROUND:

Health auxiliary personnel have an important role in oral health when they graduate and start working in the healthcare system. This study aims to find out the caries status in sexual dimorphism among the South Indian population. The early manifestation of the caries process is a small patch of demineralized enamel at the tooth surface, often hidden from sight in the fissures of teeth or in between the teeth. The destruction spreads into the softer, sensitive part of the tooth beneath the dentine. The weakened enamel then collapses to form a cavity and the tooth is progressively destroyed. Caries can also attack the roots of teeth when they become exposed by gum recession. This is more common in older adults.

MATERIALS AND METHODS:

The survey was carried out by the South Indian population. The survey was conducted among 100 people from the south India. Among them 40 of them were male and 58 of them were female and 2 of them were transgender. The participants were screened for caries. The questionnaire was circulated and data from the questionnaire were extracted and analysed through survey planet.

CONCLUSION:

We found that 34% people have dental caries among that majority of them were females. 71% of people found caries develop through the habit of eating chocolates. From here we conclude that to prevent caries we can develop the habit of brushing twice a day and also after a meal. We can also reduce the habit of eating chocolates. Moreover, a dentist consultation is also required for a healthy teeth.

KEYWORDS: Dental Caries, Sexual dimorphism, South India population, Pits and furrow.

Introduction:-

Dental caries is defined as a multifactorial infectious disease caused by plaque bacteria. When food enters the mouth, the bacteria metabolise fermentable carbohydrates, and starts producing acids which diffuse in to hard dental tissue and starts to demineralise the enamel.[1] The other factors like social, individual environmental and cultural factors are also responsible for causing dental caries.[2] Risk for caries includes physical, biological, environmental, behavioural, and lifestyle-related factors such as high numbers of cariogenic bacteria, inadequate salivary flow, insufficient fluoride exposure, poor oral hygiene, inappropriate methods of feeding infants, and poverty[3].

This is among the most common dental diseases with high prevalence in humans. It is crucial to control the disease process by assessing and rendering the treatment required along with spreading awareness regarding prevention. Several prevalence studies have been conducted and reported on different occasions on the dental caries and the treatment needs in developing countries such as India[4]. The significant impact of caries on the South Indian population makes the disease an important topic of understanding. The development of caries is multifactorial, depending on many interacting variables to promote its development. In particular, the presence of bacteria, a substrate for the bacteria (food/sugars), the host's oral environment, as well as the passing of time are the main contributing factors in the formation of caries[5].

The common perception is that dental caries rates are decreasing in developed countries but the trend in developing countries is not clear. Caries prevalence varies greatly between and within countries, as well as within different strata of the population. Statistically speaking, dental caries does not rank among the more serious diseases in Africa. On an individual level, however, dental caries causes great suffering, pains and burden. It is crucial to control the disease process by assessing rendering the treatment required along with spreading awareness regarding prevention. Several prevalence studies have been conducted and reported on different occasions on the dental caries and treatment needs in developing countries such as India. The purpose of this study was to assess the caries status in sexual dimorphism among the South Indian population [22].

MATERIALS AND METHODS:

This study was done as a questionnaire which is answered by the population of south India. Questions were prepared which included the daily dental practices of them like daily brushing practice, about their caries status. The questionnaire were given individually to each of them to avoid discussion among them and also to avoid false results, thereby no bias is evidenced in this study. Each of them were given 1 hour to complete the questionnaire.

RESULTS AND DISCUSSION:

FIG 1:

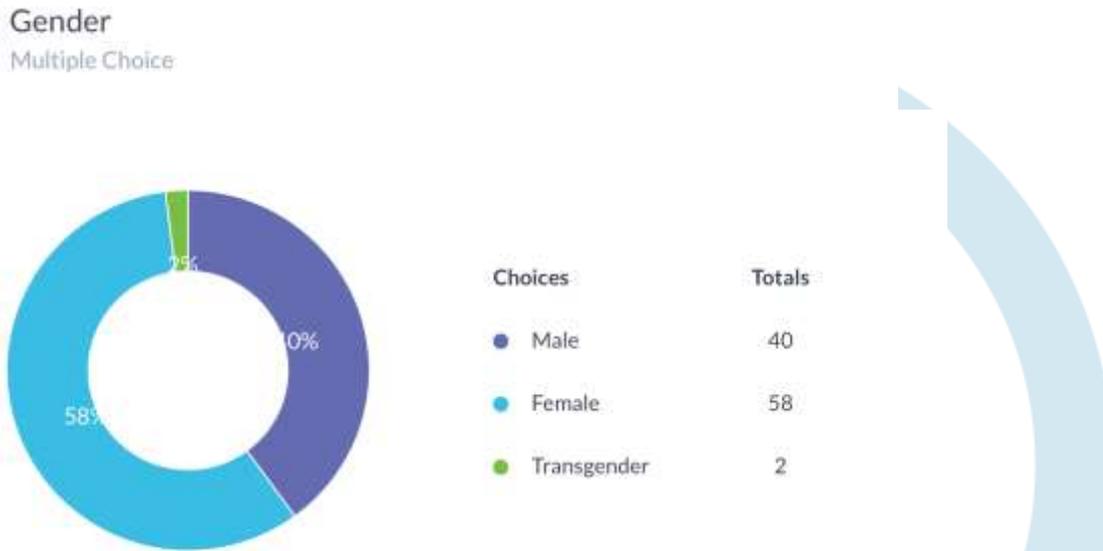


FIG 2:

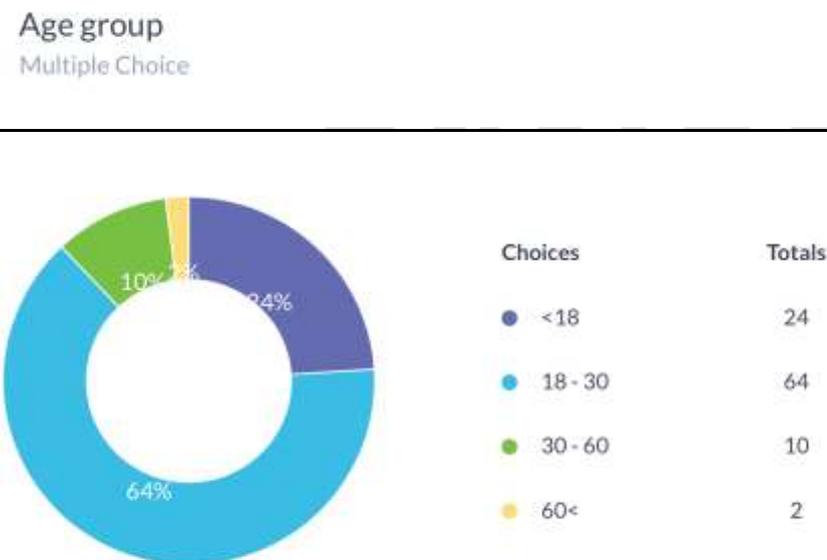


FIG 3:

Do you brush your teeth everyday?

Multiple Choice

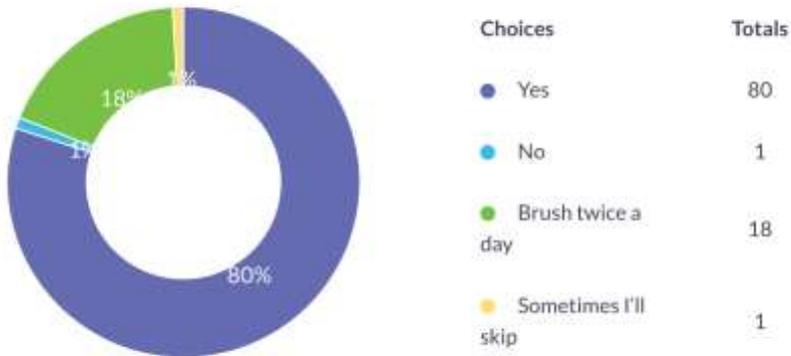


FIG 4:

Do you have teeth decay(dental caries)

Multiple Choice

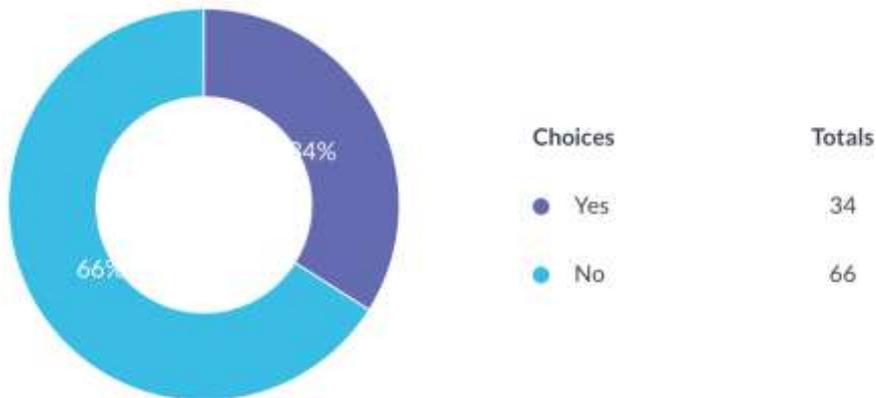


FIG 5:

Have you undergone scaling procedures?

Multiple Choice

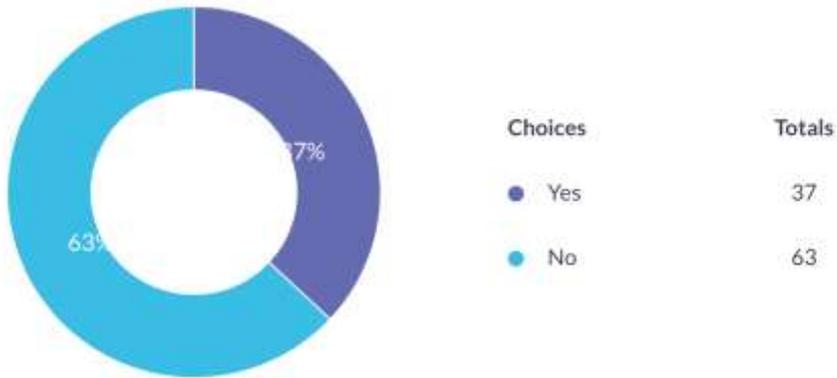


FIG 6:

How often do you visit a dentist

Multiple Choice



DISCUSSION:

The result shows that 30 to 40% of female were predominantly affected by caries. Most of them fall under the age group of 18 to 30. The age group of 18 to 30 have a habit of consuming a lot of junk foods, which is one of the main reasons behind the development of caries. Dental caries is well established that demineralization and remineralization occur in the mouth, that the process can lead to the cavitation together with all of the possible clinical complications that may follow. Laboratory models have elucidated several aspects of what goes on in the mouth.[6] [7] [8] [9]. Many in situ studies have been published that confirm aspects of the microbiology, biochemistry and physical chemistry involved[10] [11].

However, in the dental profession we still talk of diagnosing dental caries as being the detection of demineralized regions and especially cavities. The practising dentist “fixes caries” by drilling and filling rather than intervening therapeutically before cavitation occurs, and while the process of mineral loss is still reversible, or at least it can be arrested[12].

Oral health is an important component of general health in the normal development of an individual and has a potential to contribute to the well-being of both the child and the family[13]. One of the most important factors to be considered is, planning for the improvement in dental care facilities in south India and it makes the baseline data for dental diseases and the treatment needs of the population[14]. Even though it is not life-threatening, it may contribute to suboptimal health and failure to thrive[15].

Keeping this in mind, the study was planned to evaluate the prevalence of caries among the South Indian population[15]. Patterns of behavior learnt in early childhood are deeply ingrained and resistant to change and mother has an important role in this respect[17]. Attempts at changing the behavior at later stage of development may be difficult because of earlier indoctrination at home[18]. The control of dental caries in young children is a continuing problem and it is easier to manage if groups of population with greatest needs are identified[19]. Several studies have claimed that all children are not at equal risk at developing dental caries[20][21]. 71% of people encounter caries develop through the habit of eating chocolates. From here we conclude that to prevent caries we can brush twice a day and also after a meal. We can also reduce the habit of eating chocolates. Moreover, a dentist consultation is also required for a healthy teeth.

CONCLUSION:

This study observed a marked proportion of female population are affected by the dental caries. Intense oral health programme regards the dental caries need to be initiated further. To prevent caries we can develop a habit of brushing twice a day and also after a meal. We can also reduce the habit of eating chocolates. Moreover, a dentist consultation is also required for a healthy teeth.

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