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HABIT OF DIGIT SUCKING AMONG CHILDREN AND THE DEMEANOUR OF PARENTS TOWARDS THE HABIT IN PUNE

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ABSTRACT:

Aims and objectives: The purpose of this study was to evaluate how parents felt about their kids' digit-sucking behaviour and to look into potential influencing variables.

Materials and methods:Across sectional study was conducted among 191 children who were having the habit of digit sucking. A questionnaire was generated to collect the data. SPSS version 21.0 computer program, and the chi square test was used to analyse the data.

Results: It shows that 22.8% parents did not try to stop the child's habit of digit sucking because of lack of knowledge, unawareness and unacceptable attitude.7.3% parents disagreed to visit a dentist to fix the digit sucking habit.

Conclusion: All parents agreed that the concentration on digit sucking had negative effects. The parents most frequently employed non-invasive techniques to prevent their child from sucking on their fingers.

KEYWORDS:
Digit sucking, Pacifier sucking

INTRODUCTION

Buttersworth (1961): defined habit as frequent or constant practice or acquired tendency which has been fixed by frequent repetitions[1].

Oral Habit is a part of normal development. Apart from humans digit sucking is also found in chimpanzees and primates[1,2]. Habit is an established behaviour brought on by repeated action[4,5]. There are different types of habits; nutritive (Breast feeding, bottle feeding) and non nutritive (digit sucking, pacifier sucking).One of the most prevalent oral habits among kids is digit sucking[6]. Despite the fact that many babies suck their fingers or pacifiers once in a while, if this behaviour continues for several weeks after birth, it might be regarded as a habit[7]. The frequency of the habit is influenced by a number of variables, including the children's age, sex, environment, location, socioeconomic level, and race[4,8]. Children under the age of two are more likely to practice "digit sucking"[9,10,11]. To varying degrees, either the thumb or one or more fingers may be sucked[12]. This number declines with maturity, and by the age of 4-5 years, it is frequently seen that the practice has spontaneously stopped[5],[13].The prevalence of non-sucking behaviours is often lower among children aged 3-6 years who have been breastfed for nine months or more[4,8]. From 29 weeks of intrauterine life of infants there is evidence of sucking habits[1,4]. According to developmental psychologists, newborn babies engage in finger sucking during their first month of life as a way to relax and combat anxiety[9,10]. In many societies, it has been estimated that the habit is prevalent to a range of 13% to 100%[15].

The aetiology of the digit sucking habit is complex. Some scenarios that have been proposed include hunger, fear, physical and mental stress, exhaustion, excitement, and inadequate fulfilment of the infant's sucking need[7,12,16,17]. According to certain studies[4,13,17], .Many kids continue the behaviour because of insecurity as most parents work and so don't spend as much time with their kids. Slowly the child starts feeling consoling and salutary[18]. Some theories put forth by different scientists to show the aetiology of digit sucking habit and it's contrasting explanations[1,19].Some people carry it through childhood to adulthood. Numerous elements, including as anxiety, stress, and changes in their lives, may contribute to a habit's long-term persistence [4,6,13]. Digit sucking may cause skeletal as well as dental abnormalities such as open bite, class 2 malocclusion, increased overjet, posterior crossbite, high palatal arch[20]. Malposition of teeth and also displaces alveolar bone, affects aesthetic of child, speech of child[14]. According to Proffit et al (2007) 6 hours force per day can move the teeth and the skin causes malocclusion[21]. When a child puts a digit in his/her mouth there may be ingestion of noxious substances and it also leads to disfigurement of digits[22,23].

According to the literature, different ethnic groups have diverse attitudes on oral habits since they have distinct cultures, beliefs, and levels of awareness as well as socioeconomic development and compassion[4]. The parents should take every preventative measure possible to avoid the child from picking up the habit[9]. In some cases private consultation can also be used, there is a crucial role of parents as well as the dentist for habit intervention of a child[21]. There is scarcity of knowledge regarding digit sucking among parents. Hence this survey was planned to evaluate the digit sucking habit among the children and the knowledge, attitude and practice of parents towards it.

MATERIALS AND METHODS:

The study population was parents and the children . The study setting is Pune city. Sampling method used is a convenience sampling method.

A questionnaire was generated to collect the data , 27 questions were included. This questionnaire includes general information like a child's details such as gender, age , number of siblings and also includes parent's details such as occupation and education. Knowledge based questions added to check parent's knowledge about ill effects of Digit sucking, at what age it is acceptable, treatment methods available etc. Attitude based questions were added to know their attitude towards habits such as their negligence , how prolonged breast feeding and digit sucking are interconnected, etc. Practice based questions such as methods they tried to intervene , methods which should never be used for children to stop the habit, and how digit sucking affects a child's appetite,etc.

Sample size taken as 20 for pilot study which is come around 191 using the formula $n=Z^2P(1-P)/d^2$

The questionnaire shows good validity and reliability.

Later treatment plans , preventive measures, ill effects , how staying connected with the child during the change plays an important role, etc had been explained to parents through Audio-visual aids.

RESULTS:

Table 1: Demographic distribution of participants

Demographics	Total	N
Gender	Male	85
	Female	108
Education	Less than graduate	62
	Graduate and more	131
Occupation	Employed	126
	Unemployed	67
Total		193

Table 2: Distribution of scores for knowledge, attitude and practices among participants

Parameter		Overall
Knowledge	Good (>10)	89
	Fair (6-10)	58
	Poor (≤5)	46
Attitude	Good (28-40)	94

	Fair (14-27)	61
	Poor (≤13)	38
Practices	Good (28-40)	79
	Fair (14-27)	65
	Poor (≤13)	49

Figure 1: Percentage distribution of study participants in all three domains

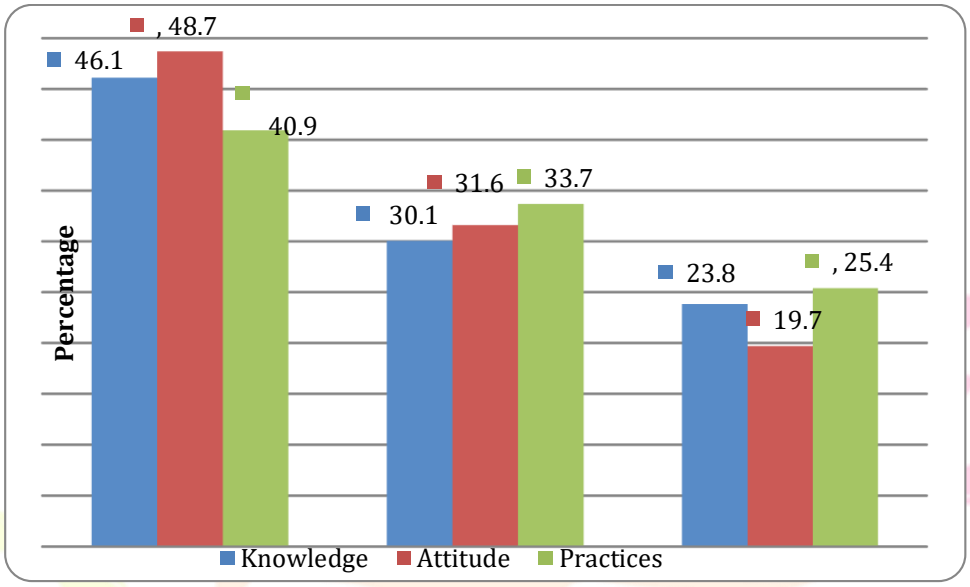

Table 3: Comparison of mean scores (SD) of knowledge, attitude and practice among different demographic variables by using unpaired 't' test

Demographics		Knowledge	Attitude	Practice
Gender	Male	8.06 (2.90)	21.45 (5.12)	11.57 (3.79)
	Female	11.11 (1.73)	25.20 (3.67)	15.02 (3.41)
	p-value	0.013*	0.038*	0.033*
Education	Less than graduate	8.19 (2.46)	20.98 (4.28)	11.42 (2.19)
	Graduate and more	10.92 (2.61)	26.50 (3.17)	15.35 (3.83)
	p-value	0.021*	0.01*	0.029*
Occupation	Employed	11.64 (3.20)	25.42 (5.08)	15.68 (2.61)
	Unemployed	7.98 (1.46)	21.71 (3.15)	11.13 (3.32)
	p-value	0.01*	0.03*	0.02*
Total		9.16 (4.09)	23.45 (5.12)	14.24 (3.18)

Table 4: Correlation analysis of knowledge, attitude and practice among study subjects by using Pearson correlation

	Knowledge		Attitude		Practice	
	r	p-value	r	p-value	R	p-value
Knowledge	-					
Attitude	1.357	0.036*	-			
Behaviour	0.962	0.044*	0.935	0.047*	-	

A total of 193 study participants responded, with a response rate of 90.3%, out of which 85 were males, while 108 were females. Similarly, 62 had less than graduation and 131 had educational qualification of graduation or more[Table 1] Knowledge, attitude and practice scores were categorized as 'good', 'fair' and 'poor' by dividing the score range by 3, and it was found that in all the three domains i.e Knowledge, attitude and practices maximum participants were under good category (46.1%, 48.7% and 40.9 %. Respectively) [Table 2/figure 1]. A statistical significant difference in mean scores was observed in all three domains when compared against the demographic variables ($p<0.05$). [Table 3] Correlation analysis revealed that there was statistically significant association between the three variables among study subjects ($p<0.05$) [Table 4]

DISCUSSION:

The purpose of this study was to evaluate how parents felt about their kids' digit-sucking behavior and to look into potential influencing variables. The study took into account the parent and child's age and sex.

In our study there are statistically significant differences between genders in terms of knowledge ($p = 0.013$*), attitude ($p = 0.038$*), and practice ($p = 0.033$*). Specifically, females tend to have higher mean scores for knowledge, attitude, and practice compared to males. This is suggestive of a gender-related variations in knowledge, attitudes, and practices regarding their child's digit sucking habits. This could be due to the reason that females provide more care to the child and the child is closer to them by nature[24].

Significant differences are observed in knowledge ($p = 0.021$*), attitude ($p = 0.01$*), and practice ($p = 0.029$*) among participants with different education levels. Those with a higher level of education (Graduate and more) tend to have higher mean scores for knowledge, attitude, and practice compared to those with lower education levels (Less than graduate). This indicates that education level plays a role in influencing knowledge, attitudes, and practices in guiding the child to stop digit sucking and maintain overall health, this is in accordance with similar studies done by Al-Jaber AS et.al[25] and S Kumar et. al.[26].

In our survey, around 47% of parents provided correct instructions and employed steps to counteract their child's tendency towards digit sucking. After the age of four, they never tolerated finger sucking. This is in agreement with other studies done in different settings by other authors[27]. While 90.2% of the parents made an attempt to stop their child from sucking their digit which is a better score than that of previous studies where 71% of the parents of 3-5 year age attempted to stop the behavior[28].

The development of posterior cross bite and class II malocclusion are two effects of finger sucking on occlusion. The severity of the habit is determined by its length, frequency, and intensity[29]. According to the majority of parents in our survey this habit can cause various ill-effects in their children. Thus, it has been proposed that the likelihood of self-correction will be higher if the kid stops sucking his or her fingers before the age of four.

Approximately 69% of the cohort in our study agreed that neglect was the primary cause for a child to start thumb sucking, this comes in agreement from the Freudian philosophy where Sigmund Freud the famous psychiatrist proposed that children are stuck to a stage in life if they are not met with their needs[30].

In our research, a clear association was observed between a child's age and the severity of malocclusion within a cohort of individuals who persisted in the habit of finger-sucking. Additionally, a significant correlation was identified between the mother's age and her perspective on this habit. Elderly parents expressed greater concern compared to their younger counterparts. This inclination may stem from the older parents' accumulated experience, heightened awareness, and increased maturity in managing such situations. Working parents, often preoccupied with their jobs outside the home, tend to have limited available time to spend with their children.

CONCLUSION:

All parents agreed that the concentration on digit sucking had negative effects. The parents most frequently employed non-invasive techniques to prevent their child from sucking on their fingers.

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