

Health beliefs of Mothers towards Prevention of Rickets among their Children

Amira Saied Mahmoud Mohamed¹, Amal Gharib Sabaq² and Hanan Nabawy-Elasser³

(1) Clinical instructor of the nursing school Kfr Shoukr, (2) Professor of Pediatric Nursing, Faculty of Nursing, Benha University and (3) Assistant Professor of pediatric Nursing, Faculty of Nursing, Benha University

Abstract

Background: Rickets considered a major worldwide health issue around the world. It is a preventable condition, but cases continue to be reported in infants and children due to lack of mothers' awareness about the importance of vitamin D, benefits and prevention of deficiency. **Aim:** This study aimed to assess health beliefs of mothers towards prevention of rickets among their children. **Design:** A descriptive study design was utilized to conduct this study. **Settings:** This study was conducted at outpatient pediatric clinics in Benha university hospital and Benha teaching hospital affiliated to Egyptian Ministry of Health and Population. **Sample:** A convenient sample of all available mothers were taken from the previously mentioned setting regardless of their characteristics and willing to participate in the study. **Tool:** Two tools were used for data collection: A structured interviewing questionnaire and mother's health beliefs scale. **Results:** The majority of the studied mothers has unsatisfactory level of knowledge scores about prevention of rickets in children and less than two thirds of the studied mothers have moderate level of health beliefs. **Conclusion:** There was a highly statistical significant relation between the studied mother's total knowledge level and the total mother's health beliefs level with their characteristics. **Recommendation:** Provide continuous educational programs based on the health belief model to enhance mother's knowledge about prevention of rickets.

Key words: Children, Health Beliefs, Mothers, Rickets.

Introduction

Rickets considers a major worldwide health issue around the world. It is disorders in which bones become soft and deformed result from lack calcium, phosphorus, vitamin D intake and decrease sunlight exposure. Rickets is a preventable condition but cases continue to be reported in infants and children due to lack of mothers awareness about the importance of vitamin D, benefits and prevention of deficiency (Alwadei et al., 2018).

Vitamin D is a fat-soluble vitamin, also called sunshine vitamin that essential for maintaining extracellular calcium ion and phosphate levels for bone mineral homeostasis. In addition to its role in skeletal health and also vitamin D plays a vital role in non-skeletal health outcomes as cancer, autoimmune diseases, cardiovascular disease

and diabetes. Vitamin D has garnered significant attention in the children with an estimated one billion child (Kenenisa et al., 2020).

A peak incidence of rickets is between 3 and 18 months of age. Risk factors increase with darker skin pigmentation children, premature children, Intestinal mal-absorption of fat, disease of the liver and kidney may produce clinical and secondary biochemical picture of nutritional rickets anticonvulsant drug accelerate the metabolism of calcidiol, which may lead to insufficiency and rickets (Almeida et al., 2020).

Exclusive or prolonged breast feeding without vitamin D supplements, gestational vitamin D deficiency and low socio-economic status have a key role in the pathogenesis of the disease. Breast milk alone doesn't provide

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infant with an adequate intake of vitamin D. Most exclusive breast feed infant are able to synthesize additional vitamin D through routine sunlight exposure (**Alramdhan &El-Zubair, 2019**).

Signs and symptoms of rickets in children include, pain or tenderness in the bones of the arms, legs, pelvis, or spine, stunted growth and short stature, bone fractures, muscle cramps, teeth deformities such as delayed tooth formation holes in the enamel, abscess, defects in the tooth structure, an increase number of cavities, skeletal deformities including an oddly shaped skull, bow legs, or legs that bow out, bumps in the ribcage, a protruding chestbone , curved spine and pelvic deformities (**Creo et al., 2021**).

Health beliefs of mothers play an important role in developing attitudes towards the disease which in turn impacts health care behavior. Mother's health beliefs are defined by attitudes, values and knowledge about health and health services. Although beliefs are not the only component to cause behavioral changes in mothers, it is one of the essential components. Therefore, mothers should be equipped with the knowledge of the various prevention measures available to increase rickets prevention (**Getaneh et al., 2020**).

Health belief model is considered as the most effective models in health promotion and preventive medicine that help in assessing knowledge and increasing awareness of mothers regarding rickets. In addition to, health belief Model focuses on mother's beliefs about health conditions, which predict individual health-related behaviors. The model defines the key factors that influence health behaviors as an individual's perceived threat to sickness or disease (perceived susceptibility), belief of consequence (perceived severity), potential positive benefits of action (perceived benefits), perceived barriers to action, exposure to factors that prompt action (cues to

action), and confidence in ability to succeed (self-efficacy) (**Jeihooni et al., 2022**).

The best way to prevent rickets is to eat a diet that includes adequate amounts of calcium, phosphorus, and vitamin D. children who have digestive or other disorders may need to take other supplements. According to the national health service of England, an infant require only 30 minutes per week of total body sun exposure to maintain adequate vitamin D status. Kidney renal diseases, that may cause poor vitamin D absorption, should be treated right away (**Kenenisa et al., 2020**).

Mother plays an essential role in child health control not only during infancy but also in the embryo stage. Maternal health and vitamin D level during pregnancy have an impact on the fetus level of vitamin D. Additionally; children are highly vulnerable to rickets because of their need to vitamin D during growth. Mothers who have children with age less than 3 years should increase their awareness and knowledge about rickets, and to understand the physiological changes and nutritional need during each stage of child growth (**Fiscaletti et al., 2021**).

Nurses play an important role in the prevention of rickets through health education. It raising mothers' awareness about vitamin D, its importance to health and wellbeing of the child, the consequences of its deficiency and ways to prevent rickets. Nurses should educate mothers about sources of vitamin D and importance of sun exposure because it is not possible to obtain an adequate amount of vitamin D from dietary sources alone. So, combination of sun exposure with adequate vitamin D supplementation for all children necessary to prevent rickets (**Khalifa, 2021**).

Significance of the study

Rickets is the most common nutritional deficiency disease worldwide. The greatest burden of disease appears in Africa, the Middle East and Asia. Globally, more than 254 million children suffer from vitamin deficiency in each

year. There has been a marked increase in diagnosis of vitamin D deficiency in children over the past decade. Future research should explore the drivers for this deficiency and diagnostic the reasons of vitamin D status in clinical practice (Almezani et al., 2021).

In addition, rickets was very common in the Arabian countries, such as; Saudi Arabia the prevalence was 68%, Oman 55%, United Arab Emirate 60%, and Jordon 57%. In spite of the sun is shining all the year in Egypt, the prevalence of rickets was high and ranges between 50%–90% in the general pediatric population with a higher incidence in critically ill children (Aly & Abdel-Hady, 2021).

The researcher expected that the mothers who seek medical health service for their children with rickets had lacked knowledge and health beliefs about rickets prevention. So that, the researcher found urgent to conduct this study to assess knowledge and health beliefs of mothers about rickets prevention.

Aim of the Study

The aim of this study was to assess health beliefs of mothers towards prevention of rickets among their children.

Research Questions

1. What is the level of mother's knowledge about rickets?
2. What is level of mother's health beliefs about rickets?
3. Is there a relationship between mother's knowledge and health beliefs to prevent rickets?

Subjects and Method

Research Designs:

A descriptive research design was utilized to conduct this study.

Research Setting:

This study was conducted in outpatient pediatric clinics at Benha University Hospital and Benha teaching hospital affiliated to Egyptian Ministry of Health and Population .The outpatient pediatric clinic of both setting

were located on the ground floor and consisted of two rooms. Outpatient pediatric clinic Provide health care for all children of different ages from Qaliubiya governorate.

Research Subject:

A convenient sample of all mothers were available at the previously mentioned setting regardless of their characteristics and willing to participate in the study.

Tools of Data Collection:

Data was gathered by using the following two tools:

Tool (I): A Structured Interviewing Questionnaire format:

It was designed by the researchers after reviewing related and recent literature. It was written in a simple Arabic language and consisted of three main parts:

Part (I): Characteristics of the studied mothers: This included data related to age, residence, education, occupation, type of occupation and income.

Part (II): Characteristics of the studied children: This included data related to age, gender, ranking in the family, weight and family history.

Part (III): Mothers' knowledge assessment: It was developed by the researcher to assess mother's knowledge towards prevention of rickets among their children and it consisted of (25) multiple-choice questions divided as the following:

- a) Mothers' knowledge about rickets disease which includes (9) MCQ questions related to: definition of rickets, signs and symptoms of rickets, causes of rickets, risk factors of rickets, complication of rickets , Treatment measures of rickets, preventive measures of rickets, mother role in prevention of rickets and Source of information about rickets.
- b) Mothers' knowledge about vitamin (D) that includes (9) MCQ questions related to definition of vitamin D, importance of

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vitamin D, Sources of vitamin D, appropriate time to give child vitamin D, proper dose of vitamin D, Best time of sun light, appropriate period of sun light, vitamin D deficiency diseases and signs of vitamin D toxicity overdose.

- c) Mothers' knowledge about calcium that includes (7) MCQ questions related to Definition of calcium, Relation between calcium and vitamin D, calcium importance, calcium sources, proper dose of calcium, calcium deficiency diseases and signs of calcium Toxicity over dose.

The scoring system for mother's knowledge:

Mothers knowledge were evaluated up on completion of the interviewing questionnaire sheet as the studied mothers knowledge was checked with model key answer and scored as the following (2) score for correct and complete answer, (1) score for correct and incomplete answer, (0)score for don't know or wrong answer . Total knowledge scores ranged from (0-50) points. So, the researcher categorized the level of mothers' knowledge as the following: Satisfactory if the score of the total knowledge (>60%) ranged from (>0 to 30) points and unsatisfactory if it is (<60%) ranged from (30 to 50) points.

Tool (II): Mother's health belief scale (MHBS)

It was developed by **Irwin, (1974)** and updated by **Kim et al., (2013)** and the researcher was adopted **Kim et al., (2013)** to assess mothers' health beliefs about rickets. It consisted of 25 item compromised of five categories: Perceived susceptibility, perceived severity, perceived benefits, perceived barrier and health motivation. The questionnaire was measured on three- point Likert scale ranged from Agree (1) to Disagree (3). The five categories were described as the following:

Category (1) perceived susceptibility of rickets, it consisted of (5) items.

Category (2) perceived severity of rickets, it consisted of (5) items.

Category (3) perceived benefits of rickets, it consisted of (4) items.

Category (4) perceived barrier of rickets, it consisted of (6) items.

Category (5) health motivation of rickets, it consisted of (5) items.

Scoring system of mothers' health beliefs:

All Items of the MHBS was used a 3-point Likert scale to rate the items as the following: agree (1), uncertain (2) and disagree (3). The possible total score ranges from (0 to 75). For the three categories concerning perceived susceptibility, and severity and barrier higher scores indicating extremely positive healthy beliefs but for the two categories concerning benefit and health motivation higher scores indicate more negative health beliefs.

The level of mothers' health beliefs was classified in to

- Low when the total score was less than (< 50%) ranges from (0 to less than 37) points.
- Moderate when the total score was (50% to < 75%) ranges from (37 to less than 56) points.
- High when total score was (\geq 75%) ranges from (equal or more than 56) points.

Content validity:

All tools were translated into Arabic and investigated for their content validity by panel of three experts (two professors and one assistant professor) in the Pediatric Nursing specialty from the Faculty of Nursing Benha University, who are selected to test content validity of the tools and to judge its clarity, relevance, comprehensiveness, understanding and applicability. The opinion was elicited regarding the layout, format and sequence of the questions and all of their remarks were taken into consideration and the tools were regarded as a valid from the experts' point of view. This started from July 2020 till the end of september2020.

Reliability:

Reliability for tools was applied by the researcher for testing the internal consistency of the tools by administrating of the same tool to the same subjects under similar condition. Internal consistency reliability of all items of the tools was assessed using Cronbach's alpha coefficient test which revealed that each of the two tools consisted of relatively homogenous items as indicated by the moderate to high reliability of each tool.

The internal consistency of knowledge was (0.881). (The total 25-items MHBS was (0.713), with breakdowns by category: perceived susceptibility to rickets was (0.757), perceived seriousness rickets of was (0.761), perceived benefits was (0.834), perceived barriers was (0.812), and health motivation was (0.724).) This indicates a high degree of reliability for the study tools.

Ethical Consideration:

The study was approved by the ethics committee at the faculty of nursing, Benha University. The researcher clarified aim of the study to the studied mothers' and verbal approval was prerequisite to participate in the study. Mothers were assured that all gathered data were used in research purpose only and the study was harmless. Additionally, mothers were allowed to withdraw from the study at any time without giving the reason. Confidentiality of the gathered data and results were secured.

Pilot Study:

A Pilot study was conducted to test the clearness and applicability of the study tools and to estimate the time needed for each tool, it was done on 10% of the total subjects, (15 mothers)and excluded from the present study to avoid sample bias and contamination. In the light of pilot study analysis, modification was done and last form was developed .This phase started from the beginning October (2020) till the end of October (2020).

Filed Work:

This phase include reviewing the related literature and different studies related to mothers health beliefs, prevention of rickets and theoretical knowledge of various aspects of the study, using textbooks, evidence based articles, internet, periodicals and journals to develop tools and to get acquainted with the various study aspects of the research problems. This started from May 2020 till the end of June 2020.

The data was gathered by the researcher through interviewing with the mothers who visited the previously selected clinics. The actual field work was conducted from the beginning of November 2020 to the end of April 2021cover 6 months. The researcher was available in the study setting two days/ week (Sunday & Wednesday) by rotation for each clinic from 9.00 am to 12 pm to collect data about the health beliefs of mothers toward the prevention of rickets among their children. First, the researcher introduced herself to the participants. Then, interviewed each mother individually and illustrated the main goal of the study in order to obtain their acceptance and cooperation. The average number of the interviewed mothers was 5-6/ week for 6 months based on their understanding and responses. The time needed for filling Interviewing questionnaire sheet ranged from 10-15 minutes and the time needed for filling mothers health belief scale ranged from 5-10 minutes. Precautionary measures are taken into consideration during data collection including personnel protective materials such as, face mask, gloves, antiseptic solution for hand hygiene. Also, personal distancing to maintain a minimum 1.5-meter distance, avoiding shaking hands or hugging, always cover the mouth while sneezing or coughing to prevent droplet transmission, avoid touching one`s mouth, nose or eyes to prevent the spread of infection. Motivation of mothers and their children was done by encouraging words to

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gain their participation and also giving sweets and gifts to their children.

Statistical analysis:

The collected data was organized, tabulated and statistically analyzed using Statistical Package for Social Science (SPSS) version 25 for windows. Descriptive statistics were applied (e.g. frequency, percentages, mean and standard deviation). Test of significance, Chi-squares and fisher exact test, as well as correlation coefficient (r) used for qualitative variables that were normally distributed. A significant level value was considered when $p < 0.05$ and a highly significant level value was considered when $p < 0.001$. No statistical significance difference was considered when $p > 0.5$.

Results:

Table (1): Shows that more than two fifth (42%) of mothers were in age group 30 < 35 years with mean 30.28 ± 4.53 years, more than two fifths (45.3%) of them have secondary education, more than one quarter (27.3%) of them has basic education, slightly more than fifth (20.7%) of them have university education and only 6.7% of mothers' educational level have read and write. Majority (86%) of mothers are lives in rural area. More than half of mothers are working and slightly more than one third (34.6%) of them are worker.

Table (2): Indicates that; two fifths (40%) of children are in the age group ≥ 18 months and half (50%) of the studied children are in weight ≥ 12 kg. While less than one third (32.7%) of them are in the weight ranges from $9 < 12$ kg and only less than one quarter (17.3%) of them are in the weight ranges from $6 > 9$ kg

and more than three quarters (81.3%) of children are females, while slightly more than two fifths (40.7%) of them rank as a third child in their families.

Figure (1): Shows that the total knowledge of the studied mothers was majority (87.3%) have unsatisfactory level of knowledge about prevention of rickets in children. While only (12.7%) of them has satisfactory level of knowledge about prevention of rickets in children.

Figure (2): Portrays that more than two fifths (46%) of mothers acquired their information about rickets from relative and friends, while more than one third (38%) of them from physicians and only (16.7% & 13.3%) acquired their information about rickets from mass media and nurses respectively.

Figure (3): Shows that more than three quarters (77% & 75.5%) of mothers recognize perceived benefits and severity respectively. Also more than two thirds (63.5%) of the studied mothers recognize health motivation, while nearly more than two thirds (68.3% & 64.7%) of the mothers recognize, susceptibility and perceived barriers.

Figure (4): Reveals that; less than two thirds (61.3%) of the studied mothers have moderate level health beliefs. Nearly one quarter (24%) of them have high level and only 14.7% of them have low level regarding health beliefs about prevention of rickets in children.

Table (3): Displays that there is a highly statistical significant positive correlation between total mother's knowledge scores and their total health beliefs scores ($r = 0.628$ and $P \leq 0.000$).

Table (1): Distribution of the studied mothers according to their characteristics (no=150)

Mothers' characteristics	No	%
Age (years)		
20 < 25	18	12.0
25 < 30	44	29.3
30 < 35	63	42.0
≥ 35	25	16.7
Mean ± SD	30.28 ± 4.53	
Mother's educational level		
Read and write	10	6.7
basic education	41	27.3
secondary education	68	45.3
university education	31	20.7
Residence		
Rural	129	86.0
Urban	21	14.0
Mother's occupation		
Working	81	54.0
Housewife	69	46.0
Type of occupation (n=81)		
Calculator	8	9.8
Nurse	16	19.7
Seller	18	22.2
Teacher	11	13.7
Worker	28	34.6

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Table (2): Distribution of the studied sample according to child' characteristics (no=150)

Child' characteristics	No	%
Age (months)		
< 6	11	7.3
6 < 12	25	16.7
12 < 18	54	36.0
≥ 18	60	40.0
Mean ± SD	16.45 ± 4.11	
Child' weight		
6 > 9kg	26	17.3
9 < 12	49	32.7
≥ 12	75	50.0
Gender		
Male	28	18.7
Female	122	81.3
Child ranking in the family		
First	29	19.3
Second	52	34.7
Third	61	40.7
Fourth or more	8	5.3
Family history of rickets		
Yes	10	6.3
No	140	93.7

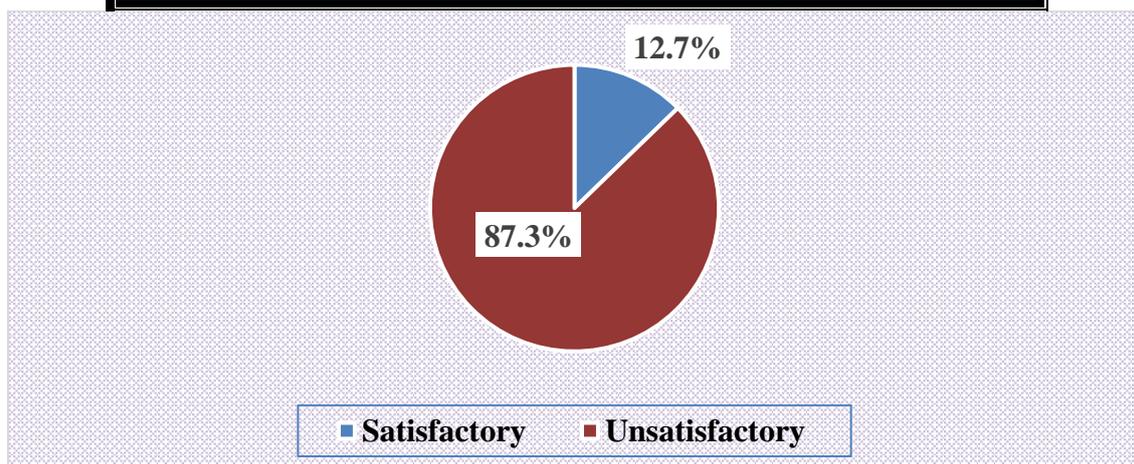


Figure (1): Total knowledge level among the studied mother's about prevention of rickets in children (no=150)

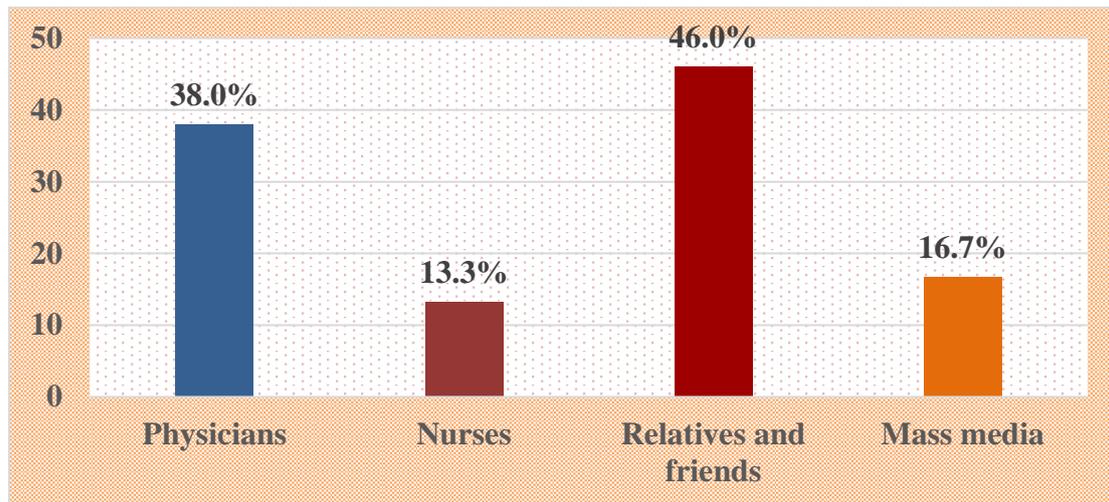


Figure (2): Source of information about rickets (no=150)

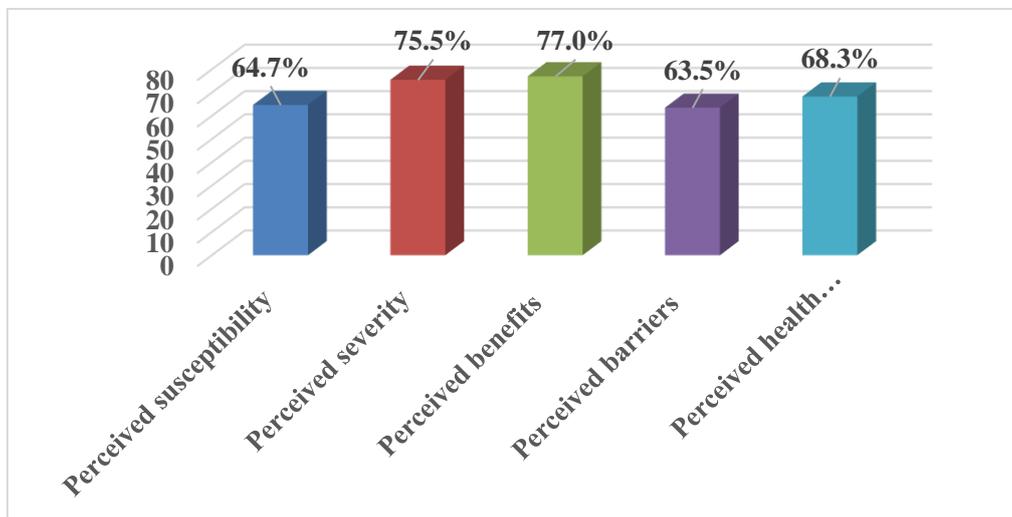


Figure (3): Health beliefs subscales among the studied mother's about prevention of rickets in children (no=150).

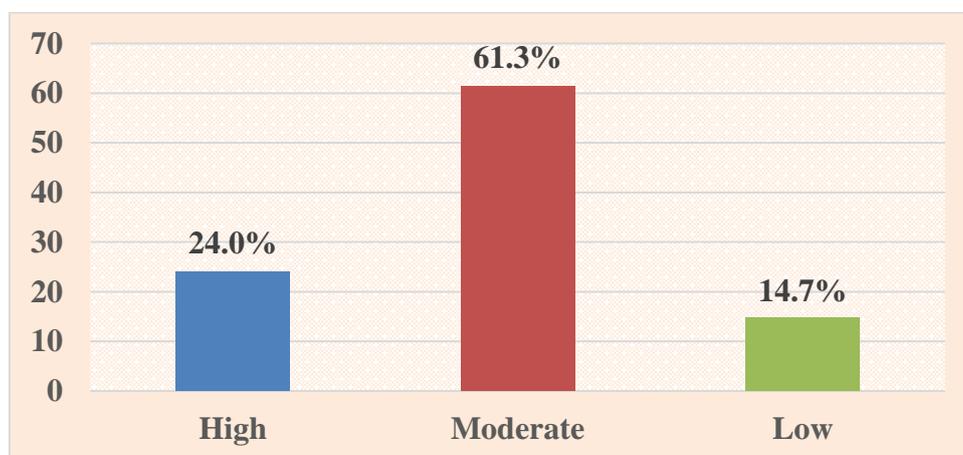


Figure (4):total score of health beliefs levels about prevention of rickets in children among the studied mothers (no=150).

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Table (3): Correlation between total mother's knowledge and total mother's health beliefs health beliefs subscales scores about prevention of rickets in children (no=150).

Total health beliefs Subscale scores	Total knowledge scores	
	r	P-value
Perceived susceptibility	0.237	0.003*
Perceived severity	0.408	0.000**
Perceived benefits	0.415	0.000**
Perceived barriers	0.385	0.000**
Perceived health motivation	0.161	0.049*
Total score	0.628	0.000**

Discussion

Vitamin D deficiency is a global health problem in children and is considered a pandemic problem. Vitamin D is a vital metabolically active compound that is either synthesized by the body using ultra violet Blight or absorbed via the digestive system from certain foods (Gentile & Chiarelli, 2021). Severely low levels of vitamin D can result in brittle bones, bone pain and muscle weakness. So, it is necessary for mothers to determine and know the optimal dose of vitamin D to ensure Vitamin D sufficiency (Kubis & Piwowar, 2020).

The health beliefs and behavioral responses of the general population, particularly mothers, are crucial in prevention and control rickets. The Health belief model is one of the effective health education models, focusing primarily on preventing illnesses and adopting behaviors to avoid diseases. It's used to study the relationship between beliefs and health behaviors. Adequate knowledge has been shown to be a prerequisite for establishing a preventive belief, forming appositve disease prevention (Fehlings et al., 2018).

Therefore, this study aimed to assess health beliefs of mothers towards prevention of rickets among their children.

Regarding characteristics of the studied mothers, the current study revealed that more

than two fifth of the studied mothers had a mean age 30.28 ± 4.53 years old. This could be due to age of mothers was important factor in providing knowledge for prevention of the disease and understanding new experience with care and treatment. This finding was agreed with Abate et al., (2020) who conducted study in Ethiopia about "Assessment of practice and factors affecting sunlight exposure of infants among mothers attending governmental health facilities" and found that less than half of the studied subject had mean age 30.22 ± 3.95 .

Concerning residence, the current study showed that the majority of the studied mothers were living in rural area. This could be due to less accessibility to medical services in rural areas so the mothers came to hospitals. This finding was paralleled with Bekalu et al., (2021) who conducted study in Nigeria about "Mothers Infant Sunlight Exposure Practice and Associated Factors" and found that the vast majority of the studied subjects were living at rural area.

Regarding educational level of studied mothers, the current study showed that more than two fifths of the studied mothers had secondary education. This might be due to the majority of the mothers were from rural area and the traditional habits of early marriage had impact on completing of their education. This finding disagreed with Elsobkey & Amer,

(2019) who conducted study in Egypt about “Children with Cerebral Palsy and vitamin D deficiency” and found that more than two fifths of the studied mothers had high educational level.

Regarding characteristics of the studied children, the current study showed that two fifths of children had age more than 18 months. This might be due to rapid growth rate in this age. This finding agreed with **Tezera et al., (2019)** who conducted study in Ethiopia about “Dietary calcium intake and sunlight exposure among children aged 6-23 months” who found that less than half of the studied children had age of 18 months or more.

The current study revealed that more than three quarters of children were female. This might be due to gender differences were not fully understood but probably reflect differences in exposure to environmental risk factors and endogenous hormones, as well as complex interactions between these influences. This result was disagreed with **Kamal, (2018)** who conducted study in Egypt about “Mothers Awareness regarding Vitamin D Deficiency among Their Infants in Kalyobia Governorate” and found that three quarters of the studied children were male.

The current study showed that half of them had equal or more than 12 kilogram. This might be due to normal average weight of this childhood stage. This finding was consistent with **Sisay et al., (2019)** who conducted study in South Africa about “Rickets and its associated factors among under-five children in selected public Hospitals” and found more than half of the studied children had weight more than 12 kilogram.

Regarding total mothers’ knowledge level about prevention of rickets, the present study showed that the majority of the studied mothers had unsatisfactory level of knowledge. This might be due to mothers did not attain any program as source of information benefits of vitamin D. here relation

46% This finding was paralleled with **Wagner & Greer, (2018)** who conducted a study about “Prevention of rickets and vitamin D deficiency in infants, children, and adolescents” and found that the majority of the studied subject had unsatisfactory level about prevention of rickets.

On assessing mothers’ source of information about rickets, the present study showed that less than half of the studied mothers acquired their knowledge from relatives. This might be due to lack of interaction between mothers and medical staff especially nurses and also lack of mass media role in providing awareness of mothers regarding prevention of rickets in rural areas. This finding disagreed with **Babelghaith et al., (2017)** who conducted a study in Saudi Arabia about “Knowledge and practice of vitamin D deficiency among people lives in Riyadh, Saudi Arabia-A cross-sectional study” and found that the half of the studied subject had information about rickets from doctors.

In respect to health beliefs subscales about prevention of rickets in children, the current study showed that more than three quarters of the studied mother's recognized perceived severity and benefits subscales. This might be due to mothers’ concerns about prevention of rickets in children. This finding was agreed with **Soliman et al., (2020)** who found that less than three quarters of the studied mothers perceived severity and benefits of health beliefs scale.

The current study revealed that more than two thirds of the studied mothers recognized perceived health motivation subscales. This might be due to appropriate sources of mothers’ information about prevention of rickets in children. This finding was agreed with **Rasheed et al., (2017)** who conduct study in Iraq about “Knowledge, attitude and practice of Iraqi mothers towards Vitamin D supplementation to their infants” who found that less than three quarters of the

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studied mothers perceived health motivation of health beliefs scale.

In the current study less than two thirds of the studied mothers had moderate level of health beliefs of rickets. This might be because majority of the studied mothers had unsatisfactory level of knowledge related prevention of rickets which reflected negatively in their health beliefs. This finding was agreed with **Franklin, (2019)** who conduct study in New Zealand about “Knowledge and attitude of vitamin D and sun exposure practices amongst New Zealand mothers with children aged five years” who found that two thirds of the studied mothers had moderate level of health beliefs.

The current study revealed that there was a highly statistically significant positive correlation between mothers total knowledge scores and total health beliefs scores. This might be due to mothers’ knowledge and health beliefs directly influenced by each other. Moreover, knowledge and beliefs was considered the baseline that helping in achieving best outcomes regarding prevention of rickets in children. This result was consistent with **Elsobkey et al. (2019)** found that there was positive correlation between total knowledge scores and total health beliefs scores about prevention of rickets in children.

Conclusion:

The majority of the studied mothers had unsatisfactory level of knowledge about prevention of rickets and less than two thirds of the studied mothers had moderate level about health beliefs about prevention of rickets. Moreover, there were a highly statistical significant positive correlation between total mothers knowledge level and total health beliefs level about prevention of rickets with their characteristics.

Recommendations:

- Provide continuous educational programs based on the health belief model to enhance

mothers' knowledge about prevention of rickets

- Guideline and booklets should be available and distributed in all health care centers especially pediatric clinics to enhance mothers' knowledge and help in prevention of rickets among their children.
- Co-ordination between health care team.
- members and mothers to enhance their knowledge about disease and improve quality of care for their children.

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تقييم المعتقدات الصحية للأمهات تجاه الوقاية من الكساح بين أطفالهم

اميرة سعيد محمود - امال غريب سباق - حنان نبوي الاعصر

يعد الكساح مشكلة مهمة حتى في البلدان ذات التعرض الكافي للشمس. تتنوع أسباب الكساح وتشمل نقص التغذية ، وخاصة قلة تناول فيتامين د والكالسيوم في النظام الغذائي. لذا هدفت هذه الدراسة الى تقييم المعتقدات الصحية للأمهات تجاه الوقاية من الكساح بين أطفالهم. وقد اجريت هذه الدراسة في عيادات الأطفال الخارجية في مستشفى بنها الجامعي ومستشفى بنها التعليمي التابع لوزارة الصحة والسكان المصرية ، وتقع عيادة الأطفال الخارجية في كلا المكانين في الطابق الأرضي وتتكون من غرفتين. وكلا العيادات الخارجية للأطفال توفر الرعاية الصحية لجميع الأطفال من مختلف الأعمار من محافظة القليوبية . وقد اشتملت العينة على جميع الامهات المتاحين في الاماكن المذكورة سابقاً بغض النظر عن خصائصهن للدراسة، والمسئولين عن توفير الرعاية المباشرة للأطفال وتم اخذ موافقتهم على المشاركة في الدراسة وكان عددهم (150) . واطهرت النتائج أن غالبية الأمهات الخاضعات للدراسة كان لديهن مستوى غير مرضٍ من المعرفة حول الوقاية من الكساح وأقل من الثلثين من الأمهات الخاضعات للدراسة كان لديهن مستوى معتدل حول المعتقدات الصحية حول الوقاية من الكساح . علاوة على ذلك ، كانت هناك علاقة ذات دلالة إحصائية عالية بين مستوى المعرفة الكلي للأمهات ومستوى المعتقدات الصحية الكلية حول الوقاية من الكساح بخصائصها. كان يوجد ارتباط إيجابي بين مجموع معرفة الأم وعشرات المعتقدات الصحية.