



An assessment of Knowledge ,Attitude ,and Practice of Libyan Mothers towards the Oral Health of Their Children

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**This Thesis was submitted in Partial Fulfillment of the
Requirement of Master Degree of Dental Science in
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University of Benghazi



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DEDICATION

I would like to dedicate this thesis to my father's and mother's souls , my helping brother Dr. Islam , my supporting husband , my family and my colleagues for endless support and encouragement .

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First of all I thank Allah the most gracious for helping me to accomplish this research and for providing me with such very encouraging and supportive supervisors.

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TABLE (List) OF CONTENT

Contents	Page No.
Copyrights 2021.....	II
Examination Committee.....	III
Dedication.....	IV
Acknowledgements.....	V
List of content.....	VI
List of tables.....	VIII
List of figures.....	IX
List of abbreviations.....	X
Abstract.....	XI
Chapter 1 : Introduction.....	1
Chapter 2: Literature Review.....	5
2.1 Early Childhood Caries.....	6
2.2 Caries Process.....	6
2.3 Childhood as critical stage of dental caries.....	9
2.4 Prevalence of dental caries globally.....	10
2.5 Risk factors of dental caries.....	12
2.6 Role of knowledge ,attitude and practice.....	15
2.7 Knowledge gap.....	18
Chapter 3: Aim and objectives	20
3.1 Aim	21
3.2 Objectives.....	21
Chapter 4: Materials and methods.....	22

4.1 Study design and sitting.....	23
4.2 Participants.....	23
4.2.1 Inclusion criteria	24
4.2.2 Exclusion criteria	24
4.3 Data collection.....	24
4.3,1 Questionnaire development	25
4.3.2 Questionnaire administration.....	25
4.4 Data analysis.....	26
4.5 Ethical considerations.....	27
Chapter 5: Results	28
5.1 Sample description.....	29
5.2 Oral health knowledge.....	31
5.3 Attitude towards oral health.....	33
5.4 Oral health related practices.....	35
5.5 Comparison of knowledge ,attitude and practice	36
5.6 Factors associated with knowledge , attitude and practice.	40
Chapter 6: Discussion.....	43
Chapter 7: Conclusions and recommendations.....	53
7.1 Conclusions.....	54
7.2 Recommendations.....	54
References.....	56
Appendices.....	67
Abstract in Arabic language	

List of Tables

Tables	Page No
5.1 Sociodemographic characteristics of study sample.....	29
5.2 Comparison of respondents' Knowledge scores	37
5.3 Comparison of respondents' Attitude scores.....	38
5.4 Comparison of respondents' Practice scores.....	39
5.5 Comparisons of knowledge ,attitude and practice scores.....	40
5.6 Correlation between Knowledge , Attitude and Practice.....	41
5.7 Correlations between participants characteristics.....	42

List of Figures

Figures	Page No.
2.1 Factors involved in caries development.....	9
5.1 Proportion of respondents who received OHE.....	30
5.2 Knowledge about oral health among study participants	31
5.3 Positive attitude to oral health in preschool children.....	33
5.4 Oral health related practices.....	35
5.5 Average scores for knowledge , attitude and practices.....	36

List of Abbreviation:

Abbreviation	Description
ECC	Early Childhood Caries
PH	Potential of Hydrogen
DMFT	Decayed ,Missing and Filled Teeth
SES	Socio Economic Status
IBM	International Business Machines
SPSS	Statistical Package For Social Science
OHE	Oral Health Education
KAB	Knowledge, Attitude and Behavior
COM-B	Capability , Opportunity , Motivation , Behavior

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Abstract

Objectives:

To asses the knowledge, attitude and practice of Libyan mothers towards the oral health of their children, which may be the first step in identifying areas of weakness and trying to change behaviors in order to develop proper oral health outcomes for children in the society.

Methods:

Across sectional survey was conducted among a convenience sample of Libyan mothers of preschool children attending public and private health clinics at Benghazi city, during the period between January and June 2021. Self-administrated questionnaire consisting of four sections including 29 questions which took about 10 minutes to complete, was used for data collection. The data was analyzed using SPSS25 software. All statistical tests were set 0.05 significance level.

Results:

A total of 402 Libyan mothers, who were 19 to 52 years old. The majority of respondents were housewives (230,57.2%) who had university education (226,56.2%). Most of participants (363,90%) reported that they did not receive oral health education. In general mothers showed average knowledge score (5.1 ± 1.8) and lower attitude (3.7 ± 1.0), and Practice (2.9 ± 1.1) scores. Significant association found between dental health knowledge, attitude and practice and mothers' education. In addition, mothers who attend public clinic and those who have 3 children or more showed significantly better oral health practices ($p \leq 0.05$).

Conclusion:

The present study showed that Libyan mothers have generally inadequate knowledge, non-positive attitude and poor behaviors in relation to oral health of their children. Education and family sized appeared to influence oral health related behaviours.

CHAPTER 1 INTRODUCTION

Oral health is an important component of overall health, and poor oral health for young children can have significant negative consequences for general, social, physical, and emotional development (Abuaffan, 2016). Recently, the World Dental Federation has adopted a new definition of oral health which depicts the multifaceted nature of oral health and incorporates its external influences and the concept of quality of life. The new definition acknowledges the importance of healthy mouth to individuals' general health and wellbeing and their ability to feed, talk and interact socially.

The foundation for healthy permanent teeth in children and teenagers is laid during the first years of life. Poor diet, poor habits of food intake and inadequate tooth brushing habits during the first 2 years of life have been shown in several studies to be related to tooth decay in children.

The development of caries in primary teeth further increases the risk of developing caries in permanent teeth. Therefore, it is essential to establish a proper oral hygiene routine early in life to help ensure the development of strong and healthy teeth.

Parents, as consistent role models, are key for setting a daily routine and to making their children understand the importance of oral hygiene.

Tooth brushing should be presented as a habit and an integral part of the daily hygiene routine. Children are very sensitive to social stimuli such as praise and affection, and learn best by imitating their parents. Physiological and mental development affects the oral care of children.

Childhood and adolescence are sensitive periods for education, learning about health-related behaviors, hygiene habits which depend on parental education and their social status and oral health beliefs(Heilmann, Tsakos, & Watt, 2015).Therefore, maintenance of good oral health at early childhood will eventually lead to better quality of life and build the foundation for maintaining optimum oral health throughout life (Chandran et al., 2019).

In fact, parents take responsibility for supervising their child's and building appropriate habits in early life (Dean, 2021). Maintenance of oral health should start before the first tooth erupts. Most studies suggest that the cariogenic bacteria can be acquired at any time from under six months to over three years of age (Shinde et al., 2018).

In addition, several studies have shown that improper frequency of diet, unhealthy eating habits, and inadequate oral hygiene measures during the first three years of life are related to tooth decay in children which

increases the risk of developing caries in permanent teeth and thus affecting the quality of life (Dawani et al., 2012; Shinde et al., 2018; Tinanoff & Palmer, 2000) .

Parents have a key role in helping their children to develop a proper oral hygiene routine in the first years of their life. Parents should supervise their children's tooth brushing approximately for the first 12 years, until the child become able to perform a proper tooth brushing. Parents have to continue supervising the regular brushing efforts of their children until eruption of the second molar. However, to do this, parents should have the appropriate knowledge and attitude to play their role in developing and shaping health habits of their children. Understanding the levels of knowledge, attitude and practices of caregivers with respect to their children's oral health care is the first step in developing oral health education program and identifying community needs in order to set oral health goals.

CHAPTER 2: LITERATURE REVIEW

2.1 Early childhood caries

The Early Childhood Caries (ECC) is defined as “the presence of one or more decayed (non-cavitated or cavitated lesions), missing (due to caries), or filled surfaces, in any primary tooth of a child under age six” (Drury et al., 1999). However, ECC is a form of dental caries which is a biofilm-facilitated, sugar-fuelled, multifactorial, dynamic disease, characterised by alternative episodes of demineralization and remineralization of tooth hard tissues. It can occur at any age in primary teeth and can cause permanent damage to tooth crown or root.

However, dental caries process can be stopped or reversed unless it reached the final irreversible phase of cavity formation because of persistent imbalance between multiple pathological and protective factors of dental caries. Among the multi-factorial determinants of dental caries, lifestyle and behavioural factors are major contributors to its occurrence and severity (Robert H Selwitz, Amid I Ismail, & Nigel B Pitts, 2007). However, dental caries is a preventable disease provided that its risk factors are controlled.

2.2 Caries process

The bacteria in dental plaque ferment dietary sugars to release organic acids as metabolic that reduce the concentration of Hydrogen ion (pH) and consequently loss of tooth minerals from the enamel when the PH drops

below 5.5 (Arens, 1999). This decline in pH happens within 3-5 minutes after the exposure to fermentable carbohydrates and stays below the critical level for 20 minutes. Buffering effect of saliva in an increase in pH and a remineralisation (precipitation of minerals) of tooth surface from calcium and phosphate and possibly fluoride if they are available in the oral environment (J. D. Featherstone, 2008). A full recovery to the resting levels occurs after 45-60 minutes (Rugg-Gunn & Nunn, 1999).

Dental caries is a continuous disease process, with alternating episodes of demineralisation and remineralisation of dental hard tissues. The initial stages of caries are asymptomatic, with symptoms starting after the carious lesion has progressed into dentine (Robert H Selwitz et al., 2007). Visible caries (cavity formation) is the last and irreversible phase in this process. It occurs when demineralisation outstrips remineralisation. A sustainable pH below 5.5 results in net mineral loss. Until this point, an intervention can be made, the demineralisation can be reversed, and cavity formation avoided, by interfering with or eliminating factors fostering the demineralisation (J. Featherstone, 2004; J. D. Featherstone, 2008).

There are several modifying factors which can faster or counterbalance the effect of pH drop and hence tip the caries process toward either demineralisation or remineralisation (R. H. Selwitz, A. I. Ismail, & N.

B. Pitts, 2007). For example, while the availability of calcium and phosphate in saliva is an important contributor in remineralisation and recovery of plaque pH to its resting level following the exposure to fermentable carbohydrates (Stookey, 2008), the diminished or impaired salivary flow increases food retention and encourages a cariogenic environment (Kidd, 2005). Similarly, the use of fluoride increases enamel resistance to acid dissolution by lowering the critical pH and enhancing remineralisation (J. D. Featherstone, 2008). On the other hand, teeth that have thin enamel, immature enamel or enamel defects such as hypoplasia are less resistant to bacterial demineralisation (Tinanoff, Kanellis, & Vargas, 2002) (Figure 2-1).

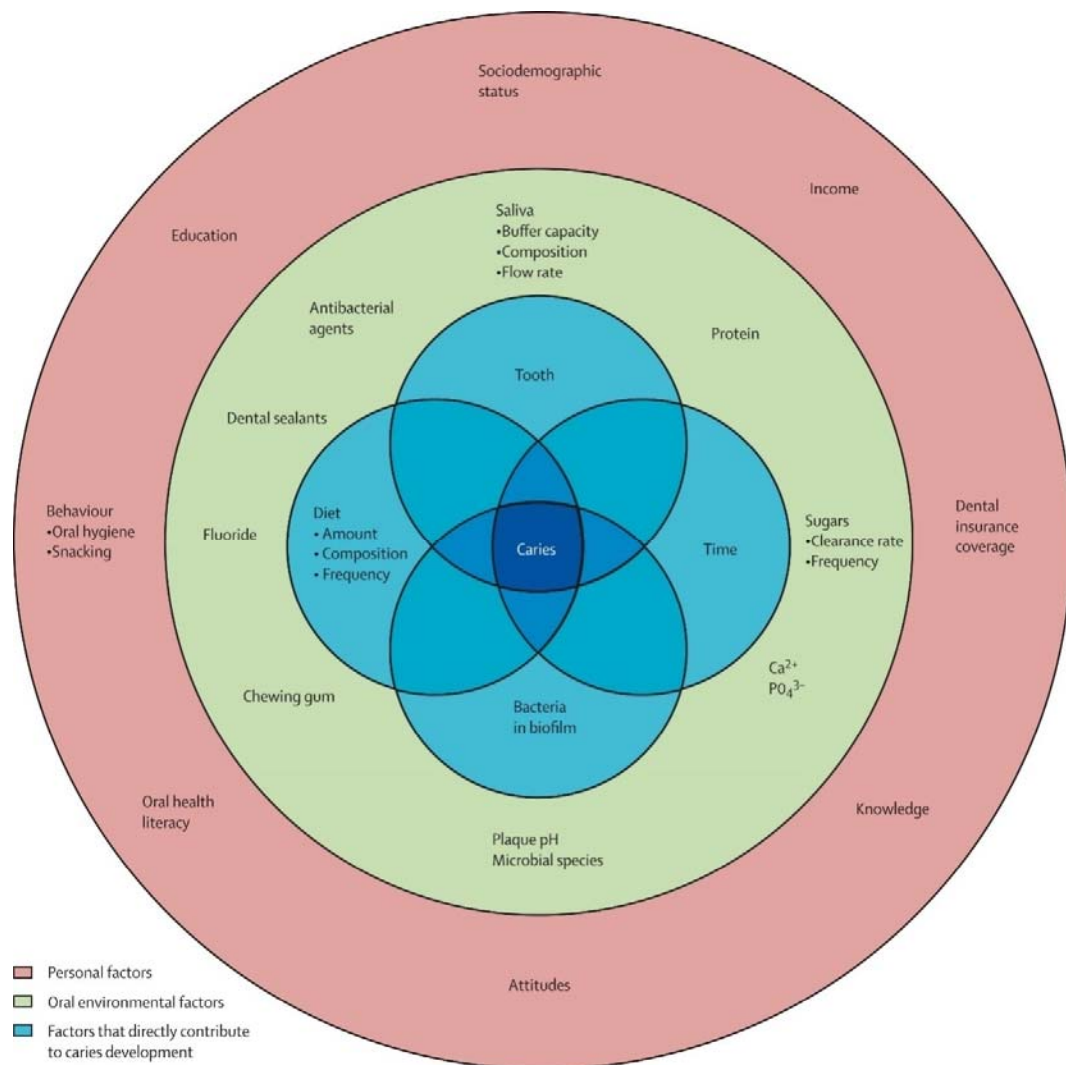


Figure 2-1: Factors involved in caries development

(Adopted from Selwitz et al. (2007))

2.3 Childhood as critical stage for dental caries development

Epidemiological data and evidence from longitudinal studies show that dental caries is more likely to develop within the first few years after eruption (Brian A Burt & Eklund, 2005; Mejare et al., 2014), particularly

among those who high risk groups of dental caries (Manji & Fejerskov, 1994). Several reasons have been given in the literature to explain this phenomenon. However, the most acceptable one is that the newly-erupted teeth have porous enamel and hence are at higher risk of developing caries because they easily demineralised(Lynch, 2013). what is more important is that cariogenic bacteria can be transmitted by saliva to the newly erupted teeth where they find suitable niches for growth and flourish. Caries in primary dentition is, therefore, a key predictor of caries in permanent teeth. Past caries experience has been recognised as the single best predictor for developing dental caries later in life (Brian A Burt & Eklund, 2005; Mejare et al., 2014). A higher caries experience in permanent dentition has been observed among children with high numbers of cariogenic bacteria in their primary teeth (Zickert, Emilson, & Krasse, 1982).

2.4 Prevalence of dental caries globally

Caries is the 4th most expensive chronic disease to treat according to the WHO (Petersen, 2008). Furthermore, if left untreated, caries may cause severe pain and mouth infection (Robert H Selwitz et al., 2007), which affects children's school attendance and performance (Jackson, Vann Jr, Kotch, Pahel, & Lee, 2011).Dental caries is an ubiquitous, global, dynamic, disease which still represents a considerable burden for many individual

patients and groups in society' (Robert H Selwitz et al., 2007). Oral diseases such as dental caries are major public health problems worldwide and poor oral health has a profound effect on general health and quality of life (Petersen, 2003). Caries is the 10th most prevalent of all the 291 oral diseases and injuries in primary teeth and affecting 621 million children worldwide 9% of the global population (Marcenes et al., 2013).

There are a handful of studies that addressed the prevalence and severity of dental caries in primary dentition among Libyan children. A study by Hawew et al., (1996) reported that the prevalence of dental caries of 6 and 12-year-old children in two cities in Libya was 39% in Jardinah, with mean dmft 1.07 and DMFT 0.87, and 48% in Benghazi, with mean dmft 2.32 and DMFT 1.17. A study by Al-Shabarti et al. carried out in 1993-1994 but published in 2000 with sample of 762, 6–12-year-old schoolchildren in Benghazi showed that the prevalence of dental caries was 61.9 %. The most recent paper on prevalence of caries in preschool children dated back to 2003. Of 685 preschool children included in the study, which was conducted in Benghazi, 58% of children had carious primary teeth with mean dmft of 2.58 (Ingafou et al., 2003).

2.5 Risk factors of dental caries

Dental caries is a multi-factorial disease with many factors related to individual's characteristics, behaviours and oral environment affecting the initiation and progression of dental caries. It is well recognized that oral health behaviours comprise a key determinant of dental caries, with regular brushing, using fluoridated toothpaste; regular dental visits and less consumption of sugars being the main favourable behaviours associated with lower risk of dental caries. Administering a pacifier dipped in sugar substance to the child were associated with overall caries experience (Declerck et al., 2008; Slade et al., 2006). It is suggested that cooling the child food by mothers mouth is a risk factor, as the principal source of bacterial infection of the child is via 'vertical transmission' from mothers or the primary caretaker (Caufield, Cutter, & Dasanayake, 1993; Milgrom et al., 2000).

The socio behavioural risk factors have been found to play significant roles in the occurrence of dental caries in both children and adults worldwide (Petersen, 2005). The results of a review paper on the prevalence of childhood dental caries in 22 different countries confirmed that ECC is related to the SES level of the family strictly (Bernabeé & Hobdell, 2010). A previously published comprehensive review including studies from Europe,

Africa, Asia, the Middle East and North America reported many risk factors are associated with ECC, but the main one is low socioeconomic status of the parents, with a prevalence of ECC is about 70% in socially disadvantaged groups (Milnes, 1996). Several studies over years demonstrate that the socioeconomic status is the fundamental factor related to dental of caries. The significant association between social class (household employment) and caries experience proved to be twice that of the association between tooth brushing and caries and nearly three times that between sugar confection and caries (Gibson & Williams, 1999).

By searching in the literature many systematic reviews were conducted to review the association between dental caries and socioeconomic status (oral health inequalities), dietary and oral behaviours. A systematic review evidence of dental caries related risk factors included seventy-three studies and reported 106 risk factors having noticeable association with caries in children of 6 years and younger. Low parental or maternal education (in 11 studies) and low income (in 4 studies) were significant risk factors. More frequent sweetened snacks especially between meals (in 9 studies), long duration of breast feeding for more than 12 months (in 11 studies), nocturnal breast (in 1 study) and bottle feeding (in 9 studies),

frequency of teeth brushing (in 11 studies) and age of starting brushing indicated as main factors associated with ECC (Harris et al., 2004).

A more recent review in 2014 confirmed that high prevalence of childhood dental caries is strongly related to the socioeconomic status of the family (parents especially maternal educational level and income) and they are the most decisive factors involved. High frequency consumption of sugary liquid in bottle especially at night and solid sugared snacks between meals considered of the most significant caries risk factors. Furthermore, the results showed an association between the frequency, long duration and nocturnal breastfeeding and high risk for ECC (Congiu, Campus, & Lugliè, 2014).

Dietary habits are significant in the development of chronic diseases and influence the development of dental caries (P. Moynihan & Petersen, 2004). Extravagant sugars amounts and frequency are major causes of dental caries and the risk of caries is high if population exposure to fluorides is inadequate (Petersen et al., 2005).

Despite of the well-known relation between high sugar consumption and high caries levels, there an evidence of balance between good and bad habits by way between consistent and frequent teeth brushing and highly

cariogenic diet appear to be important in regard to caries (Wendt et al.,1996).

2.6 Role of parental knowledge, attitude and practice:

It is widely acknowledged that the behavior of parents, and in particular mothers, who play a critical role in a child's development and health ,as they are the main caregivers of oral health to their children during the early childhood , even in preschool, mothers are still the main supplier of children's oral health (Chala et al.,2018; Chandran et al., 2019).A significant relationship has been reported between parental frequency of tooth brushing and child frequency of tooth brushing (Bozorgmehr et al., 2013). Also, an inverse relationship was found between mean dmft, caries prevalence, mean plaque score in children and mother's knowledge, attitude and practices about oral health and the findings were highly significant .(Kshetrimayum et al., 2014) Therefore, it has been suggested that Dental health education in the first place begins from mothers awareness regarding oral health , hence their oral health knowledge and attitude towards dental care acts as a significant predictor of their children's oral health (Krishnan et al., 2019). lack of knowledge in part combined with negative attitude and wrong behaviors (in the form of poor feeding practices, poor oral hygiene maintenance, and failure to seek professional dental care) appear to place a

given child at a higher risk of developing dental diseases than other children with more care (Abuhaloob et al., 2019; Kowash et al., 2017; Oredugba et al., 2014a).

Several studies have investigated parental knowledge and attitude towards oral health of their children. (Moallemi et al, 2008) reviewed dental literature about mothers knowledge of and attitudes towards their children oral health, and concluded that Mothers' higher level of oral health knowledge and better attitude scores were associated with children's sound dentition , while only mothers' better attitude was associated with children's twice-daily tooth brushing .(Z. Saied-Moallemi 2008)

A Cross-sectional study was made among 372 randomly selected parents/guardians in Moshi, Tanzania, 2009 reported that the oral health knowledge was generally poor, more parents/guardians with secondary education showed relatively better dental knowledge than those with primary education. While the majority of the parents/guardians gave positive to maintaining teeth for life for themselves and for their children, a moderate number of respondents reported supervising their children during tooth brushing, though the majority said that their children brushed less than twice a day (NG'ANG'A, 2009). Likewise, a study conducted in Kuwait, in which 334 caregivers of children under the age of 6 years were surveyed, showed

that caregivers with higher education had better knowledge and practices. Education and attitude appeared to be potential indicators of the caregivers' practices with regard to the oral health of their preschool children.(F. Ashkanani & M. Al-Sane, 2013).

However, the knowledge and attitude towards oral health vary within and between countries. For example, In Mathura, India 2010, a cross sectional study of a sample comprised 406 mothers, with the mean age of children being 3.8 years, found that most of mothers had a good knowledge about dietary practices, while around quarter of the mothers had a good knowledge about the importance of oral hygiene practices and importance of deciduous teeth, respectively.(Suresh et al., 2010).

On the other hand, another survey conducted in Maharashtra, India 2014, the level of knowledge and attitude among parents were relatively low (Bodhale, Karkare, & Khedkar, 2014).

In addition, studies conducted in Pakistan (Huma Farid, 2013; Mubeen, 2016), Thailand (Suwansingha & Rirattanapong, 2014), India (Shetiya et al., 2018; Thomas et al., 2015) and Nigeria (Oredugba et al., 2014b), surveys of mothers revealed that majority of the mothers had poor oral health related knowledge and attitude. There was a lack of sufficient

knowledge regarding timings of the children's first dental visit and preventive dental care such as limiting frequency of in-between meals snacks consumed by their children, and prolonged bottle feeding beyond the recommended age. However, other studies conducted in other countries such as Saudi Arabia found that mothers had good knowledge about dietary practices and oral hygiene practices, though more than half of them do not know when to start child mouth cleaning, first visit to dentist and transmissibility of caries, as well as the frequent consumption impact on dental caries(Almalki et al., 2021; Mona et al., 2015). Similar observation was reported among Sudanese mothers (S. Abduljalil & H. Abuaffan, 2016) and United Arab Emirates (Mahmoud et al., 2017).

2.7 Knowledge gap

So far, little is known about knowledge, attitude and practice of Libyan mothers toward the oral health of their children. However, recent studies in Libyan children suggest high rates of dental caries. Data collected from six-year-old children in 2017 in Benghazi, found that 71% of pre-school children had dental caries at dentine level, which was positively associated with daily consumption of sugary snacks and a negatively with tooth brushing twice daily(Ballo, Arheiam, & Marhazlinda, 2021). This highlights the need to assess how prepared are parents in this area in order to

develop health education and promotion programs to tackle the widespread dental caries in Benghazi.

CHAPTER 3: AIMS AND OBJECTIVES

Aim and Objectives

3.1 Aim

The general aim of the present is to investigate the knowledge, attitude and practice of Libyan mothers towards oral health of their children.

3.1 Objective

1. Explore oral health related knowledge, attitude and practices among Libyan mothers in Benghazi.
2. To explore the proportion of mothers who received oral health education and its influence on their knowledge, attitude and practice.
3. To explore the association between knowledge, attitude and practice .
4. To explore factors associated with knowledge, attitude and practice.

CHAPTER 4: MATERIALS AND METHODS.

This study assessed knowledge, attitude and practice of mothers regarding oral health of preschool children. The study used a paper-based questionnaire and targeted dental patients in public and private clinics in the city of Benghazi.

4.1 Study design and setting

A cross-sectional, descriptive study using paper-based questionnaire was used in the present study. This design is deemed appropriate for such type of studies seeking knowledge, attitude and practice of participants. The study was conducted in public and private health care institutions at the city of Benghazi during the period between January and June 2021. The city of Benghazi is the second largest city in Libya and hosts nearly million inhabitants. The health care is provided through a hybrid system comprising both private and public sectors. Maternity care is provided free in the public sector.

4.2 Participants

A convenience sample of mothers of pre-school children who visited maternity, dental, and vaccine units were invited to take part in the study. A study sample of 384 participants was found to be enough to estimate the proportions of mothers who have knowledge about oral health of their preschool children at 95% confidence level and 0.05-error margin. The

participants were recruited from two dental facilities in public (Ras-Abida) & private (Al nokhba1) health sectors in Benghazi, according to following inclusion and exclusion criteria. Five hundred questionnaires were distributed in order to compensate for potential non-response.

4.2.1 Inclusion criteria:

- Libyan mothers .
- Have at least one pre-school child .
- Provided consent to take part in the study.

4.2.2 Exclusion criteria:

- Married woman who had no children.
- Declined to take part in the study.
- Non-Libyans.
- Mothers who are not able to respond to questions.

4.3 Data collection:

The data was collected using a paper-based questionnaire that covers the knowledge, attitude and practice of mothers in relation to oral health of pre-school children.

4.3.1 Questionnaire development

A simple structured and direct questionnaire written in Arabic Language was developed from previous studies. All questions were close ended. The questionnaire was pretested and validated among thirty mothers to assess the validity and reliability. It was easy to understand and no modifications were needed. Therefore, the data obtained from the pilot study were included in the final analysis. The final questionnaire comprised of four sections including 29 questions of demographic characteristics of participants, knowledge, attitude and practice. The responses for the attitude questions were rated a 3-point Likert scale(disagree, agree and uncertain).

An additional question was added to inquire previous exposure to oral health information (Appendix I). The questionnaire took about 10 minutes to complete.

4.3.2 Questionnaire administration

The main researcher approached the mothers and explained the aim of the study. Those who satisfied the inclusion criteria were asked to complete the questionnaire as one-to-one interview in the waiting room. This allow the respondents to clarify questions and provide appropriate answers. After completing the questionnaire, the participants were give instruction on how to maintain oral health of their children.

4.4 Data analysis

The data used for analysis were uploaded on excel sheet and given a numerical code for the responses of each question. Subsequently, all the coded data were entered into computer employing Statistical Package for Social Science software version 25 (IBM SPSS version 24). Scores for knowledge, attitude and practice were created by summing the appropriate responses for question in each category(knowledge:11 items, attitude: 7 items and practice: 8 items). Descriptive statistic was employed to describe the variables. Mean and standard deviation were used for numerical data (age, knowledge score, attitude score and practice score), while frequency and percentage were used to describe categorical data. Later, normality test (skewness and kurtosis tests) were performed to determine either parametric or non-parametric tests should be used to analyze the data. The data was not normally distributed and hence non-parametric tests (Mann-Whitney U and Kruskal Wallis tests were used). Bivariate correlation using Pearson correlation coefficient was employed to assess correlation between knowledge, attitude and practice. All statistical tests were conducted at 0.05 level of significance

4.5 Ethical considerations

An ethical clearance was obtained from the Research Committee, Faculty of dentistry, University of Benghazi. A letter describing the aim of the study was sent to the heads of the selected public clinic and private clinic in order to accomplish this study. In addition, a verbal consent was obtained from the selected mothers by the main researcher after explaining the purposes of the study during the direct interviewed questionnaire.

CHAPTER 5: RESULTS

5.1 Sample description:

Table 1 shows the distribution of study precipitants. A total of 402 questionnaires were analysed, which gives a response rate of 80%. The majority of respondents (246, 61.2%) were dental patients at public clinics, (226, 56.2%) University educated,(230,57.2%) housewives, and (239, 59.5%) have 3 or more children. The respondent age ranged between 19 and 52 years of age with an average of 34.4 years.

Table 1: Sociodemographic characteristics of study sample (N=402)

Variable		N	%
Education	Less than University	176	43.8
	University or Higher	226	56.2
Clinic	Private	156	38.8
	Public	246	61.2
Number of Children	2 or less	163	16.4
	2	97	24.1
	3 or more	239	59.5
Job	Housewife	230	57.2
	Working mother	172	42.8
Age	Mean (SD)		Min-Max
	34.4 (6.81)		19-52 years

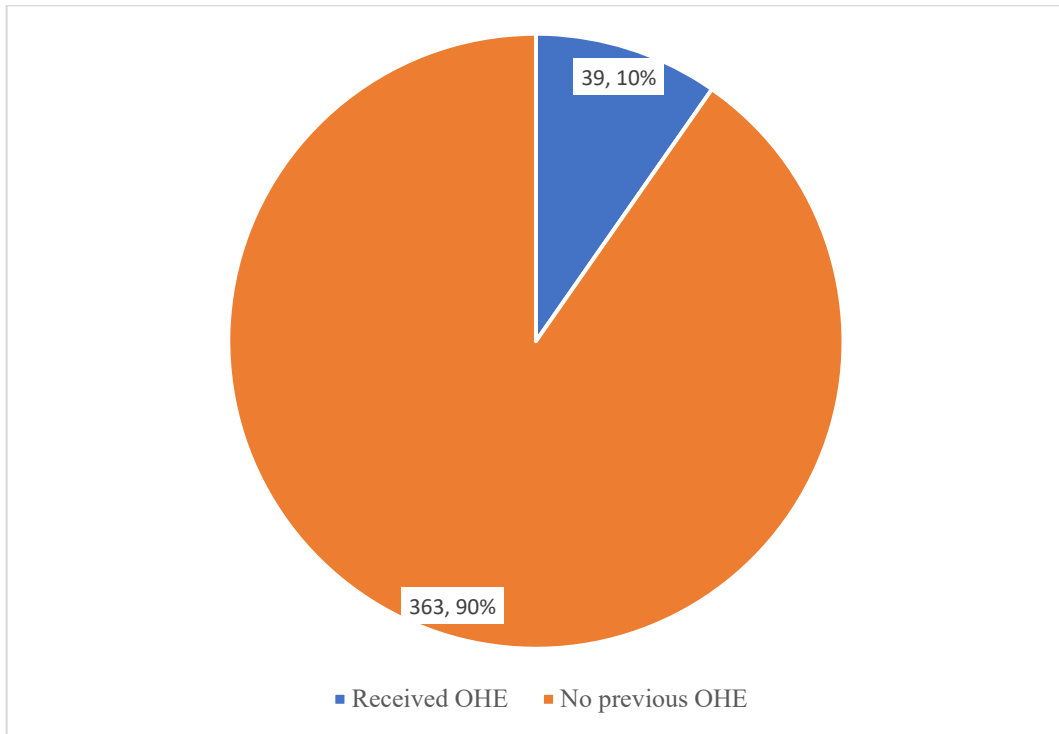


Figure 1: Proportion of respondents who received OHE

Figure 1 shows most of participants (90%) did not received OHE before .

5.2 Oral health Knowledge

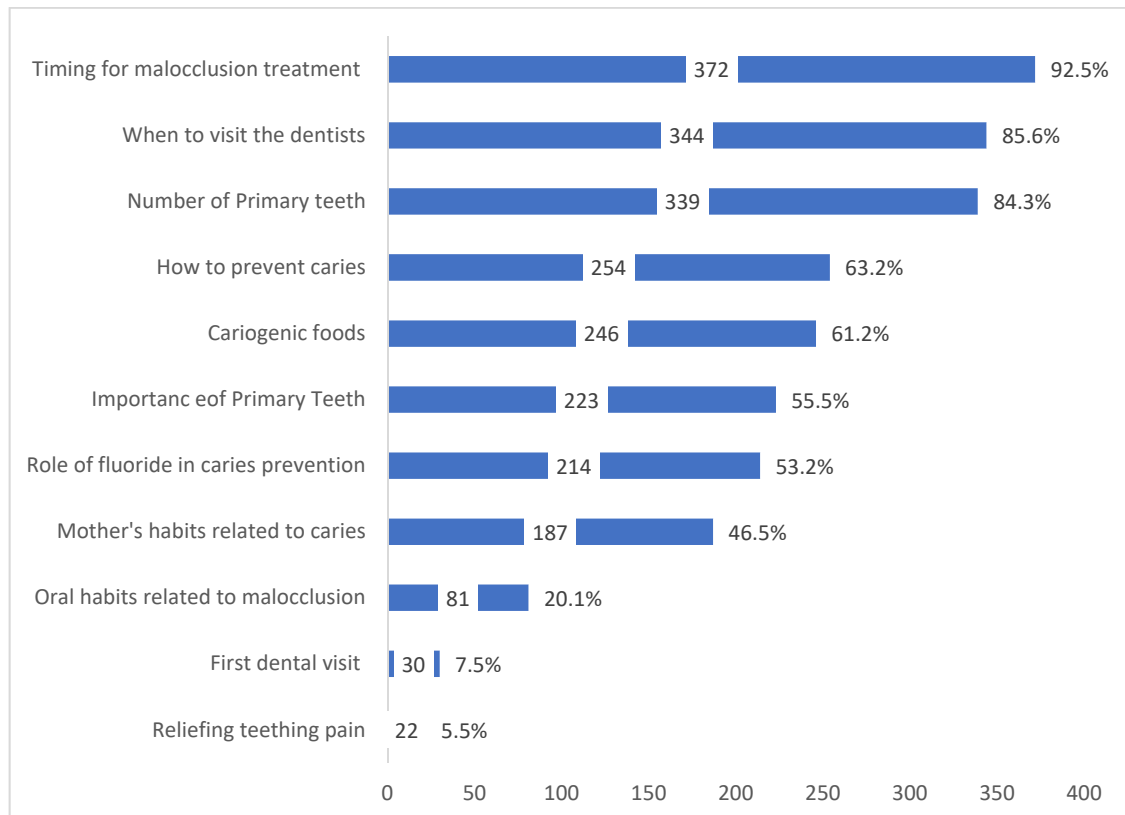


Figure2: Knowledge about oral health among study participants (n=402)

Figure 2 depicts responses to appropriate answers to oral health knowledge questions. Most of respondents knew the number of primary teeth (84.3%), and were aware of oral health problems that mandates visiting the dentist (85.65). On the other hand, very small proportions of respondents know to relief teething pain (5.5%) and when the first dental visit should be made (7.5%). A small number of the participants reported knowledge of the unhealthy impacts of oral habits (20.1%). More than half of the participants demonstrated acceptable knowledge on the role of fluoride, cariogenic foods

and the importance of primary dentition. However, less than half (46.5%) of the respondents know the impact of mother's habits on caries process.

5.3 Attitude towards oral health

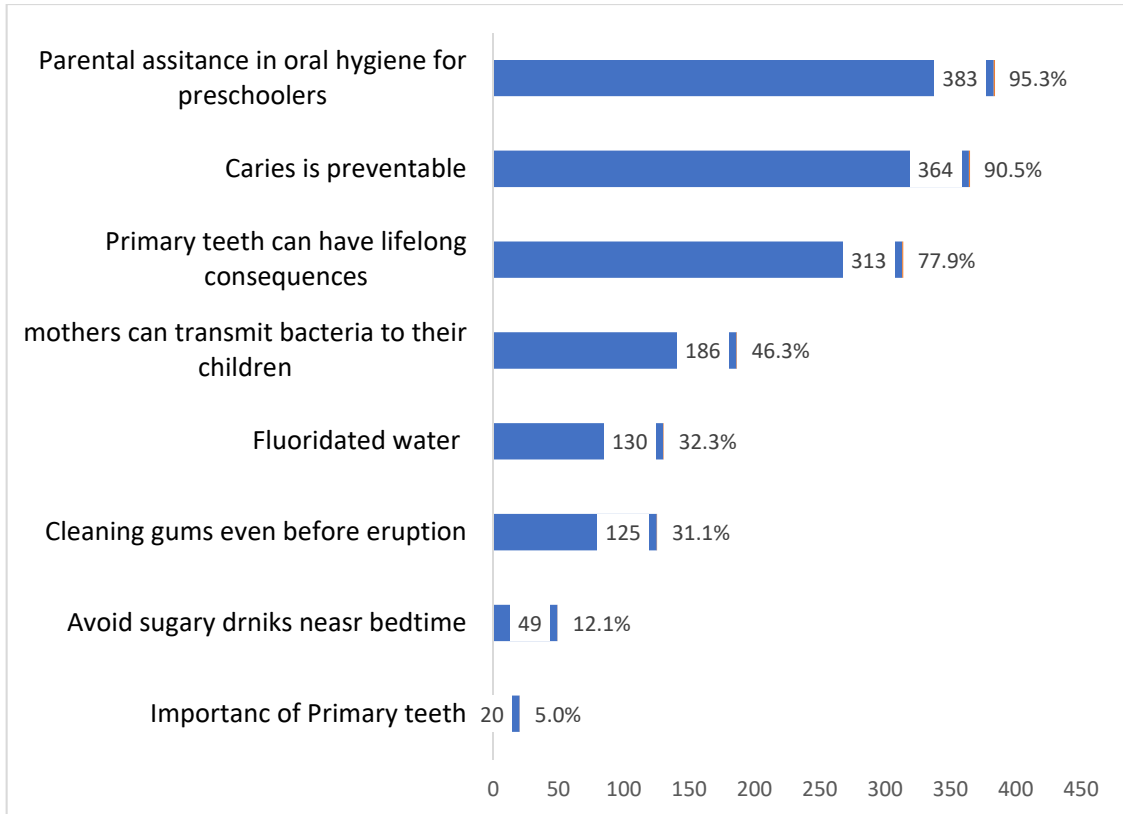


Figure 3: positive attitude to oral health in preschool children

The attitude to oral health was presented in figure 3 that shows the proportions of participants who showed positive attitude towards statements on oral health among preschool children. The least positive attitudes were observed in relation to importance of primary dentition (5%), and near bed intake of sugars (12%). Less negative attitudes were related to water fluoridation and oral hygiene before eruption of primary teeth (31% & 32%, respectively).

Coversly, the most positive attitudes were related role of parents in maintaing oral hygiene of their children (95.3%) and the fact that caries is prevntable (90.5%).

5.4 Oral Health related Practices

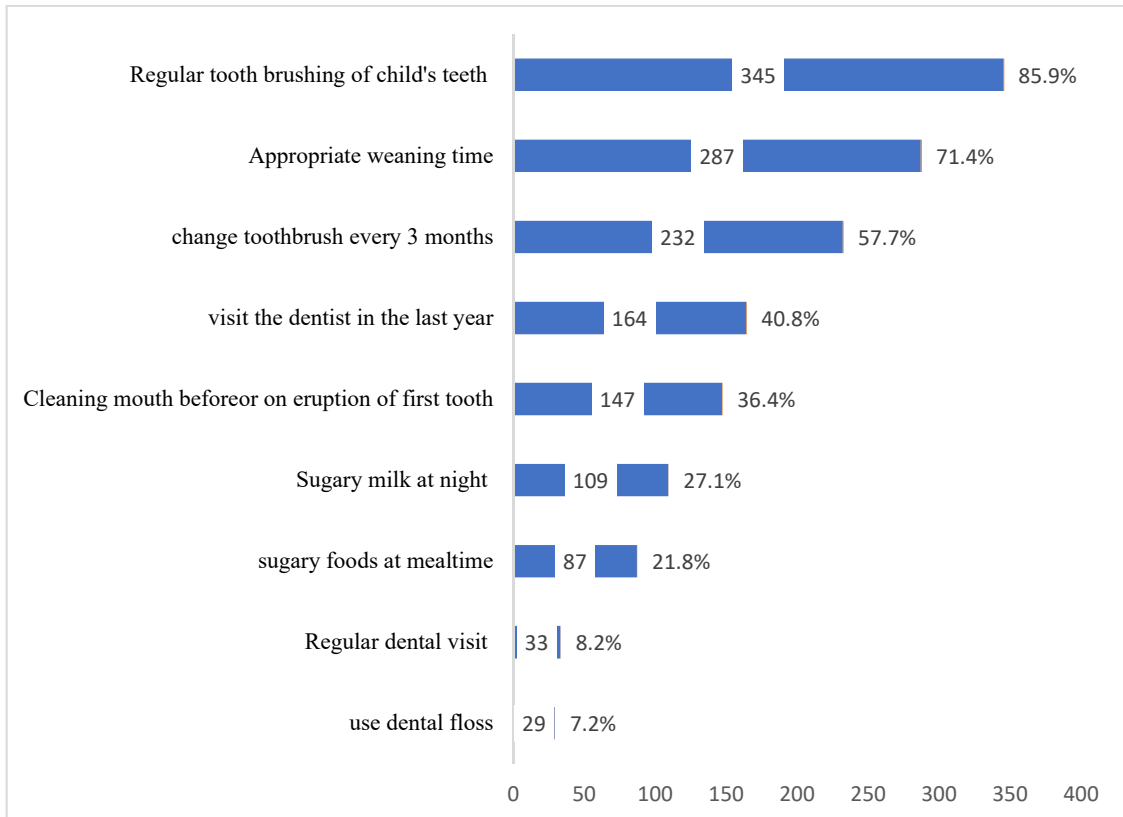


Figure 4: preschool children practices related to oral health .

Most of the parents (Figure 4) indicated that their children practiced tooth brushing on daily basis once or twice (85.9%), that they weaned their children with first year of life (71.4%). The majority of respondents indicated that they change the tooth-brush every 3-months (57.7%). Very small numbers of participants use dental floss (8.2%), and visit the dentist regularly (7.2%) whereas less than the quarter of them avoid sugary foods at night (27.1%).

5.5 Comparison of Knowledge, attitude and practice

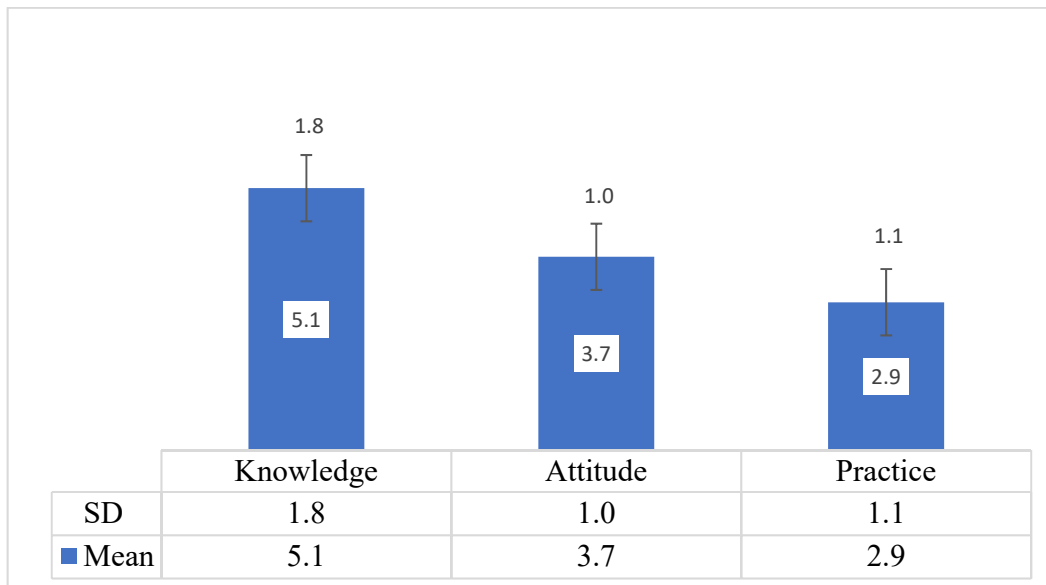


Figure 5: average scores for knowledge, attitude and practices

Figure 5 shows the average score for knowledge, attitude and practice related to oral health in preschool children. The range for knowledge and attitude was between zero and six, whereas the range for knowledge score was 0-10. The average knowledge score was (5.1 ± 1.8) , and (3.7 ± 1.0) and (2.9 ± 1.1) , for attitude and practice respectively.

Comparisons of knowledge score by Participants' characteristics indicates significantly higher score among University educated mother ($p=0.027$). The differences according by other attributes were not statistically significant and negligible (Table 2).

Table 2: Comparison of respondents' knowledge scores (n=402)

Variable		Knowledge Mean (SD)	P value
Education	Less than University	4.83 (1.85)	0.027*
	University or Higher	5.25 (1.79)	
Clinic	Private	5.12 (1.84)	0.501
	Public	5.03 (1.81)	
Number of Children	2 or less	5.21 (1.79)	0.199
	3 or more	4.96 (1.84)	
Job	Housewife	4.94 (1.87)	0.097
	Working mother	5.23 (1.76)	
Age	Correlation coefficient		0.847
	-0.01		

Attitude scores were nearly equal among all subgroup (Table 3).

Table 3: Comparison of respondents' Attitude scores (n=402)

Variable		Attitude Mean (SD)	P value
Education	Less than University	3.73 (1.01)	0.902
	University or Higher	3.74 (1.00)	
Clinic	Private	3.74 (1.02)	0.951
	Public	3.73 (0.98)	
Number of Children	2 or less	3.80 (1.03)	0.362
	3 or more	3.69 (1.00)	
Job	Housewife	3.73 (1.04)	0.847
	Working mother	3.75 (0.97)	
Age	Correlation coefficient		0.839
	-0.007		

Regarding the comparison of practices (Table 4), mother who attended to public clinic and those who have 3 or more children showed significantly higher practice scores than private clinic patient and mothers of 2 or less children ($p=0.001$, for both).

Table 4: Comparison of respondents' Practice scores (n=402)

Variable		Practice Mean (SD)	P value
Education	Less than University	2.97 (1.17)	0.064
	University or Higher	2.77 (1.11)	
Clinic	Private	2.65 (1.21)	0.001
	Public	2.99 (1.07)	
Number of Children	2 or less	2.63 (1.23)	0.001
	3 or more	3.01 (1.05)	
Occupational status	Housewife	2.84 (1.19)	0.635
	Working mother	2.88 (1.07)	
Age	Correlation coefficient		0.309
	0.051		

5.6 Factors associated with Knowledge, attitude and practice

Table 5 summarize comparisons of knowledge, attitude and practice scores by previous OHE. Overall, those who received OHE in the past had higher scores for knowledge, attitude and practice.

Table 5: comparisons of knowledge, attitude and practice scores by previous OHE (N=402)

Score	Previous OHE	Mean	SD	P value
Practice	No	2.81	1.12	0.019*
	Yes	3.28	1.21	
knowledge	No	4.99	1.79	0.025*
	Yes	5.79	1.99	
Attitude	No	3.72	1.02	0.303*
	Yes	3.90	0.88	

Independent sample t test was used to compare groups. *. significant at the 0.05 level,

. significant at the 0.01 level*. significant at the 0.001 level,

The correlation test showed that knowledge and attitude are positively correlated ($r= 0.432$, $p=0.001$) but the practice was not correlated with any of them (Table 6).

Table 6: correlation between Knowledge, attitude and Practice

Variable		Attitude	Practice
knowledge	Correlation Coefficient	0.304**	0.02
	P value	0.000	0.689
Attitude	Correlation Coefficient	-	0.07
	P value	-	0.163

Pearson correlation test was used. *. significant at the 0.05 level, **. significant at the 0.01 level***. significant at the 0.001 level,

Table 7 shows positive correlation between education level and visiting private practice and job status ($p=0.000$ & $p=0.003$). negative correlation between private clinic and number of children was also reported ($p=0.000$)

Table 7: Correlations between participants characteristics

Variable		Education	Children	Job	Clinic
Education	Correlation Coefficient	1.000	-.065	.287**	.147**
	P value	.	.194	.000	.003
Children	Correlation Coefficient	-.065	1.000	.069	-.185**
	P value	.194	.	.167	.000
Job	Correlation Coefficient	.287**	.069	1.000	-.111*
	P value	.000	.167	.	.026
Clinic	Correlation Coefficient	.147**	-.185**	-.111*	1.000
	P value	.003	.000	.026	.

Pearson correlation test was used. *. significant at the 0.05 level, **. significant at the 0.01 level***. significant at the 0.001 level,

CHAPTER 6 :DISCUSSION

This study was set out to explore Libyan mother's knowledge, attitude and practice regarding oral health of pre-school children. For a considerable proportion of children, dental caries comes with a long journey of pain, discomfort and poor quality of life, which usually ends in tooth extraction. For example, dental caries was reported to be the most common cause for admission to hospital among 5 to 9 year olds in England, which increase by 14% between 2010–11 and 2013–14 (Royal College of Surgeons, 2015). The cost of these hospital admissions to extract carious teeth was estimated to be up to £35 million (British Dental Association, 2016).

Dental caries in children is therefore still an important public health concern, with a need to consider cost-effective strategies for its control and lessening its impact on the quality of life, especially for those from deprived backgrounds.

Mothers are the key player in developing childhood behavior and maintaining oral health as well as general health for their children. Thus, the assessment of the knowledge, attitude and practice of mothers may be the first step in identifying areas of insufficient knowledge and driving attitudes, and trying to change behaviors in order to gain the benefits of preventive

behaviors and to reach optimum oral health outcomes for children , and reduce the burden of avoidable dental care on the society.

The present study findings demonstrated that oral health related knowledge was less than average among overall study participants (5.1/11).

The levels of knowledge were varied by items. Whilst some items knowledge (such as malocclusion treatment) was very high, knowledge related to other items was very low (such relieving teething pain and first dental visit). However, average knowledge was reported related to caries causes and related factors.

These observations agree with the findings of previous studies conducted in other countries which demonstrated varied levels of knowledge in relation to different items. For example, a cross sectional study of a sample comprised 406 mothers found that Three hundred (73.8%) mothers had a good knowledge about diet and dietary practices, while only 110 (27.1%) and 103 (25.4%) mothers were found to have a good knowledge about the importance of oral hygiene practices and importance of deciduous teeth, respectively (Suresh et al., 2010). Similarly, a study of Saudi mothers' knowledge and attitude found that mothers had good knowledge about dietary practices and oral hygiene practices. While more than half of them

do not know when to start child mouth cleaning, first visit to dentist and transmissibility of caries. Half of the respondents do not know the contribution of frequent sweet consumption to dental caries. they recommended broadening prevention concept.(Mona et al., 2015).

Interestingly the knowledge score was higher among university educated mothers. This while corroborates great deal the findings of previous studies conducted in other countries such as Kuwait(Fatima Ashkanani & Mona Al-Sane, 2013) and Saudi Arabia (S. Abduljalil & H. Abuaffan, 2016), it may explain the variability in knowledge of different items. In other words, educated mothers could have the chance to search on health information particularly in the current era of digital media. Another possible explanation could be that educated mothers have received health education as part of their studies. These explanations remain assumption and further research using qualitative methods such interviews and focus groups is needed to fully understand this phenomenon. The issue remains, however, that the finding of this study should be used to design and develop oral health education program by focusing on areas of deficient knowledge, particularly on the first dental visit.

The current study assessed oral health related attitude among mothers. Overall. the attitude scale was in the middle (3.7/7). While this, at first sight,

indicates indifferent attitude to oral health, in fact it suggests non-positive attitude to oral health. By looking at different items, it is clear that mother exhibit varying attitudes to different oral health issues. On one hand, the mothers' attitude was positive towards parents' role in maintaining oral hygiene of their children and the fact that caries is preventable. Similar findings have been observed in previous studies in India (Z. Saied-Moallemi 2008), UAE (Mahmoud et al., 2017) and Saudi Arabia (AlJameel et al., 2017). On the other hand, negative attitudes were observed in relation to importance of primary dentition, and the need to avoid near bed intake of sugars. This finding can be seen as reflection of the lack of appropriate knowledge regarding these matters. This assumption is supported by the present study's findings where knowledge score is positively correlated with attitude scores.

Interestingly, nearly three quarters of respondents give their children sugary foods at night and most of them believe that this is not harmful. This raises a flag on an important issue that requires attention. The harmful consumption of fermentable carbohydrates, particularly sugars, is recognized to be an essential pre-condition and an important behavioral and dietary etiological cause, despite the now widespread use of fluoride toothpaste (B. A. Burt & Pai, 2001; Marthaler, 1990; P. J. Moynihan & Kelly, 2014; R. H.

Selwitz et al., 2007). One of the reasons for the failure in combating a high prevalence of dental caries in some populations, is that insufficient attention has been paid to its primary cause-namely high sugar consumption (Sheiham & James, 2015). Therefore, efforts to limit the use of dietary sugar are necessary in the Libyan context.

In similar pattern to knowledge and attitude, participants report of oral health practices ranged from very common to low. On one end of the spectrum, regular tooth brushing was selected by most of the respondents. On the other end, small numbers of participants use dental floss and visit the dentist regularly. The overall practice scale was less than half (2.9/6). This indicates poor oral health practices among the study sample. Similar observation has been in seen in many previous studies conducted in different places of the world. For example, a study in Qatar concluded that Despite the existence of good knowledge of oral health care, there were deficiencies in the oral health care provided to children(Alkhtib & Morawala, 2018). This emphasize the need to establish good oral health practices at an early stages to prevent poor oral health throughout life.

Although the present study assessed knowledge, attitude and behaviors as separate processes, the correlations between these constructs was examined and it shows that knowledge and attitudes scales are

positively correlated but none of them was associated with practices. This supports the notion that change in knowledge can induce changes in beliefs but not necessarily changes in the behavior. Attitude represents a mental posture or stance towards objects, people, processes or institutions (Brown, Manogue, & Rohlin, 2002). An all-encompassing, but commonly held view of attitudes was that they contained three components: cognitive (knowledge and understanding), affective (emotions and feelings) and behavioral (practical and social skills) components (Brown et al., 2002). In practice, however, the correlation between attitudes and behaviors are not always high (Kaplan, 1990).

The knowledge-attitude-behavior model modifies human health-related behaviors by dividing changes into three continuous processes: knowledge acquisition, belief generation and behavior formation (Bettinghaus, 1986). The KAB model proposes that behavior changes gradually. As knowledge accumulates in a health behavior domain, changes in attitude are initiated. Over some period of time, changes in attitude accumulate, resulting in behavioral change (Baranowski et al., 2003). The primary resource in this model seems to be the accumulation of knowledge, which at some point develops into changes in attitudes, behaviors, or both. This chimes with the findings of this study where

mothers of more than 2 children demonstrated better knowledge and behaviors. This could be the result of accumulation of knowledge or may be the experience of children. Although mothers attending public clinic showed higher behavior scores, evidence from present research indicates this could be due to the fact that mothers with more children are more likely to visit public practices than others. Despite this, it is possible that dentists in public clinic had more time to give oral health information to their patients than those working in busy dental practices. Previous research on barriers of preventive dental care in many countries including Libya reported the lack of sufficient time as a barrier (Arheiam, Masoud, & Bernabé, 2014).

One of the important findings in the present study was that previous OHE is associated with better knowledge and behaviors. This finding should be interpreted with caution since the process by which behavioural change occurs in KAB models has not been specified. The most common procedure for promoting change by use of this model has been the provision of information which in turn develop beliefs and eventually behaviours. However, KAB model, by itself, seems to be inadequate as a means of understanding or promoting healthy behavioral change. Evidence from many systematic reviews showing that traditional educational interventions

that are simply based on providing knowledge have limited success in causing sustainable behaviour changes (Watt & Marinho, 2005).

Behaviour change requires more than knowledge and attitude. According to COM-B model, behaviour change requires three main constructs to happen. These are capability, opportunity and motivation.(Harris et al., 2012; Watt, McGlone, & Kay, 2003).

In a more recent systematic review that aimed to assess the efficacy of health behaviour change interventions undertaken in the dental setting with adults, authors found that while evidence existed to support brief interventions for tobacco use cessation, evidence for other lifestyle behaviours including sugars consumption was limited or non-existent. Authors recommended that more clinical research should be undertaken in order to evaluate and improve health behaviour change interventions in the dental setting (Ramseier & Suvan, 2015).

The current study has some limitations which needs discussion here. First, the study used questionnaire which has its limitations such social desirability bias. However, the participants were informed that the aim of the study was to assess oral health knowledge, attitude and practices rather making any judgment. In addition, no personal information that identify

participants were selected. Second, the study collected information using questionnaire only and no clinical data was collected. We acknowledge this as a limitation which should be addressed in future studies. However, the aim of the study was to provide important information to inform oral health programs in Libya rather than to assess the association with actual oral health. Finally, the study participants were recruited from dental patients and, hence, the findings cannot be generalized to the whole population. However, the sample profile reflects a range of sociodemographic characteristics which represent different sections of the Libyan culture.

CHAPTER7: CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

The present study shows that Libyan mothers have generally inadequate knowledge, non-positive attitude to and poor behaviors in relation to oral health of their children. Key aspects of oral health in children such as the intake of sugary foods and first dental visit are underrated.

Knowledge and attitude are positively correlated but none of them is correlated to behaviors. However, oral health education appeared to positive impact on knowledge and behaviors. Mothers who visit public clinic and who have more than 2 children have better oral health habits than mothers with less than 2 children which may reflect a role of experience.

7.2 Recommendations

1. Oral health education programs should focus on diet and first dental visits as key issues.
2. Oral health programs should focus on pregnant mothers and new mothers as key target groups.
3. Oral health education interventions should use theoretical approaches as COM-B model to enhance behavior change.
4. Dental curriculum should teach effective oral health education strategies in dental practice.

5. Additional research is needed to explore barriers and effective interventions to promote oral health

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Appendices

University of Benghazi / Faculty of Dentistry

Pediatric Dentistry Department

We present this questionnaire to assess the knowledge, attitude and practice of Libyan mothers towards the oral health of their children

Age: **educational level :** uneducated - primary – intermediate- high

Job: Working- not working **Number of children** 1 2 3 and over

Phone number: optional **Address :**

1-Number of deciduous teeth in children : a-12 b-15 c-20

d- I don't know

2- To relieve gum pain during the teething period: a- use the anesthetic

solution b- by massaging the gums c-use the teething ring

d- All of the above e- do nothing

3-First visit of to check your child's oral health: a- The first year

b- The second year c-when eruption of primary teeth is completed

d- When there is a problem e- I don't know

4-The importance of healthy deciduous teeth: a- They help with

mastication and speech b- Preserving the place of permanent teeth

c-add an aesthetic appearance to the face d- All of the above

e- I don't know

5-The role of Fluoride in toothpaste –a- Adding refreshing breath

b- treat gum infections c- preventing tooth decay d- I don't know

e- All of the above

6 -To prevent tooth decay, dentists advise the following: a- Repeated

dental visits b- frequent using of the toothbrush and toothpaste

c- Reducing the intake of sweets and sugars d-all the above

e- I do not know

7-The following foods contribute to tooth decay : a-chocolates and sweets

b- baked goods and crackers c- sweetened juices d- all of the above

8) The mother may contributes to the decay of her child deciduous

teeth in the case of :a -delay the child weaning or frequent feeding at night

b- Giving sweetened drinks and sweets at night c- Continuous intake of

the sugar-containing medicines d- All of the above e-I don't know

9-Habits may contributes to teeth protrusion of the children : a-Sucking

on a pacifier or finger (especially after the fourth year) b-by pushing

the tongue across the teeth c-mouth breathing d-I do not know
e-All of the above

10-Is it possible to treat teeth protrusion resulted from the previous

habits when the child grow up: a-Yes b-No c-I do not know

11-you must urgently visit the dentist in case of: a- appearance of white

or brown spots on the teeth b- teeth mobility or fracture

c-gum infection or bleeding d-bruxism e-all of the above

12- deciduous teeth do not require Maintaining and caring like

permanent teeth: a- I agree b- I do not agree c-I do not know

13-Do you think it is necessary to clean the baby gum even before the appearance of the deciduous teeth ?

a-I agree b- I don't agree c-I do not know

14- Is it good to give the child milk containing sugar or sweetened juices

before the bedtime : a-I agree b-I do not agree C-I don't know

15- It is recommended to drink government fluoridated water (tap water) after the sixth month :

a-I agree b- I don't agree c- I don't know

16-The responsibility of cleaning children's teeth depends on the mother until the child reaches the age of 6-7 years:

a-I agree b-I do not agree c- I don't know

17-Neglecting the preservation and treatment of milk teeth affects the oral health and dental in the elderly:

a-I agree b-I do not agree c- I do not know

18-In your opinion, is it possible to prevent tooth decay?

a-Yes b-No c- I don't know

19-Do you think that dental caries infection transmitted from a mother to her child: a-Yes b-No c-I do not know

20-When you start caring and paying attention to your child's oral hygiene? a- since birth b- after the appearance of the first milk tooth

c-when eruption of primary teeth is completed d- I don't remember

21- Did you feed your child with milk containing sugar or sweetened juices during the night? a-Yes b-No

22-When you weaned your children? a-six months of age or less

b-between six months and a year c-between the first and the second year

d-between the second and the third year

23- When do you take your child to the dentist ? a- Every 6 months

b- Every year c- If there is pain or a problem d - not gone yet

e- I don't remember

24- How many times do you clean your child's teeth throughout the

day? a- once b- twice c- rarely d- I don't brush my child's teeth

25-What is the appropriate time for giving the child foods that contain

sugar ? a-before the main meals b- after the main meals

c- between meals d- at the night e- at any time

26- Your child's last visit to the dentist was since : a- Less than 6 months

b- More than 6 months c- More than a year d- Has not gone yet

e- I don't remember

27- How long do you change your child toothbrush?

a- From 1-3 months b- From 3-6 months c- From After 6 months

28-Do you use dental floss for your children? a-Yes b- No

29-Have you attended any awareness programs about oral and dental

health? a-Yes b-No

جامعة بنغازي / كلية طب وجراحة الفم و الأسنان

قسم الأطفال

نطرح هذا الاستبيان لتقييم المعرفة والمواقف والعادات المتبعة للأمهات اللبيبات حول

صحة الفم لأطفالهن .

العمر : المستوى التعليمي : غير متعلمة ابتدائي متوسط عالي الوظيفة :

تعمل لا تعمل عنوان السكن : رقم الهاتف : اختياري

عدد الأطفال 1 2 3 فما فوق

1) عدد الأسنان اللبنية عند الأطفال : أ_ 12 ب_ 15 ج_ 20

د_ لا أعلم

2) لتسكين الأم اللثة خلال فترة التسنين أ_ استعمال الجل المخدر ب_ تدليك اللثة

ج_ استعمال الحلقة التسنين د_ جميع ما سبق ه_ لا شيء

3) أول زيارة للطبيب للكشف على صحة فم طفلك تكون :

أ_ العام الأول ب_ العام الثاني ج_ عند اكتمال عدد الاسنان د_ عند وجود مشكلة

ه_ لا أعلم

4) أهمية الأسنان اللبنية السليمة : أ_ تساعد على المضغ و الكلام ب_ حفظ مكان

الأسنان الدائمة ج_ إضافة مظهر جمالي للوجه د_ جميع ما سبق ه_ لا أعلم

5) دور عنصر الفلورايد في معجون الأسنان :

أ_ إضافة رائحة منعشة ب_ يعالج التهابات اللثة ج_ يمنع تسوس الأسنان د_ لا أعلم
ه_ جميع ما سبق

6) للوقاية من تسوس الأسنان ينصح الأطباء بما يلي :

أ_ الزيارة المتكررة لطبيب الأسنان ب_ استعمال الفرشاة ومعجون الأسنان ج_ الحد
من تناول الحلويات والسكريات د_ جميع ما سبق ه_ لا أعلم

7) تساهم الأغذية الآتية في تسوس الأسنان بشكل مباشر :

أ_ الشوكولاته والحلويات ب_ المخبوزات و المقرمشات ج_ العصائر المحلاة
د_ جميع ما سبق

8) تساهم الأم في تسوس الأسنان اللبنية لطفلها في حالة :

أ_ طول مدة الفطام أو الرضاعة المتكررة اثناء الليل ب_ إعطاء المشروبات المحلاة
والحلويات ليلا ج_ تناول الطفل المستمر للأدوية التي تحتوي السكر د_ جميع ما سبق
ه_ لا أعلم

9) تساهم العادات الآتية في بروز الاسنان:

أ_ مص اللهاية أو الإصبع (خاصة بعد العام الرابع) ب_ دفع اللسان عبر الاسنان
ج_ التنفس عن طريق الفم د_ لا أعلم ه_ جميع ما سبق

10) هل من الممكن علاج بروز الأسنان الناتج عن العادات السابقة في الكبر :

أ_ نعم ب_ لا ج_ لا أعلم

11) يجب الإسراع في مراجعة طبيب الأسنان في حالة :

أ_ ظهور بقع بيضاء أو بنية على الأسنان ب_ تعرض الاسنان لأي كسر أو إزاحة من مكانها

ج_ وجود التهابات في اللثة أو نزيف حول الأسنان د_ صرير الاسنان هـ_ جميع ما سبق

12) لا تتطلب الأسنان اللبنية المحافظة و الاهتمام مثل الأسنان الدائمة :

أ_ أوافق ب_ لا أوافق ج_ لا أعلم

13) هل برأيك من الواجب تنظيف لثة الطفل حتى قبل ظهور الأسنان اللبنية:

أ_ أوافق ب_ لا أوافق ج_ لا أعلم

14) هل من الجيد إعطاء الطفل قبل النوم الحليب المحتوي على سكر أو عصائر محلاة:

أ_ أوافق ب_ لا أوافق ج_ لا أعلم

15) ينصح بشرب المياه الحكومية المفلورة (مياه الصنبور) بعد الشهر السادس :

أ_ أوافق ب_ لا أوافق ج_ لا أعلم

16) مسؤولية تنظيف أسنان الأطفال تقع على عاتق الأم حتى بلوغ الطفل من 6-7

سنوات:

أ_ أوافق ب_ لا أوافق ج_ لا أعلم

17) إهمال المحافظة وعلاج الاسنان اللبنية يؤثر في صحة الفم والأسنان في الكبير:

أ_ أوافق ب_ لا أوافق ج_ لا أعلم

18) برأيك هل من الممكن الوقاية من مرض تسوس الأسنان:

أ_ نعم ب_ لا ج_ لا أعلم

19) برأيك هل تنتقل عدوي تسوس الأسنان من الأم لطفلها:

أ_ نعم ب_ لا ج_ لا أعلم

20) متى باشرت العناية والاهتمام بنظافة فم طفلك :

أ_ منذ الولادة ب_ بعد ظهور أول سن ج_ عند اكتمال عدد الأسنان اللبنية د_ لا أذكر

21) هل قمتي بإعطاء طفلك الحليب المحتوي على سكر او عصائر محلاة على شكل

رضعات أثناء الليل:

أ_ نعم ب_ لا

22) متى قمتي بإعطاء طفلك : أ_ منذ 6 أشهر فأقل ب_ ما بين 6 اشهر إلى سنة

ج_ ما بين السنة الأولى والثانية د- ما بين السنة الثانية و الثالثة

23) متى تصطحبين طفلك لطبيب الأسنان :

أ_ كل 6 أشهر ب_ كل عام ج_ في حالة وجود ألم أو مشكلة د_ لم يذهب حتى الآن

ه_ لا أذكر

24) كم مرة تقومين بتنظيف أسنان طفلك على مدار اليوم:

أ_ مرة واحدة ب_ مرتان ج_ نادرا د_ لا أقوم بتنظيف أسنان طفلي

25) ما الوقت المناسب التي تقومين فيه بإعطاء الطفل الأطعمة التي تحتوي على سكر:

أ_ قبل الوجبات الأساسية ب_ بعد الوجبات الأساسية ج_ بين الوجبات د_ الفترة الليلية
هـ_ في أي وقت

26) آخر زيارة لطفلك للطبيب الأسنان كانت منذ :

أ_ أقل من 6 أشهر ب_ أكثر من 6 أشهر ج_ أكثر من سنة د_ لم يذهب حتى الآن
هـ_ لا أذكر

27) كم المدة التي تقومين فيها بتغيير فرشاة الأسنان :

أ_ من 1-3 أشهر ب_ من 3-6 أشهر ج_ من بعد 6 أشهر د_ لم يستعملها بعد

28) هل تستخدمين خيط الأسنان الطبي لأطفالك : أ_ نعم ب_ لا

29) هل خضعتي لأي برامج توعوية حول صحة الفم و الأسنان ؟

أ_ نعم ب_ لا

Abstract in Arabic language

تقييم المعرفة والمواقف والعادات المتبعة للأمهات الليبيات حول صحة الفم

لأطفالهن

قدمت من قبل :

فاطمة عبدالنبي محمود عبدالعاطي

تحت إشراف :

د. أرحيم أرحيم

الملخص

أهداف الرسالة:

لتقييم معرفة ومواقف وممارسات الأمهات الليبيات تجاه صحة الفم لأطفالهن, والتي قد تكون الخطوة الأولى في تحديد مجالات الضعف ومحاولة تغيير السلوكيات من أجل تطوير نتائج صحة الفم المناسبة للأطفال في المجتمع.

منهجية الدراسة:

تم إجراء مسح مقطعي شامل لعينة ملائمة من أمهات ليبيا لأطفال في مرحلة ما قبل المدرسة يترددن على عيادات صحية عامة و خاصة في مدينة بنغازي, خلال الفترة ما بين يناير ويونيو 2021. استبيان ذاتي الإدارة يتكون من أربعة أقسام و يتضمن 29 سؤال, استغرق إكماله حوالي 10 دقائق . تم استخدامه لجمع البيانات ثم تحليلها باستخدام برنامج SPSS 25 , تم ضبط جميع الاختبارات الإحصائية على مستوى الأهمية (0.05).

نتائج الدراسة:

402 أم ليبية تتراوح أعمارهن بين 19 و 52 سنة, غالبية المشاركات كن ربوات بيوت (230,57.2%), حاصلات على تعليم جامعي (226,56.2%). أفادت معظم المشاركات (363,90%) أنهن لم يتلقين تثقيف حول صحة الفم .

بشكل عام أظهرت الأمهات متوسط درجات المعرفة (5.1±1.8) و مواقف (3.7±1.0) وممارسة (2.9±1.1). تم العثور على ارتباط كبير بين المعرفة الصحية للأسنان والمواقف والممارسات ومستوى تعليم الأمهات . فضلا عن ذلك أظهرت الأمهات اللواتي يذهبن إلى العيادة العامة , واللواتي لديهن 3 أطفال أو أكثر ممارسات صحة الفم بشكل ملحوظ ($p\leq 0.05$).

استنتاج الدراسة:

أن الأمهات الليبيات بشكل عام لديهن معرفة غير كافية, ومواقف غير إيجابية , وسلوكيات سيئة فيما يتعلق بصحة الفم وأسنان أطفالهن.



تقييم المعرفة والمواقف والعادات المتبعة للأمهات

الليبيات حول صحة الفم لأطفالهن

قدمت من قبل :

فاطمة عبدالنبي محمود عبدالعاطي

تحت إشراف :

د. أرحيم أرحيم

قدمت هذه الرسالة استكمالاً لمتطلبات الحصول علي درجة الماجستير

في طب أسنان الأطفال

جامعة بنغازي

كلية طب وجراحة الفم والأسنان

فبراير 2022