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KNOWLEDGE ATTITUDE AND PRACTICE OF MOTHERS TOWARD CHILDREN ORAL HEALTH

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Abstarct:

Background: Oral health is termed as a state of being free from any kind of pain, inflammation in mouth and face. Oral health is prominent important part of every individual personality. It is an integral part of overall health and plays a critical role in the child's life. It play important role in preventing different diseases because mouth works as window for remaining body. Parent is a main character to develop each aspect of their children life. Children oral health maintenance are enhanced by mother positive knowledge and attitude along with practice of oral health. Aim of the study: The aim of this study is to assess knowledge, attitude and practice of mothers toward children oral health. Methodology: A Cross sectional descriptive study was conducted among the community total (n= 124) in Lahore, Pakistan from September 2019 to December 2019. Result: Data were collected through questionnaire translated into Urdu from English. Convenient sampling technique was used. Study included 124 mothers of the community in which 25.0% (n=31) participants belong to 25 years age, 29.8% (n=37) belong to 30 years age, 33.9% (n=42) participants belong to 35 years age, and 11.3% (n=14) participants belong to 40 years age. The mean knowledge of study participants was 2.44, attitude 1.51 and mean practice of participants was 1.94. Conclusion: This study found comparatively average level of knowledge, attitude and practice of mothers to children oral health due to which there were presence of oral diseases in children. Keywords: Attitude, Knowledge, Oral Health, Practice.

INTRODUCTION

‘‘Heath is a state of complete physical mental and social wellbeing not merely the absence of disease or a state of being free from diseases’’ (Yazdi et *al*., 2018). Oral health is termed as a state of being free from any kind of pain, inflammation in mouth and face. Oral health is prominent important part of every individual personality. It is an integral part of overall health and plays a critical role in the child’s life. It play important role in preventing different diseases because mouth works as window for remaining body. Parent is a main character to develop each aspect of their children life. Children below age 5 spend most of time with mother and they depend on their parents when they begins school activities diet and oral health became a huge challenge for parents. Children oral health maintenance are enhanced by mother positive knowledge and attitude along with practice of oral health. It is clear that more mother attention to dentistry result better oral health of children (Abduljalil & Abuaffan, 2016).

Oral health maintenance related activities and habits should be developed in every individual from early age tooth brush should be started when primary teeth appear in mouth because unhygienic condition of mouth lead to several diseases like dental caries, gum diseases pain and also affect a child both biologically and psychologically. It is important to continue routine visit to dental clinic to make sure a sound oral health. Mother should lead from the front regarding safe brushing method almost after every meal (Anopa, et *al*., 2015).

There is a connection between oral health and general health of body. Oral health is necessary to general health of every child. A healthy mouth maintain nutrition of the physical body, also increases social interaction, encourages self-esteem and state of mind of well-being (Sufia, 2014).

Oral health has impact on body because digestive and respiratory system start from mouth so appropriate care for mouth is important (Mirza & Ali, 2017).

Mother has a key role in developing children in every society other family member may also take part in child development but mother understand the psychology of child and health related problem. The development of their children depend upon level of knowledge, awareness and practice (Mani & Ismail, 2018).

There are many factors which affect the knowledge and approach of mother to child teaching and practicing of tooth brushing including their cultural background beliefs, ideas and cultural practices. There are still many communities which are below the quality standard living they are illiterate and do not have attention to self-hygiene (Suvarna & Hegde, 2016).

However it is compulsory for every mother to implement on their children to brush a least twice a day also changes their brush after three months. Use a healthy dies and reduce the amount of sugars to prevent dental caries. It is a famous fact that dental caries is an infectious disease linked with sociocultural and socioeconomic features. Dental caries is one of the most significant global oral health issue. In most developing countries the intensities of dental caries were low but now tend to increase due to imbalance diet (Omiri Wahadni & Saeed, 2016).

Increase in severity of dental caries is due to lack of knowledge of mothers and ineffective practices toward their children for healthy life. From birth most of children use diet containing a huge amount of sugars. Furthermore tooth brushing behaviors educated in the early years of life are fixed in child's mind and produce practice of good oral hygiene techniques in later life. A standard for good practice of tooth brushing is at least 2 minutes (Freire & Jordão, 2015).

The world health organization indicated that oral health education should be on the attitude toward oral health and mouth cleaning activities of school children by which the children can eliminate the risk of oral disease and stimulate oral health. With the help of oral health teaching students can change and enhance their tooth brushing habits. Another important aspect for mother and their children is the motivation about the significance of having a proper sounded oral hygiene and increase the level of oral hygiene (Lopes, 2017).

Having teeth clean and healthy can help our children relief from bad breath. Bad breath is so common and is repeatedly caused by a collection of plaque and is a symptom of gum disease and tooth decay as well as being uncomfortable and adverse. It is more important for parents to aware children from good brushing practice for the prevention of early childhood caries and gum diseases like gingivitis in children (Mubeen & Nisar, 2015).

Successfully promoting oral health agendas and programs can help to change parental beliefs and attitudes and to create decent practices and behaviors in childhood so when well-known can sustain through adulthood (Downer, 2014).

Health education play a very vital role in promoting protecting and enhancing oral health. Health education should be held regularly in communities especially in developing countries to ensure good sounded oral health (Khadri, 2017).

The aim of this study is to evaluate knowledge, attitude and practice of mothers toward theirs children oral health.

LITERATURE REVIEW

When parents were asked about the significance of knowledge attitude and practice of their children oral health and the dental visit we found 88% mother had a good knowledge and they feels that oral health is very important, 77% mothers had a good practice regarding oral health of their children. While they were asked about how frequently should be the dental visit, 55% considers that they should visit the dentist twice a year. This study concluded that overall mothers had a suitable knowledge of their children oral health and had enough practice therefor ratio of children oral diseases is low (Gupta & shah, 2018).

Most of parents 83.3% indicated equitable attitude 70% showed reasonable knowledge, and 66.7% presented poor practices towards a children's oral health. This study showed that mothers had equitable knowledge and attitude with poor practices towards their children's oral health which can be enhanced with good oral health education (Arangkulavan Sakthi & Gurunathan, 2015).

Maximum of the parents had enough knowledge about children oral health but had a poor attitude (58.7%) and practice (48.5%). The knowledge attitude and practice of Parents vary in age groups like parents between 25-30 years presented meaningfully greater mean knowledge (25.90 ± 3.93), attitude (15.71 ± 2.23), and practice (20.09 ± 2.50). Female parents rank higher mean knowledge (21.45 ± 4.27) and attitude (14.97 ± 2.15) than male parents. The study conclude that Parent's knowledge attitude and practice is poor regarding oral health of children all the health related departments should take serious action and health education is needed in regular basis in order to improve oral health of children (Nagarajappa et *al.*, 2016).

This study reveals that 89% of parents had good knowledge about oral health of their children but there is a difference regarding socioeconomic status of family. Family with a low income status had a poor knowledge 40% and poor attitude toward children oral health Tooth caries found in 55% of children of poor family background. This study conclude that oral health status of children highly depend upon their children if they had a suitable knowledge regarding oral health then they will bring their knowledge into good practice while a parents with poor knowledge especially mother results oral disease in their chlidren like dental caries gum diseases (Talekar Rozier slade & Ennett, 2015).

This study consist of number of 389 mothers. The study also include children in which half of them were male (50.4%). About (34.3%) mothers were age 30-34 years while 10.3% of mothers aged above 45 years. Almost (56.4%) mothers showed knowledge about oral care of their children and (50.3%) of mothers had attention toward practice of children. The study conclude overall low level of knowledge and practice toward their children oral health although there were some factors affecting the current low status of them toward oral hygiene (Alzaidi, 2018).

A study conducted in Anganwadi to assess the mothers regarding their knowledge, attitude and practice of their children oral health. This study confirms that 53.6% of mother are living with low knowledge and 69.2% had negative attitude toward oral hygiene and 61.4% keep an eye on poor practices of oral hygiene of their children. The conclusion of this study reveals that preschool mothers had enough knowledge but other do not have required knowledge. Similarly mothers of preschool children had a good attitude and practice while the others lacking (Singhal, 2017).

Another study proves that 87% of mothers had knowledge of oral care of their children while 95.8% acknowledged positive attitude toward oral care and 80.5% mothers are regularly practicing good oral care of their children 65.3% mothers thinks that intake of excess amount of sugars lead to dental decay of our children while 59.3% mothers suggest that dental visits are compulsory either at weekly, monthly or year based. This study also conclude that most of knowledge regarding oral health were influenced by other elder of family members and they forced us to have a proper knowledge about our children oral health by continuing so every other community children will grow healthy like our children (Shetty, et *al*., 2016).

A crossectional survey held in tirpura india which indicates that (73.5%) mothers had knowledge about children oral care (p>0.05). About (80.2%) of mothers had a positive attitude toward oral care (p=0.010) and (80%) of mother had a good practice of oral care of their children (p=0.008) Meanwhile there some mother who also thinks that our children should take sugars in numerous amount. Conclusion of this study states mothers of the understudy area had enough knowledge to care for their children however there is no adequate focus on dental visits (Reang & Bhattacharjya, 2015).

Another study held in which 174 (46.8%) parents take part including 67 (38.5%) male and 107(61.5%) female both male and female respond to questionnaire. About this study the female tend to had greater level of knowledge (70%) attitude (65%) and practice (60%) while male had low value score than female regarding oral care of children. Conclusion include most of the families are aware but practice is not enough to maintain their children oral care better. Male contribute very low when it comes to practicing his child almost negligible therefore some of this community children are suffering oral diseases (Rwakatema, 2018).

A study conducted in benglore india in which there is a huge difference between the mother of private school children and mother of government school mother. Private school student's mother had a knowledge value of (74.09%) while government school mother had knowledge (70.10 %) of their children oral health. Similarly there is a difference of attitude of private school mother and attitude of government school mother toward oral health of their children. The private school children mother had (75.27%) attitude while government school mother had (69.4%). Coming toward practice of both private and government school children mother private school mother had practice value of (59.74%) while government school children mother had (43.70%). Conclusion of this study suggest that there is a greater need of health education about oral health to government school more than private school.

PROBLEM STATEMENT

This research study focuses on oral health of children. Lack of knowledge, negative attitude and improper or lack of practice of mothers toward their children will lead to a sort of situation which can easily affect the lives of several individuals. As it is clear that oral health is one of the most important in our life. Mouth is a window opening for every body system unhygienic condition of mouth can easily lead every one body to several diseases. Oral health of children is main problem because they are in such a stage of their life in which they want to be independent from their parents. Globally it becomes a very main problem in all developing countries where the ratio of education is low.

Most of people in developing countries are illiterate and do not have much awareness about oral health maintenance. A research conducted in Kenya on the knowledge attitude and practice of mothers toward their children health revels that mother had a very low level of knowledge about oral health of their children. They also had negative attitude toward their children oral health. Similarly low level of knowledge and negative attitude lead them poor practice of their children oral health.

This study is conducted in Ali Raza Abad a town of Lahore in which most of people are illiterate and not aware of oral health maintenance. The ratio of oral diseases is high in most of school children dental decay, dental caries and gum diseases are most prevalent in children. The main reason behind these diseases are low level of knowledge negative attitude and poor practice of their mothers toward children oral health. In early stage of their children life they were unable to educate their children about oral health.

OBJECTIVE(S)

The objectives of this study are

Assess the knowledge of mothers toward their children oral health

Assess the attitude of mothers toward their children oral health

Assess the practice of mothers toward their children oral health.

Research Questions:

1 What is the knowledge of mothers regarding oral health of their children?

2 What is attitude of mothers regarding oral health of their children?

3 What is practice of mothers regarding oral health of their children?

OPERATIONAL DEFINITION(S)

Knowledge:

The fact or condition of knowing something with familiarity gained through experience or association.

Attitude:

An attitude is a learned predisposition to respond in a favorable or unfavorable manner towards peoples or objects.

Practice:

Practice is defined as to use an idea or actually put it into place or to do something over and over.

CONCEPTUAL DEFINITION(S)

Knowledge:

It is the awareness of the mothers about their children oral health. It is measured by 10 questions on Likert's scale.

Attitude:

The way a mothers thinks and behaves toward their children oral health. It is measured by 6 questions on Likert's scale.

Practice:

The mother's activities regarding children oral health. It is measured by 9 questions on Likert's scale

HYPOTHESIS

Null hypothesis:

There are no effect of knowledge and attitude on the practice of mother toward their children oral health.

Alternate hypothesis:

Knowledge and attitude have a significant effect on the practice of mother toward their children oral health.

MATERIAL AND METHODS

Study Design: This is a cross‐ sectional study design

Settings: This study is conducted in the community of Ali Raza Abad .

Duration of Study: This study start from September and will continue till December.

Target population: The target population of this study is people of community of Ali Raza Abad.

Sample Size: The simple size of this study are 124 mothers of school children of Ali Raza Abad. Simple size were calculated on the base of (Mubeen, & Nisar, 2015). Study in which knowledge was 91.1%.

Sample size is calculated by using Kish Leslie's formula based on proportion.

$n=Z^2 pq/e^2$

n= Sample size

Z^2=Confidence level at 95% i.e 1.96

P=Estimated proportion of knowledge as present in previous study.

q=1-p

e^2= margin of error i.e 0.05 at 95% C.I

n= 1.96×1.96×0.91×0.089/0.5×0.5

n=124

Sampling Technique: Random sampling technique.

Sample Selection: A simple Random sample technique is used in this research study.

Inclusion Criteria: The inclusion of this study based on

1) The mothers of Ali Raza Abad are included who want to participate.
2) Literate and illiterate both are included.

Exclusion Criteria: The exclusion of this study based on

1) Men of Ali Raza Abad are excluded.
2) Those mothers of Ali Raza Abad who do not want to participate are excluded from this study.

Equipment: The data is collected by using questionnaire of (Jain, 2015)

DATA COLLECTION PROCEDURE

Data is collected from the community of Ali Raza Abad through questionnaire. The questionnaire consist of two parts. First part contain demographic (name, age, educational status) and the second portion contain three parts (Knowledge, attitude and practice). The questionnaire was converted to Urdu. The first portion consist of Knowledge of mothers toward their children oral health and the 2nd portion contain attitude of mother toward their children oral health while third portion of questionnaire contain practice of mother toward their children oral health.

DATA ANALYSIS PROCEDURE

Data was collected and analyzed through spss version 21.

Outcomes of this study offer frequencies, percentage, pie chart and bar chart.

Result:

Age of participant

	Frequency	Percent	Valid Percent	Cumulative Percent
25 years	31	25.0	25.0	25.0
30 years	37	29.8	29.8	54.8
35 years	42	33.9	33.9	88.7
40 years	14	11.3	11.3	100.0
Total	124	100.0	100.0	

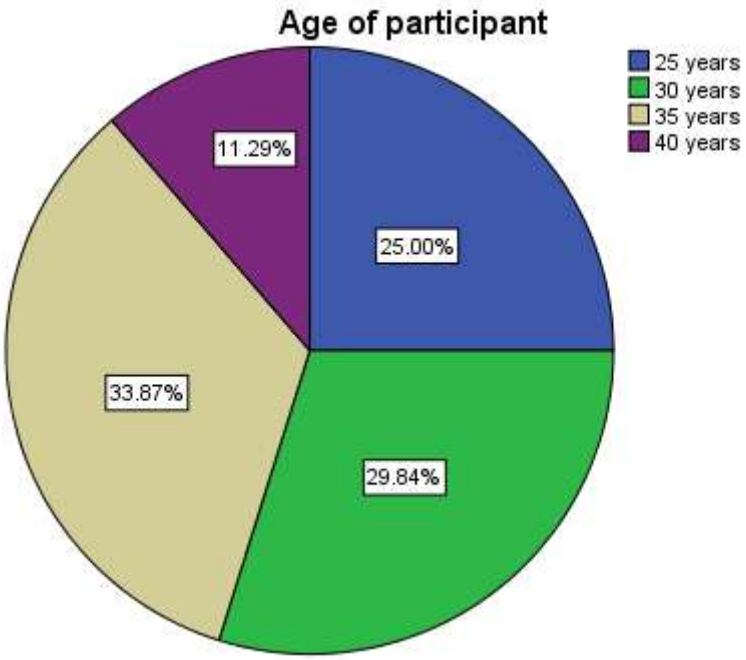

Figure 1

Table and figure no 1 show that 25.0% (n=31) participants belong to 25 years age, 29.8% (n=37) belong to 30 years age, 33.9% (n=42) participants belong to 35 years age, and 11.3% (n=14) participants belong to 40 years age.

Educational status of the participants

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	79	63.7	63.7	63.7
No	45	36.3	36.3	100.0
Total	124	100.0	100.0	

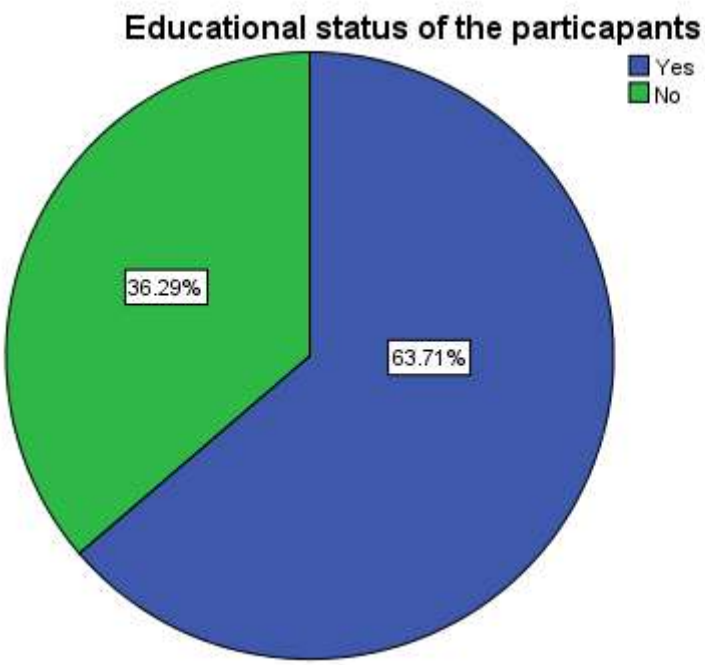

Figure 2

Table and figure no 2 show the educational status of the community Ali Raza Abad, 63.7% (n=79) are literate and 36.3% (n=45) are illiterate.

How many milk teeth are there in a children mouth

	Frequency	Percent	Valid Percent	Cumulative Percent
Ten	52	41.9	41.9	41.9
Twelve	43	34.7	34.7	76.6
Twenty	7	5.6	5.6	82.3
Twenty Eight	16	12.9	12.9	95.2
I do not know	6	4.8	4.8	100.0
Total	124	100.0	100.0	

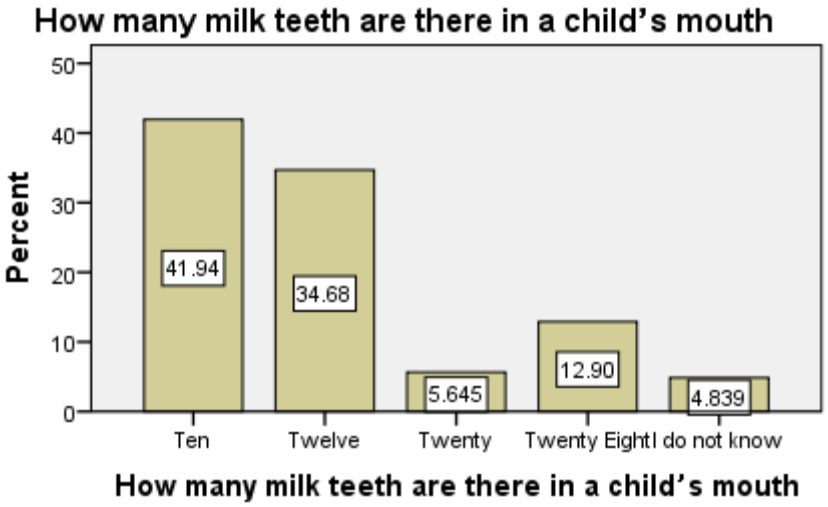

Figure 3

Table and figure no 3 show that 41.9% (n=52) mothers thinks children has ten milk teeth, 34.7% (n=43) mothers thinks children has Twelve milk teeth, 12.9% (n=16) mothers thinks children has Twenty Eight milk teeth, and 4.8% (n=6).

Does the tooth paste contain fluoride?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	44	35.5	35.5	35.5
No	42	33.9	33.9	69.4
I do not know	38	30.6	30.6	100.0
Total	124	100.0	100.0	

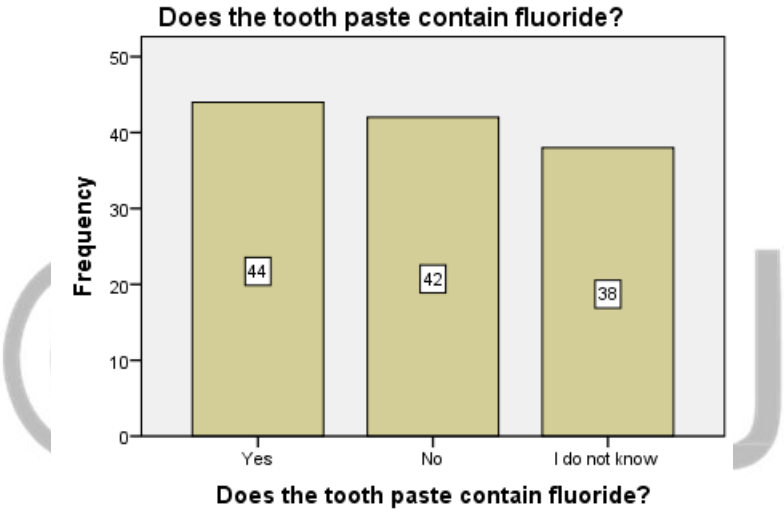

Figure 4

Table and figure no 4 show that 35.5% (n=44) mothers says tooth paste contain fluoride, 33.9% (n=42) mothers says tooth paste do not contain fluoride and 30.6 % (n=38) mothers do not know about fluoride in tooth paste.

What is the role of the fluoride in the tooth paste?

	Frequency	Percent	Valid Percent	Cumulative Percent
Prevents tooth decay	35	28.2	28.2	28.2
Prevents gum problems	42	33.9	33.9	62.1
Gives freshness	29	23.4	23.4	85.5
I don't know	18	14.5	14.5	100.0
Total	124	100.0	100.0	

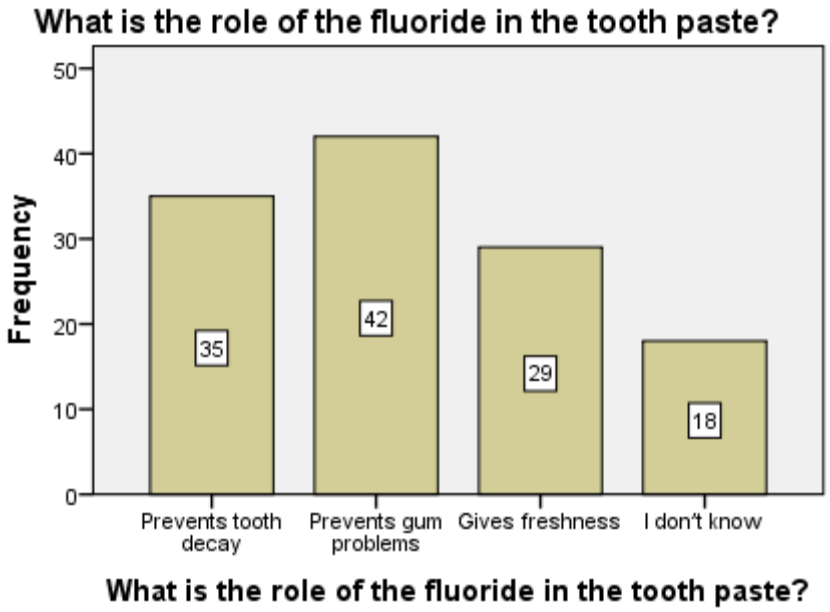

Figure 5

Table and figure no 5 show that 28.2% (n=35) mothers says fluoride prevent tooth decay, 33.9% (n=42) mothers says fluoride prevents gum problems, 23.4% (n=29) mothers says fluoride gives freshness and 14.5% (n=18) mothers do not know about the role of fluoride in tooth paste.

What is the most common dental disease in the child?

	Frequency	Percent	Valid Percent	Cumulative Percent
Tooth decay	39	31.5	31.5	31.5
Bleeding gums	42	33.9	33.9	65.3
Discolored tooth	20	16.1	16.1	81.5
I don't know	23	18.5	18.5	100.0
Total	124	100.0	100.0	

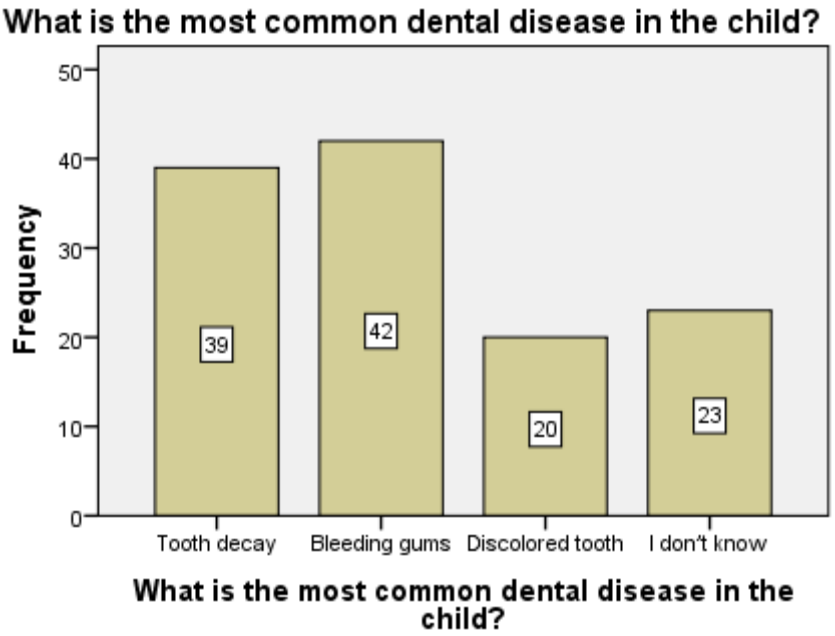

Figure 6

Table and figure no 6 show that 31.5% (n=39) mothers think tooth decay is the most common dental disease of children, 33.9% (n=42) mothers thinks Bleeding from gums is problem of children oral health, 16.1% (n=20) mothers thinks discolored tooth is major issue of children and 18.5% (n=23) mothers do not know about the most common dental disease in the children.

Which of the following food items can lead to tooth decay?

	Frequency	Percent	Valid Percent	Cumulative Percent
Chocolates	30	24.2	24.2	24.2
Bakery products	47	37.9	37.9	62.1
Soft drinks	36	29.0	29.0	91.1
All of the above	8	6.5	6.5	97.6
I don't know	3	2.4	2.4	100.0
Total	124	100.0	100.0	

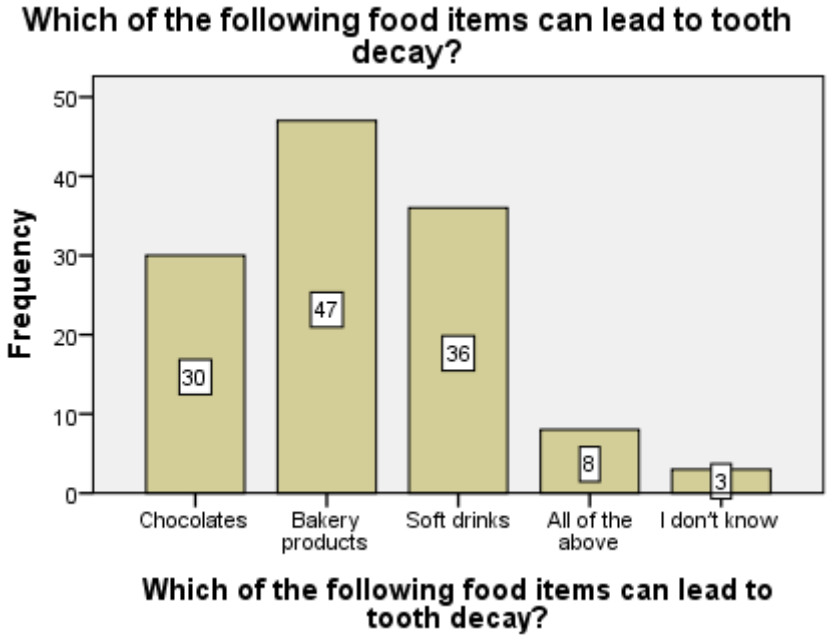

Figure 7

Table and figure no 7 show that 24.2% (n=30) mothers think usage of Chocolates can lead to tooth decay, 37.9% (n=47) mothers think Bakery products can lead to tooth decay, 29.0% (n=36) mothers thinks Soft drinks can lead to tooth decay, 6.5% (n=8)mothers thinks all of the above mentioned things can lead to tooth decay and 2.4% (n=3) mothers do not know about which food items can lead to tooth decay in the children.

Which of the following do you think prevents the tooth decay?

	Frequency	Percent	Valid Percent	Cumulative Percent
Restricting sweets	24	19.4	19.4	19.4
Tooth brushing	49	39.5	39.5	58.9
Regular dental visits	32	25.8	25.8	84.7
Fluoridated tooth paste	9	7.3	7.3	91.9
I don't know	10	8.1	8.1	100.0
Total	124	100.0	100.0	

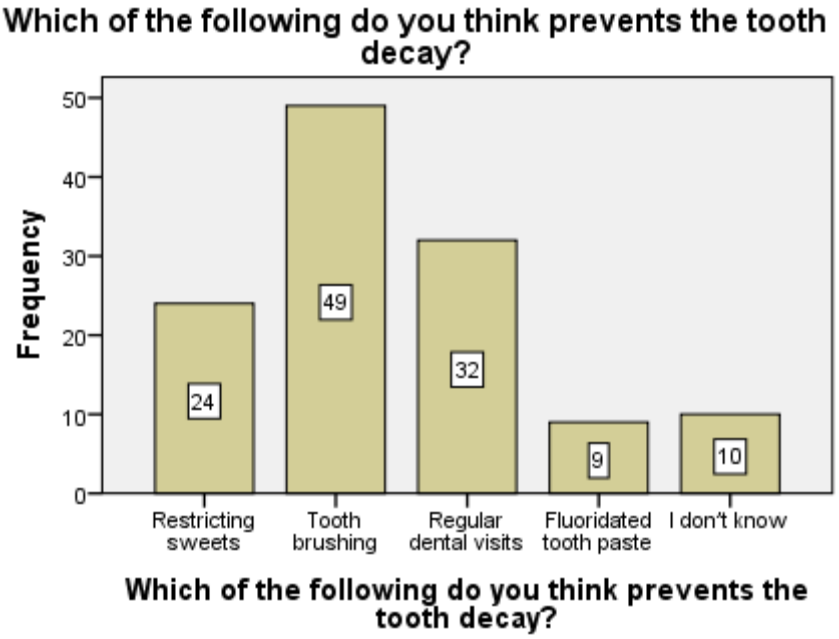

Figure 8

Table and figure no 8 show that 19.4% (n=24) mothers think by Restricting sweets can prevents tooth decay, 39.5% (n=49) mothers think tooth brushing can prevents tooth decay, 25.8% (n=32) mothers think regular dental visits prevents tooth decay, 7.3% (n=9) mothers think fluoride in tooth paste can prevent tooth decay and 8.1% (n=10) mothers do not know about which of the above mentioned things can prevent tooth decay in the children.

Causes for gum disease?

	Frequency	Percent	Valid Percent	Cumulative Percent
Improper brushing	28	22.6	22.6	22.6
Tartar	39	31.5	31.5	54.0
All of the above	29	23.4	23.4	77.4
I don't know	28	22.6	22.6	100.0
Total	124	100.0	100.0	

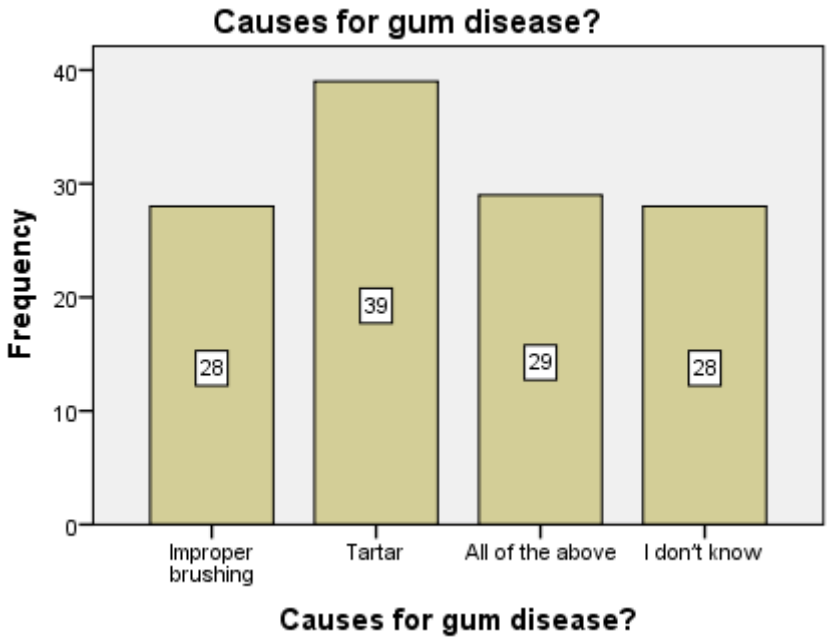

Figure 9

Table and figure no 9 show that 22.6% (n=28) mothers says improper brushing can cause gum disease, 31.5% (n=39) mothers think Tartar can cause gum disease, 23.4% (n=29) mothers think all of the above can cause gum disease, and 22.6% (n=28) mothers do not know about the causes of gum diseases in children.

Which of the following do you think prevents the gum disease?

	Frequency	Percent	Valid Percent	Cumulative Percent
Regular brushing and mouth wash	34	27.4	27.4	27.4
Professional cleaning	42	33.9	33.9	61.3
All of the above	21	16.9	16.9	78.2
I don't know	27	21.8	21.8	100.0
Total	124	100.0	100.0	

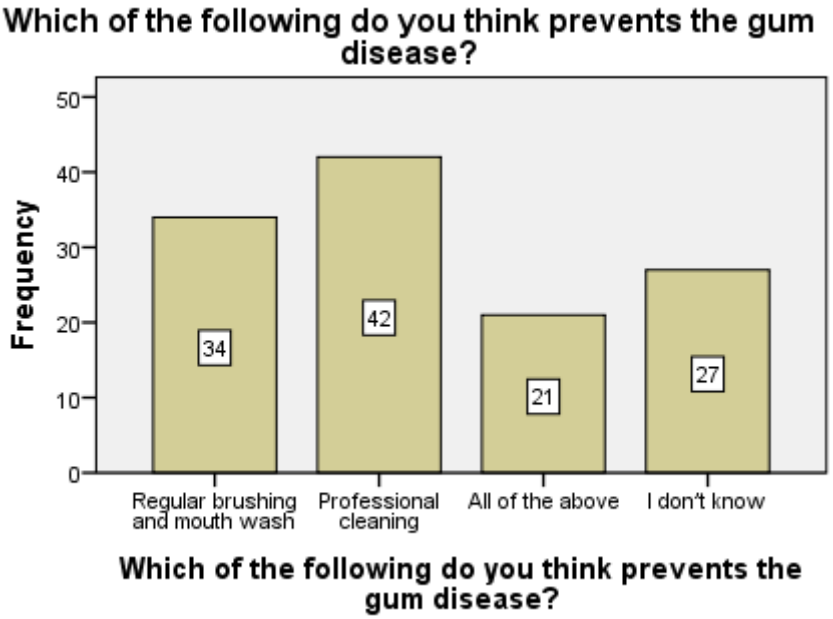

Figure 10

Table and figure no 10 show that 27.4% (n=34) mothers thinks regular brushing and mouth wash can prevent gum disease, 33.9% (n=42) mothers think Professional cleaning can prevent gum disease, 16.9% (n=21) mothers think all of the above can prevent gum disease, and 21.8% (n=27) mothers do not know about the prevention of gum diseases in children.

Which of the following can lead to irregular teeth?

	Frequency	Percent	Valid Percent	Cumulative Percent
Thumb sucking	34	27.4	27.4	27.4
tongue thrusting	48	38.7	38.7	66.1
All of the above	22	17.7	17.7	83.9
I don't know	20	16.1	16.1	100.0
Total	124	100.0	100.0	

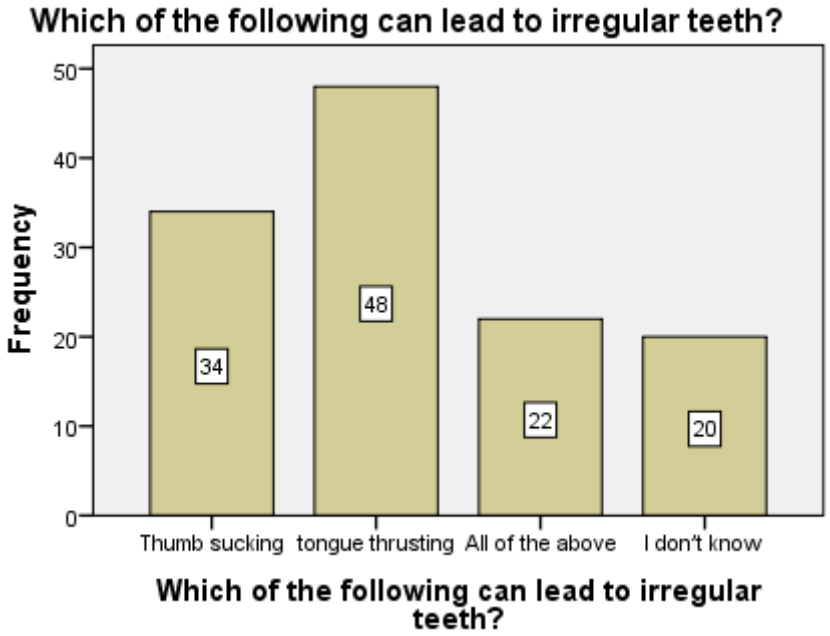

Figure 11

Table and figure no 11 show that 27.4% (n=34) mothers says thumb sucking can lead to irregular teeth, 38.7% (n=48) mothers says tongue thrusting can lead to irregular teeth, 17.7% (n=22) mothers think all of the above can lead to irregular teeth, and 16.1% (n=20) mothers do not know about the cause of irregular teeth.

Can irregularly placed teeth be aligned in the correct position?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	34	27.4	27.4	27.4
No	52	41.9	41.9	69.4
I don't know	38	30.6	30.6	100.0
Total	124	100.0	100.0	

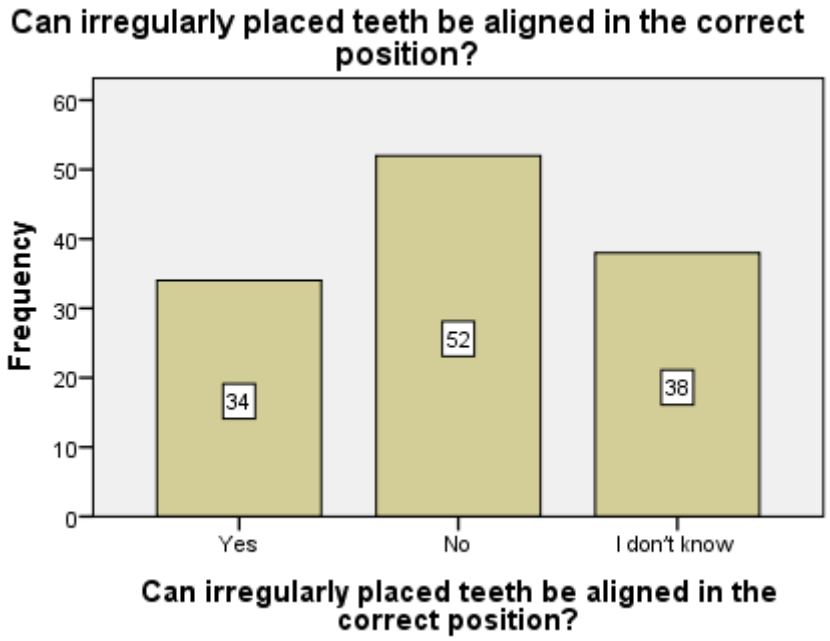

Figure 12

Table and figure no 12 show that 27.4% (n=34) mothers thinks irregularly placed teeth are aligned in the correct position, 41.9% (n=52) mothers thinks irregularly placed teeth are not aligned in the correct position, 30.6% (n=38) mothers do not know about irregularly placed teeth aligned in the correct position.

It is necessary to take the child for regular dental visits

	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	84	67.7	67.7	67.7
Uncertain	29	23.4	23.4	91.1
Disagree	11	8.9	8.9	100.0
Total	124	100.0	100.0	

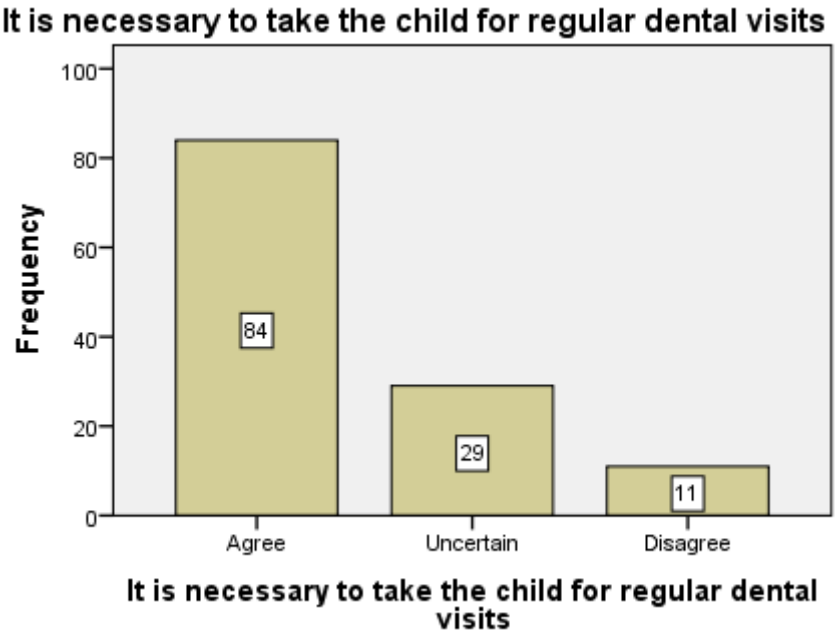

Figure 13

Table and figure no 13 show that 67.7% (n=84) mothers agree to take child for regular dental visits, 23.4% (n=29) mothers uncertain to take child for regular dental visits, and 8.9% (n=11) mothers disagree to take child for regular dental visits.

Cleaning of the child's teeth should be done by mothers

	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	77	62.1	62.1	62.1
Uncertain	32	25.8	25.8	87.9
Disagree	15	12.1	12.1	100.0
Total	124	100.0	100.0	

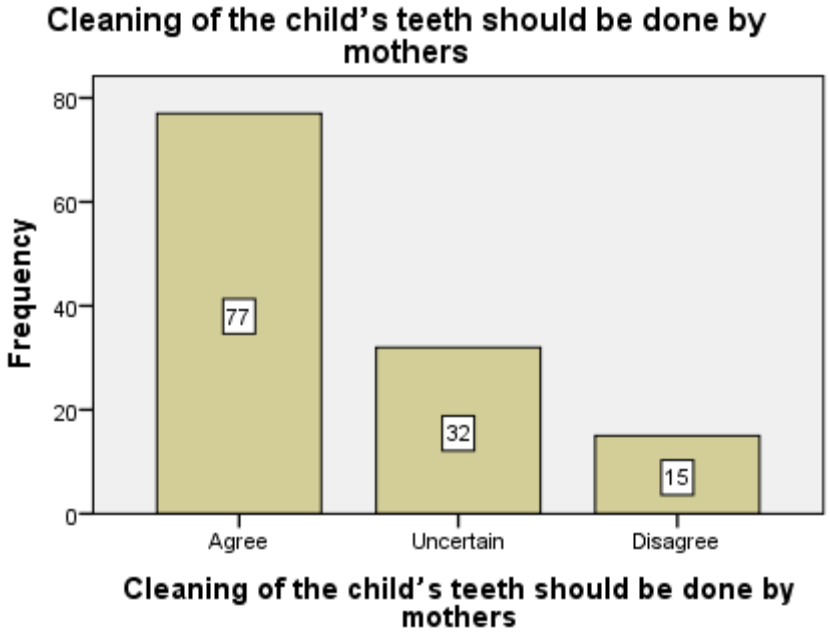

Figure 14

Table and figure no 14 show that 62.1% (n=77) mothers agree to take part in cleaning of their children teeth, 25.8% (n=32) mothers uncertain to take part in cleaning of their children teeth, and 12.1% (n=15) mothers disagree to take part in cleaning of their children teeth.

It is necessary to clean the child's teeth after every meal

	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	71	57.3	57.3	57.3
Uncertain	22	17.7	17.7	75.0
Disagree	31	25.0	25.0	100.0
Total	124	100.0	100.0	

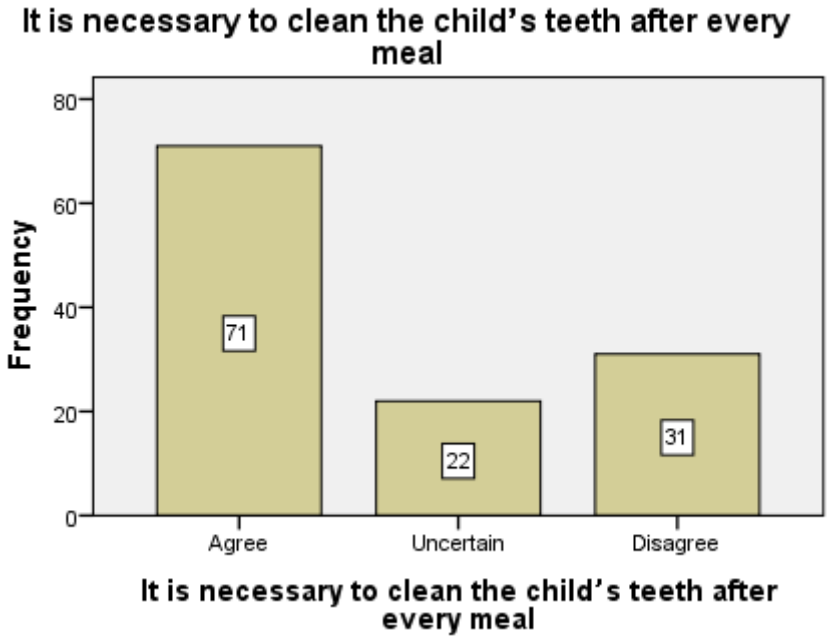

Figure 15

Table and figure no 15 show that 57.3% (n=71) mothers agree to necessarily clean children teeth after every meal, 17.7% (n=22) mothers uncertain to necessarily clean children teeth after every meal, and 25.0% (n=31) mothers disagree to necessarily clean children teeth after every meal.

Milk teeth do not require good care as it is going to fall anyway

	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	78	62.9	62.9	62.9
Uncertain	34	27.4	27.4	90.3
Disagree	12	9.7	9.7	100.0
Total	124	100.0	100.0	

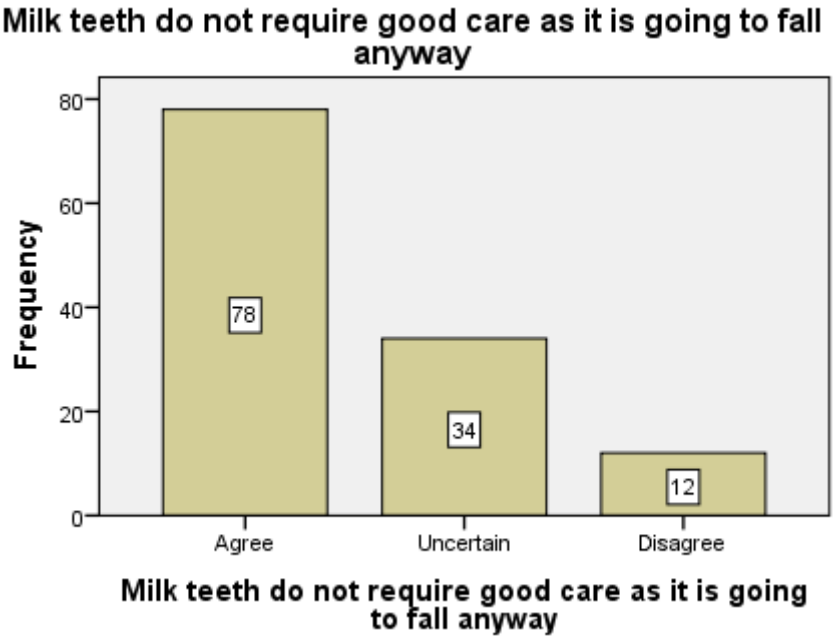

Figure 16

Table and figure no 16 show that 62.9% (n=78) mothers agree to milk teeth do not require good care as it is going to fall anyway, 27.4% (n=34) mothers uncertain to milk teeth do not require good care as it is going to fall anyway, and 9.7% (n=12) mothers disagree to milk teeth do not require good care as it is going to fall anyway.

Good oral health is related to the good general health

	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	72	58.1	58.1	58.1
Uncertain	32	25.8	25.8	83.9
Disagree	20	16.1	16.1	100.0
Total	124	100.0	100.0	

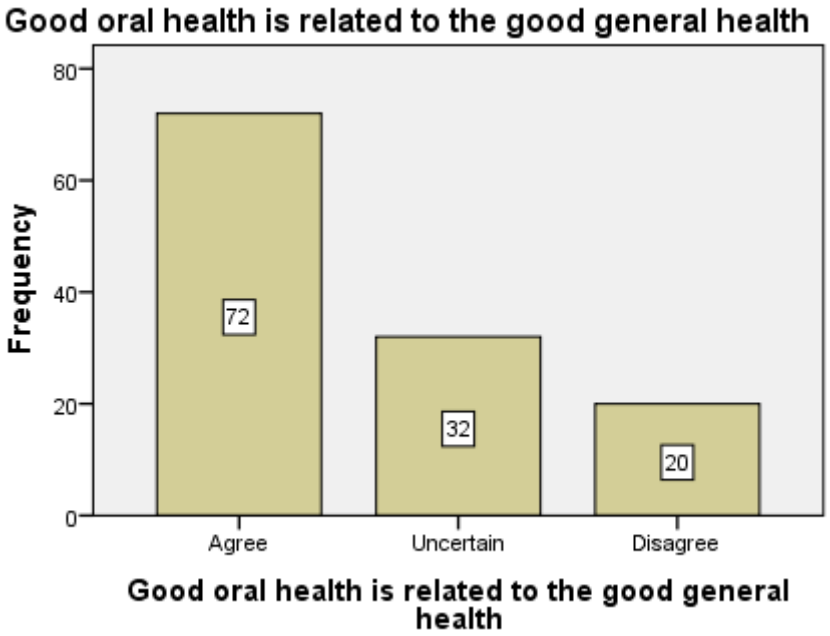

Figure 17

Table and figure no 17 show that 58.1% (n=72) mothers agree good oral health is related to the good general health, 25.8% (n=32) mothers uncertain to good oral health is related to the good general health, and 16.1% (n=20) mothers disagree to good oral health is related to the good general health.

Healthy milk teeth are essential for children to chew the food properly

	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	82	66.1	66.1	66.1
Uncertain	32	25.8	25.8	91.9
Disagree	10	8.1	8.1	100.0
Total	124	100.0	100.0	

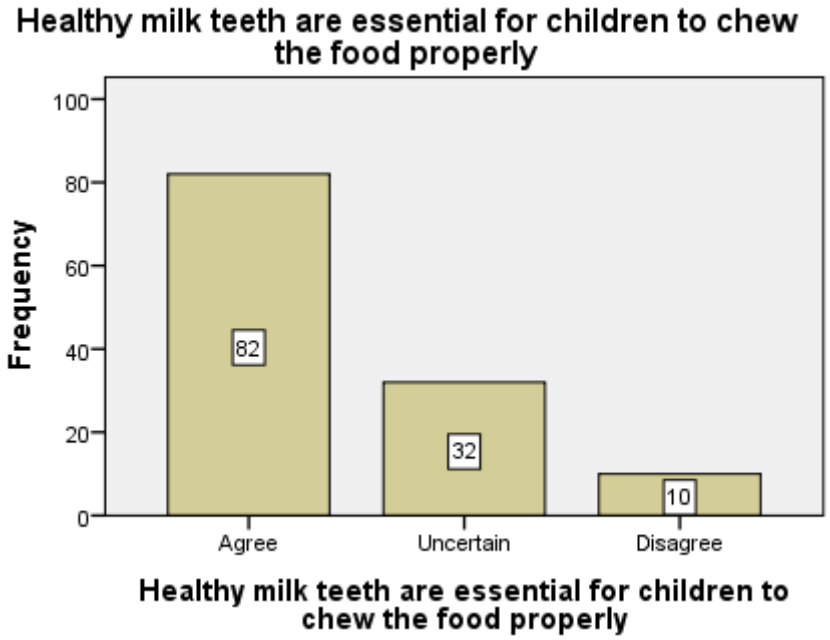

Figure 18

Table and figure no 18 show that 66.1% (n=82) mothers agree to healthy milk teeth are essential for children to chew the food properly, 25.8% (n=32) mothers uncertain to healthy milk teeth are essential for children to chew the food properly, and 8.1% (n=10) mothers disagree to healthy milk teeth are essential for children to chew the food properly.

When was the child first dental visit?

	Frequency	Percent	Valid Percent	Cumulative Percent
6 months after birth.	77	62.1	62.1	62.1
After the eruption of first milk tooth.	26	21.0	21.0	83.1
1 year after birth	18	14.5	14.5	97.6
Not yet visited	3	2.4	2.4	100.0
Total	124	100.0	100.0	

Figure 19

Table and figure no 19 show that 62.1% (n=77) mother thinks 6 months after birth was the child's first dental visit, 21.0% (n=26) mothers thinks after the eruption of first milk tooth was the child's first dental visit, 14.5% (n=18) mothers thinks 1 year after birth was the child's first dental visit, and 2.4% (n=3) mothers not yet visited.

When do you take your child to visit the dentist?

	Frequency	Percent	Valid Percent	Cumulative Percent
Only during problems	55	44.4	44.4	44.4
Every 6 months	37	29.8	29.8	74.2
Every 1 year	28	22.6	22.6	96.8
Not particular	4	3.2	3.2	100.0
Total	124	100.0	100.0	

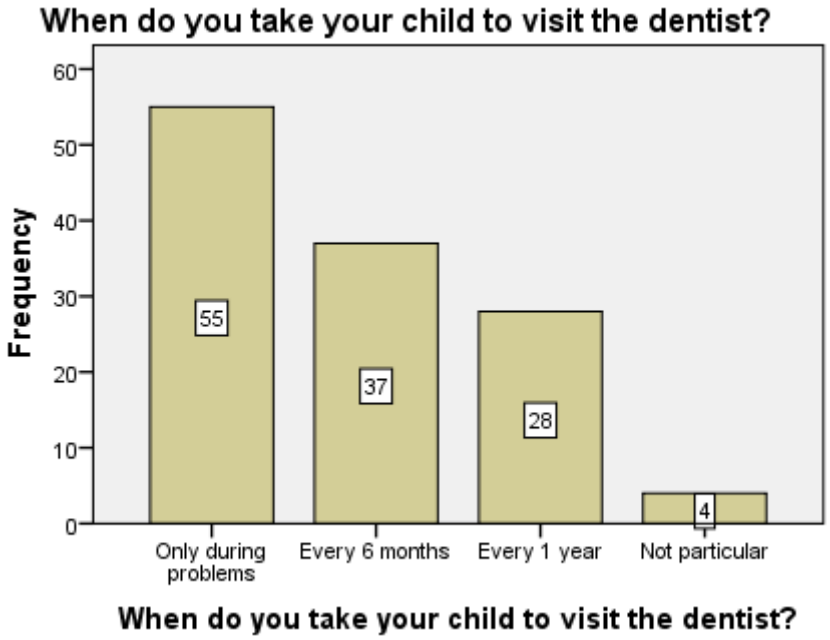

Figure 20

Table and figure no 20 show that 44.4% (n=55) mother says only during problems we take our children to dentist visit, 29.8% (n=37) every 6 months says we take our children to dentist visit, 22.6% (n=28) mothers says every 1 year we take our children to dentist visit, and 3.2% (n=4) mother says not particular dentist visit.

When did you commence the cleaning of your child's teeth?

	Frequency	Percent	Valid Percent	Cumulative Percent
Soon after first milk	33	26.6	26.6	26.6
After 4-6 milk teeth eruption	53	42.7	42.7	69.4
After all milk teeth eruption	35	28.2	28.2	97.6
After first birthday of the child	3	2.4	2.4	100.0
Total	124	100.0	100.0	

Figure 21

Table and figure no 21 show that 26.6% (n=33) mother says soon after first milk we commence the cleaning of our children teeth, 42.7% (n=53) mother says after 4-6 milk teeth eruption we commence the cleaning of our children teeth, 28.2% (n=35) mothers says after all milk teeth eruption we commence the cleaning of our children teeth, and 2.4% (n=3) mother says after first birthday we commence the cleaning of our children teeth.

Which of the following aids are used to clean your child's teeth?

	Frequency	Percent	Valid Percent	Cumulative Percent
Finger	40	32.3	32.3	32.3
Tooth brush	45	36.3	36.3	68.5
Twig	33	26.6	26.6	95.2
Any other	6	4.8	4.8	100.0
Total	124	100.0	100.0	

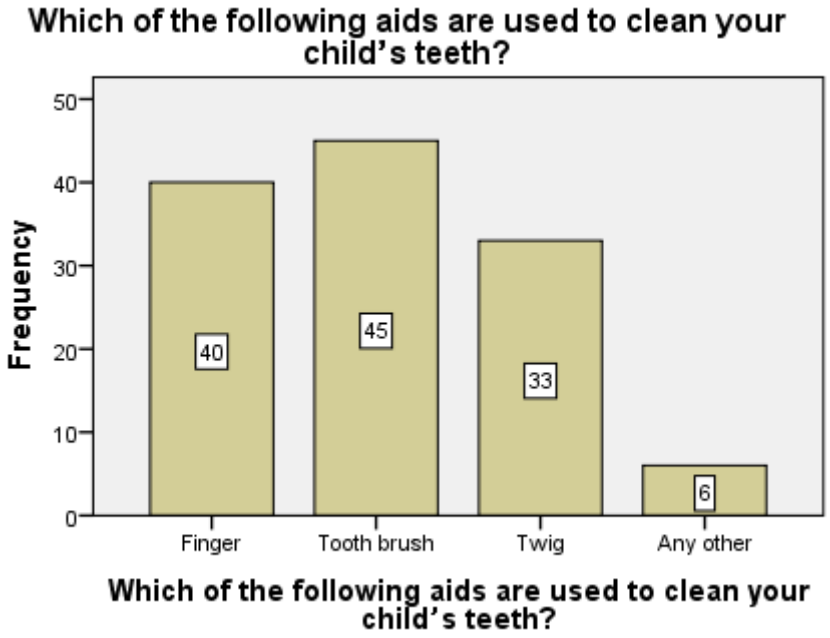

Figure 22

Table and figure no 22 show that 32.3% (n=40) mother says we use finger to clean our children teeth, 36.3% (n=45) mother says we use tooth brush to clean our children teeth, 26.6% (n=33) mother says we use twig to clean our children teeth, and 4.8% (n=6) mother says we use any other than the above to clean our children teeth.

How many times do you brush your child's teeth?

	Frequency	Percent	Valid Percent	Cumulative Percent
Once in a day	25	20.2	20.2	20.2
Twice in a day	61	49.2	49.2	69.4
After every meal	19	15.3	15.3	84.7
Not particular	19	15.3	15.3	100.0
Total	124	100.0	100.0	

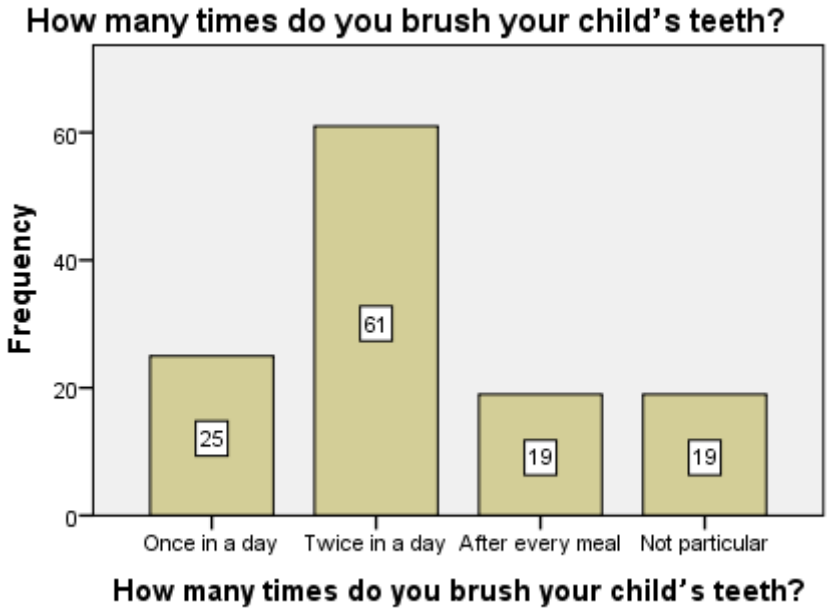

Figure 23

Table and figure no 23 show that 20.2% (n=25) mother says we brush our children teeth once in a day, 49.2% (n=61) mother says we brush our children teeth twice in a day, 15.3% (n=19) mother says we brush our children teeth after every meal, and 15.3% (n=19) mother says we brush our children teeth but not particular.

When do you change your child's tooth brush?

	Frequency	Percent	Valid Percent	Cumulative Percent
Once in 15 days	38	30.6	30.6	30.6
Once in a month	54	43.5	43.5	74.2
Every 2-3 months	23	18.5	18.5	92.7
Once the bristles fray out	9	7.3	7.3	100.0
Total	124	100.0	100.0	

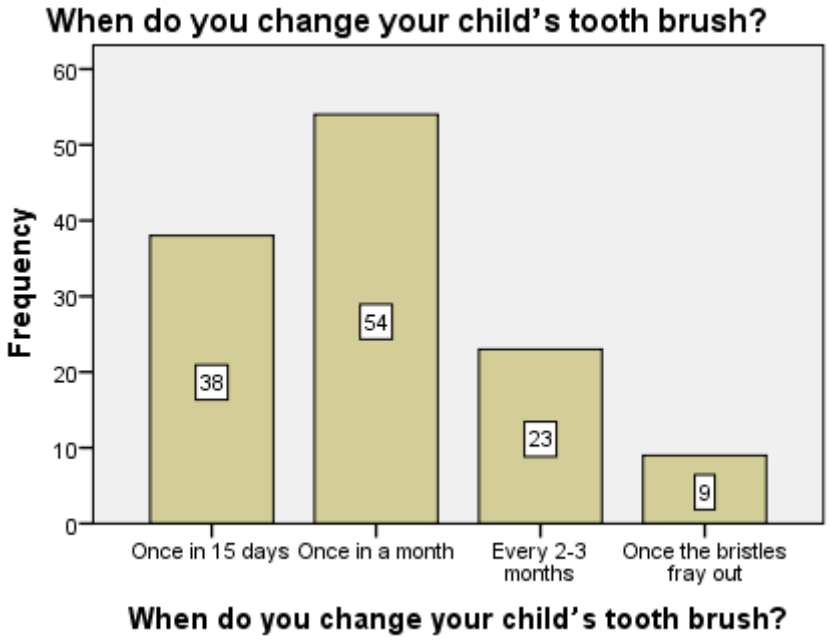

Figure 24

Table and figure no 24 show that 30.6% (n=38) mother says we change our children brush once in 15 days, 43.5% (n=54) mother says we change our children brush once in a month, 18.5% (n=23) mother says we change our children brush every 2-3 months, and 7.3% (n=9) mother says we change our children brush once the bristles fray out.

What material do you use to clean your child's teeth?

	Frequency	Percent	Valid Percent	Cumulative Percent
Tooth paste	41	33.1	33.1	33.1
Tooth powder	52	41.9	41.9	75.0
Any others	31	25.0	25.0	100.0
Total	124	100.0	100.0	

Figure 25

Table and figure no 25 show that 33.1% (n=41) mother says we use tooth paste to clean our children teeth, 41.9% (n=52) mother says we use tooth powder to clean our children teeth, and 25.0% (n=31) mother says we use any other than the above to clean our children teeth.

Does your child rinse the mouth after eating/drinking?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	56	45.2	45.2	45.2
No	41	33.1	33.1	78.2
Sometimes	20	16.1	16.1	94.4
I don't know	7	5.6	5.6	100.0
Total	124	100.0	100.0	

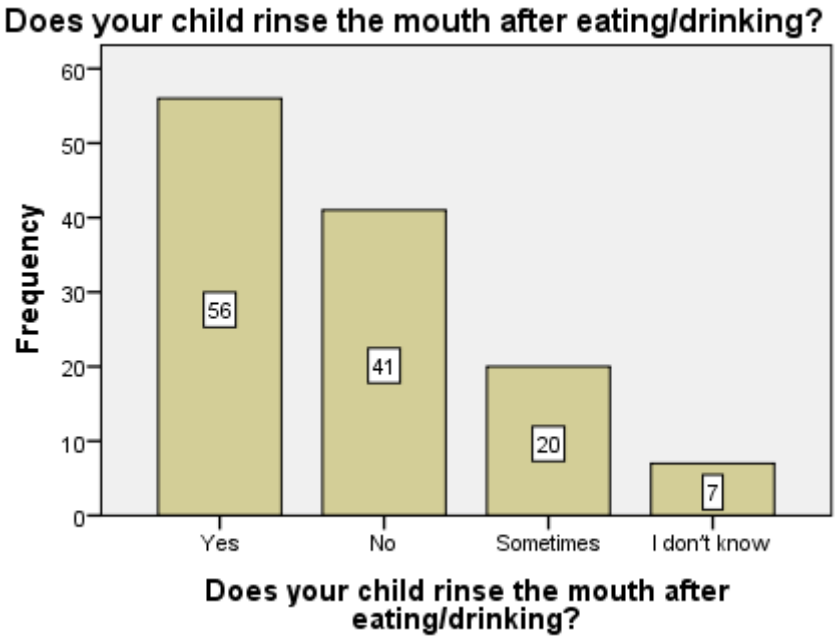

Figure 26

Table and figure no 26 show that 45.2% (n=56) mother thinks our children rinse their mouth after eating, 33.1% (n=41) mother says our children do not rinse their mouth after eating, 16.1% (n=20) mother says sometimes our children rinse their mouth after eating, and 5.6% (n=7) mother says we do not know whether our children rinse their mouth or not.

At what time do you give the sugary food items to your child?

	Frequency	Percent	Valid Percent	Cumulative Percent
With meals	42	33.9	33.9	33.9
In between meals	42	33.9	33.9	67.7
Before going to bed	38	30.6	30.6	98.4
Not particular	2	1.6	1.6	100.0
Total	124	100.0	100.0	

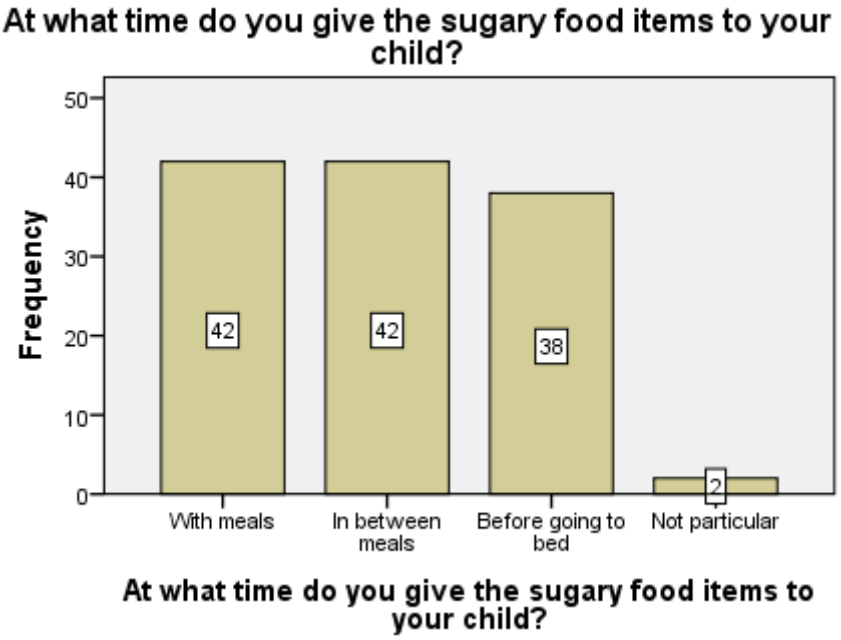

Figure 27

Table and figure no 26 show that 33.9% (n=42) mother says we give the sugary food items to our child with meal, 33.9% (n=42) mother says we give the sugary food items to our child in between meals, 30.6% (n=38) mother says we give the sugary food items to our child before going to bed, and 1.6% (n=2) mother says we do not know particularly about sugary items.

Discussion:

This study was conducted in Lahore school of nursing, the University of Lahore. This study explore the Knowledge attitude and practice of mother toward children oral health. Target population of this study is Ali Raza Abad (Raiwand road Lahore) 124 mothers of Ali Raza Abad community take part in this study. Data were collected through questionnaire (Urdu). The questionnaire consist of two parts first part consist of demographic (name, age, educational status) and the second part contain questions translated into Urdu from English. All the questions were divided into three parts.

The first part consist of questions related to knowledge, second part related to attitude and third part related practice of mothers regarding oral health of children. The participant of this study differ according age about 25.0% (n=31) participants belong to 25 years age, 29.8% (n=37) belong to 30 years age, 33.9% (n=42) participants belong to 35 years age, and 11.3% (n=14) participants belong to 40 years age. Educational ratio is low in Ali Raza Abad (36.3% n=45) and 63.7% (n=79) are literate.

In response of question (Causes of gum disease) 22.6% (n=28) mothers says improper brushing can cause gum disease, 31.5% (n=39) mothers think Tartar can cause gum disease, 23.4% (n=29) mothers think all of the above can cause gum disease, and 22.6% (n=28) mothers do not know about the causes of gum diseases in children. Similar finding found in a study conducted in Chennai India in which explore that improper brushing and excessive consumption can lead to gum diseases (Gurunathan Moses & Arunachalam, 2018).

About the child first dental visit 62.1% (n=77) mother thinks 6 months after birth was the child's first dental visit, 21.0% (n=26) mothers thinks after the eruption of first milk tooth was the child's first dental visit, 14.5% (n=18) mothers thinks 1 year after birth was the child first dental visit, and 2.4% (n=3) mothers not yet visited. Similar findings were found in another study in concerning the importance of first and frequent dental visits, 99% of mothers were aware about the importance of frequent visits to the dentist (Abduljalil & Abuaffan, 2016).

Different materials were used by mother for cleaning of their children teeth 33.1% (n=41) mother says we use tooth paste to clean our children teeth, 41.9% (n=52) mother says we use tooth powder to clean our children teeth, and 25.0% (n=31) mother says we use any other than the above to clean our children teeth. Another study conducted in Kashmir which explore that majority (81.0%) of mothers used tooth brush and tooth paste for cleaning their children's teeth and for

frequency of brushing, 57.8% of mothers reported that only once a day (Sultan Ain & Gowhar, 2016).

The tooth paste contain fluoride or not, 35.5% (n=44) mothers says tooth paste contain fluoride, 33.9% (n=42) mothers says tooth paste do not contain fluoride and 30.6 % (n=38) mothers do not know about fluoride in tooth paste. Similar finding show by another study conducted in Bangalore show that most of the mothers answered that they rarely or never use fluoridated tooth pastes (29.76%). Study in Kolkata revels that 50.9% of mothers said they used fluoridated tooth paste for tooth brushing, reason might be because of lack of awareness of benefits of fluoridated tooth paste (Jain & Chitguppi, 2015).

Conclusion:

This is a cross sectional study conducted in Lahore school of nursing, the University of Lahore. Aim of this study is to explore knowledge attitude and practice of mothers toward children oral health. 124 mothers from Ali Raza Abad community take part in this study. Data were collected through questionnaire translated from English to Urdu. Most of the participant were age 35 and illiterate.

This study found comparatively low level of knowledge, attitude and practice of mothers to children oral health. The government and public health sectors should have to held proper health education in this community.

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PROFORMA/QUESTIONNAIRE

Questionnaire:

Knowledge of mothers toward their children oral health

S#NO	Description					
1	How many milk teeth are there in a child's mouth	10 41.9%	12 34.7%	20 5.6%	28 12.9%	I don't know 4.8%
2	Does the tooth paste contain fluoride?	Yes 35.5%	No 33.9%	I do not know 36.3%		
3	What is the role of the fluoride in the tooth paste?	Prevents tooth decay 28.2%	Prevents gum problems 33.9%	Gives freshness 23.4%	I don't know 14.5%	
4	What is the most common dental disease in the child?	Tooth decay 31.5%	Bleeding gums 33.9%	Discolored tooth 16.1%	I don't know 18.5%	
5	Which of the following food items can lead to tooth decay?	Chocolates 24.2%	Bakery products 37.9%	Soft drinks 29.0%	All of the above 6.4%	I don't know 2.4%
6	Which of the following do you think prevents the tooth decay?	Restricting sweets 19.4%	Tooth brushing 39.5%	Regular dental visits 25.8%	Fluoridated tooth paste 7.3%	I don't know 8.1%
	Causes for gum disease?	Improper brushing	Tartar	All of the above	I don't know	

7		22.6%	31.5%	23.4%	22.6%	
8	Which of the following do you think prevents the gum disease?	Regular brushing and mouth wash 27.4%	Professional cleaning 33.9%	All of the above 16.9%	I don't know 21.8%	
9	Which of the following can lead to irregular teeth?	Thumb sucking 27.4%	tongue thrusting 38.7%	All of the above 17.7%	I don't know 16.1%	
10	Can irregularly placed teeth be aligned in the correct position?	Yes 27.4%	No 41.9%	I don't know 30.6%		

Attitude of mothers toward their children oral health

12	It is necessary to take the child for regular dental visits	**Agree.** 67.7%	**Uncertain** 23.4%	**Disagree** 8.9%
13	Cleaning of the child's teeth should be done by mothers Disagree	62.1%	25.8%	12.1%
14	It is necessary to clean the child's teeth after every meal	57.3%	17.7%	25.0%
15	Milk teeth do not require good care as it is going to fall anyway	62.9%	27.4%	9.7%

17	Good oral health is related to the good general health	58.1%	25.8%	16.1%
18	Healthy milk teeth are essential for children to chew the food properly-	66.1%	25.8%	8.1%

Practices of mothers toward their children oral health

19	When was the child's first dental visit?	6 months after birth. 62.1%	After the eruption of first milk tooth. 21.0%	1 year after birth 14.5%	Not yet visited 2.4%	
20	When do you take your child to visit the dentist?	Only during problems 44.4%	Every 6 months 29.8%	Every 1 year 22.6%	Not particular 3.2%	
21	When did you commence the cleaning of your child's teeth?	Soon after first milk 26.6%	After 4-6 milk teeth eruption 42.7%	After all milk teeth eruption 28.2%	After first birthday of the child 2.4%	
22	Which of the following aids are used to clean your child's teeth?	Finger	Tooth brush 36.3%	Twig	Any other	

		32.2%		26.6%	4.8%	
23	How many times do you brush your child's teeth?	Once in a day 20.2%	Twice in a day 49.2%	After every meal 15.3%	Not particular 15.3%	
24	When do you change your child's tooth brush?	Once in 15 days 30.6%	Once in a month 43.5%	Every 2-3 months 18.5%	Once the bristles fray out 7.3%	
25	What material do you use to clean your child's teeth?	Tooth paste 33.1%	Tooth powder 41.9%	Any others 25.0%		
26	Does your child rinse the mouth after eating/drinking?	Yes 45.3%	No 33.1%	Sometimes 16.1%	I don't know 5.6%	
27	At what time do you give the sugary food items to your child?	With meals 33.9%	In between meals 33.9%	Before going to bed 30.0%	Not particular 1.6%	