

“KNOWLEDGE REGARDING VITAMIN D DEFICIENCY IN MOTHERS OF PRE-SCHOOLERS”.

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ABSTRACT

Introduction: Vitamin D also known as the sunshine vitamin, helps in bone metabolism and calcium homeostasis. It is estimated that one billion people in the world have vitamin D deficiency making it a public health problem. Vitamin D deficiency is an important public health problem in both developed and developing countries, with a reported worldwide prevalence of 30-80% in children and adults. Title: “A descriptive study to assess knowledge regarding vitamin D deficiency in mothers of preschoolers from selected areas of Pune city”. The objectives of the study were to assess knowledge regarding vitamin D deficiency among the mothers of preschoolers from selected areas of Pune city. To associate knowledge score with selected demographic variables. **Material and Method:** In this study we used quantitative research approach. A descriptive study design was selected as the investigation's study methodology. The non-probability purposive sampling technique was used. The sample consist of 200 addicted adult male who had fulfilled the inclusion criteria of the study. The reliability of tool was done on 20 participants the value was +0.928 and tool found reliable. Pilot study done on 20 sample and study was fisible to conduct main study. **Result:** The study mentioned above reveals that 80% of people have average knowledge of vitamin D deficiency, 11% have poor knowledge, and 9% have strong knowledge, with a mean of 08.55 and a standard deviation of 2.16. Demographic variable such as Age, education, socio- economic status, child ages, gender & weight are not significantly associated with p value at the level of <0.05. **Conclusion:** There was no statistically significant correlation between the demographic factors of the preschooler mother and vitamin D insufficiency. Even so, the mother of a preschooler had only average knowledge of vitamin D inadequacy. Health care practitioners should place more emphasis on health education to raise awareness of vitamin D in the population.

(Keywords: Assess, Descriptive, Knowledge, Preschooler, Deficiency)

INTRODUCTION

The history and need for the study are covered in this chapter. It details India's vitamin D shortage situation. Additionally, negative consequences of vitamin D insufficiency included. Vitamin D is necessary for the equilibrium of calcium and phosphorus as well as for bone metabolism. In both adults and children, a lack of vitamin D can result in rickets and osteomalacia. There could be other dire effects as well. Vitamin D insufficiency is significantly linked to many different unfavorable occurrences, including mortality, cancer, diabetes, cardiovascular disorders, depression, and other conditions. The Indian Academy for Pediatrics Guidelines and the Global Consensus on Prevention and Management of Nutritional Rickets both state that 25(OH)D concentrations below 30 nmols/L (12 ngm/ml) are considered

deficient in children and adolescents. Concentrations between 30 and 50 nmols/L (12-20 ng/ml) are considered insufficient for the body. Around the world, 1 billion people of various ages and ethnicities have low vitamin D concentrations. 31% of the 490 million vitamin D deficient individuals in India are children and adolescents. In India, the majority of published studies only include participants from a single district or from a small group of people. Additionally, studies use small sample numbers, and there are various ways to estimate vitamin D, including radioimmunoassay, ELISA, chemiluminescence, etc. Additionally, there are differences due to various cut-offs, which makes it difficult and varied to evaluate data. Lack of sun exposure, dietary factors (such as low vitamin D and calcium intake, excessive phytates and phosphates, caffeine use, and the incidence of lactose intolerance), and environmental factors can all contribute to skin cancer. Vitamin D deficiency in India, a nation with plenty of sunshine, has been connected to skin pigmentation, pollution that blocks UV radiation from accessing the skin, genetic polymorphisms, and body fat percentage. New findings from studies cause the recommendations for vitamin D intake to vary every few years.

NEED OF STUDY

A study conducted by Mesinovic, Jakub et al. A total of 50 older persons who were overweight or obese and had low vitamin D levels (25(OH)D 50 nmol/L) were enrolled in the study. Their average age and standard deviation were 60 and 6 years, respectively. All individuals continued taking vitamin D/placebo and engaged in three days per week of multi-modal exercise between weeks 12 and 24. The outcome demonstrates that vitamin D supplementation had no impact on gait speed, whether exercise was included or not. Improvements in stair climb times and waist circumference were found to be vitamin D-related. A study conducted by Pilz, S., Zittermann, A., Trummer, C., et al (2019), on Vitamin D testing and treatment: a narrative review of current evidence. The minimum consensus among scientists is that serum 25(OH)D concentrations below 25-30 nmol/L (10-12 ng/mL) must be prevented and treated, despite the fact that several guidelines set targets serum 25-hydroxyvitamin D (25[OH]D) values of 50 nmol/L (20 ng/mL). It has been established that there is a substantial prevalence of vitamin D deficiency worldwide using this latter threshold of serum 25(OH)D concentrations, which may necessitate public health initiatives such vitamin D food fortification. The rapid increase in vitamin D testing and supplementation, on the other hand, is a cause for concern because it drives up prices and has the potential to be detrimental. In the scientific discussion on vitamin D, it is important to keep in mind that nutrient trials are different from pharmacological trials and that, in addition to the divergent viewpoints on the appropriate uses for.

AIM OF THE STUDY

A descriptive study to assess knowledge regarding vitamin d deficiency in mothers of preschoolers from selected areas of Pune city.

RESEARCH METHODOLOGY

In this study research approach used by researcher is Quantitative. Non-experimental descriptive research design was chosen as the study's research strategy. The research variable in this study is knowledge of vitamin D insufficiency. In this study, research setting is selected areas of Pune city. In this study, the target population consisted of mothers of preschoolers. In this study, the accessible population consisted of mothers of preschoolers who fits in inclusion criteria in selected urban areas of Pune city. In this study, menopausal women who fits in inclusion criteria in selected urban areas of Pune city. Sample size is 200. Nonprobability purposive sampling technique was used to select the samples in the study.

RELIABILITY

Measurement quality has to do with reliability. The "consistency" or "repeatability" of metrics is reliability in the common meaning. The consistency of a set of measures or a measuring tool called reliability. Validity is not required by reliability. Consequently, a trustworthy measure is one that regularly measures something other than what it is intended to assess. The degree to which test measurements hold true throughout numerous trials with the same subject and under the same circumstances is referred to as reliability. Investigator calculated the r- value for knowledge regarding vitamin D deficiency in mothers of preschoolers = +0.92

RESULT

Section I: Demographic Variables: -

ghts of 11 and 13 kg, followed by 14 to 16 kg, 17 to 19 kg, and 8 to 10 kg.

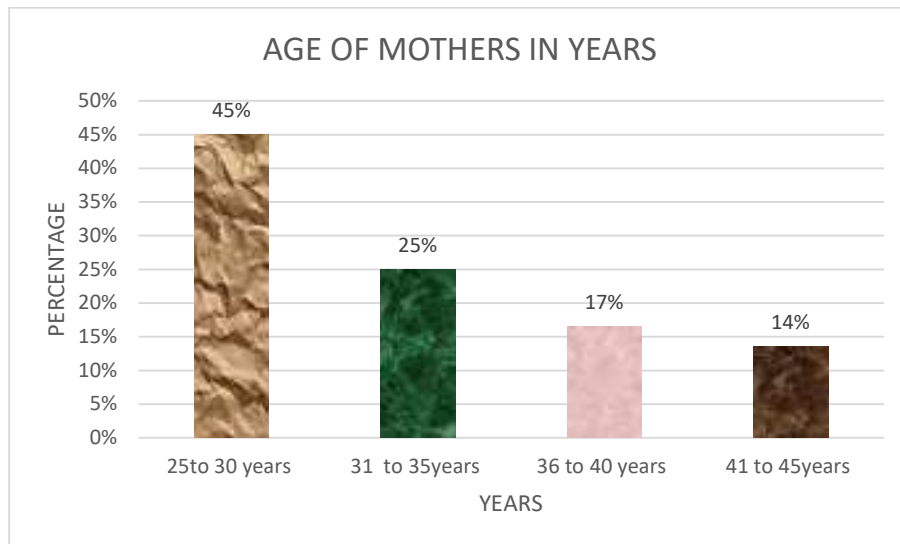


Figure 1: BAR DIAGRAM SHOWING AGE OF PRESCHOOLER MOTHERS

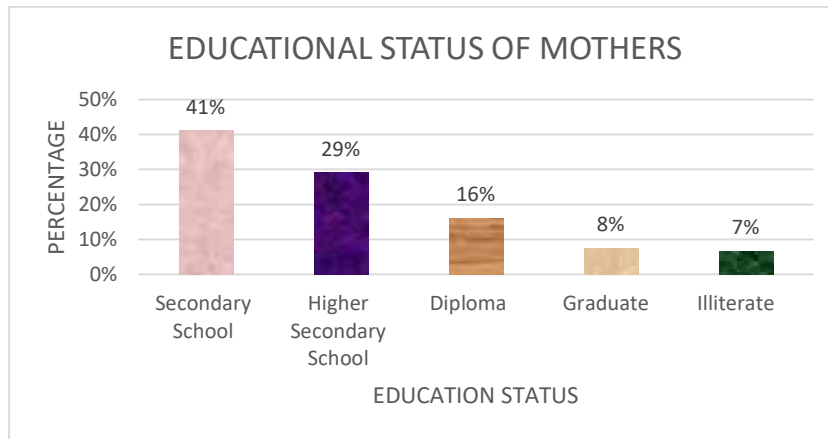


Figure 2: BAR DIAGRAM SHOWING EDUCATIONAL STATUS OF PRESCHOOLER MOTHERS

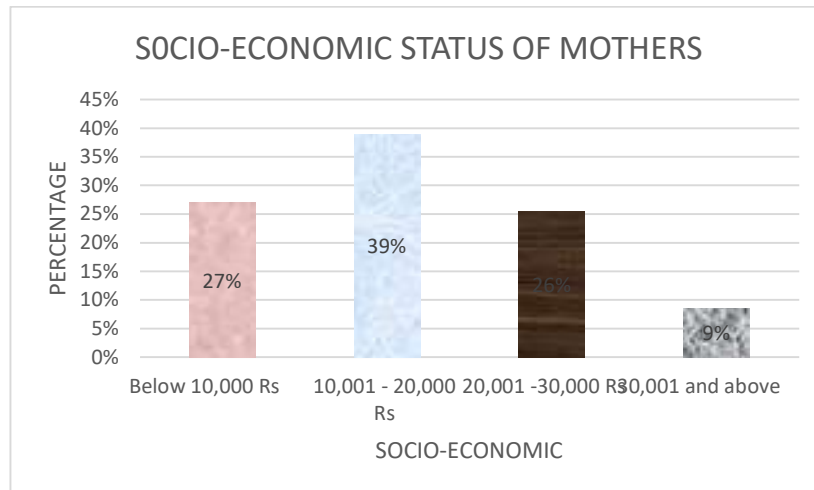


Figure 3: BAR DIAGRAM SHOWING SOCIO-ECONOMIC STATUS OF PRESCHOOLER MOTHERS

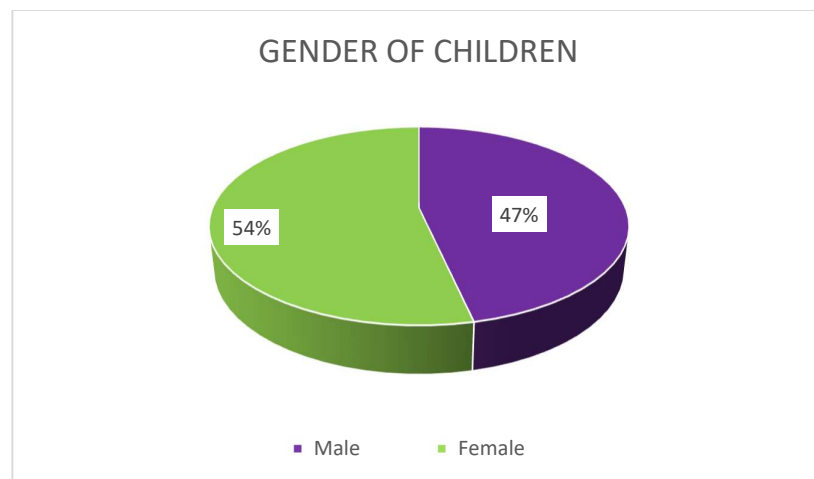


Figure 4: PIE CHART SHOWING GENDER OF PRESCHOOLER CHILDREN

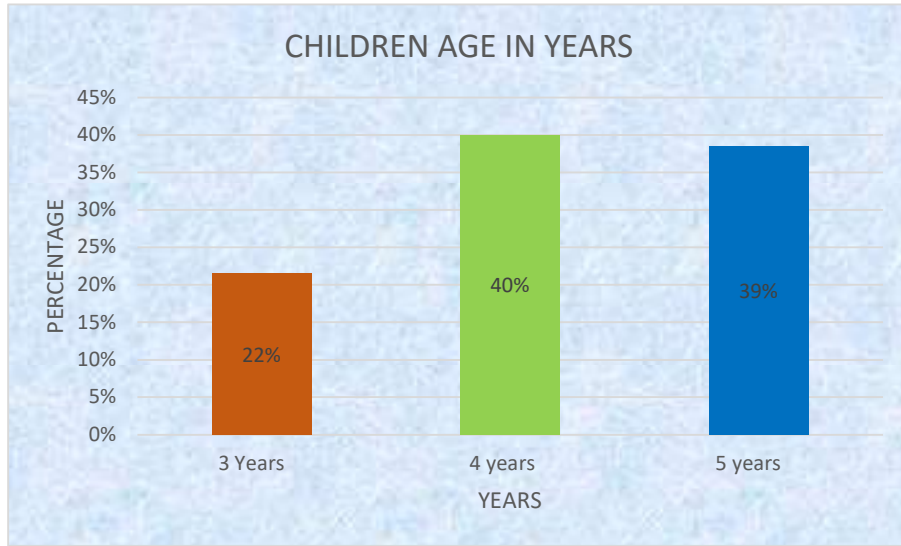


Figure 5: BAR DIAGRAM SHOWING PRESCHOOLER CHILDREN AGE IN YEARS

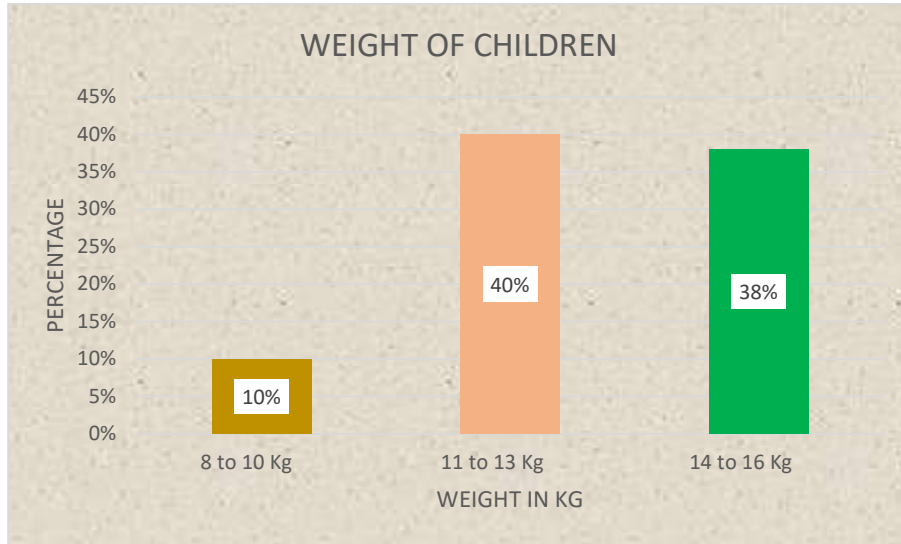


Figure 6: BAR DIAGRAM SHOWING WEIGHT OF CHILDREN IN KG.

- The majority, or 45%, are between the ages of 25 and 30. 25% are between the ages of 31 and 40.
- The majority are secondary school graduates (41%), higher school graduates (29%), graduates (8%), diploma recipients (16%), and illiterates (7%).
- 39% of people reported incomes over \$100,000, 29% below \$100,000, 26% over \$20,000, and 9% over \$30,000.
- 40% of parents had children older than 4 years old, 39% had children older than 5 years old, and 22% had infants.
- 54% of moms have female children, while 46% have male children.
- The majority of children were between the weights of 11 and 13 kg, followed by 14 to 16 kg, 17 to 19 kg, and 8 to 10 kg.

Section II:

Analysis related to knowledge regarding vitamin D deficiency in preschooler mother.

Knowledge	Frequency	Percentage	Mean	SD
Poor	22	11	8.55	2.16
Average	160	80		
Good	18	9		

Table 2: The finding shows majority 80% have average knowledge, 11 % have poor knowledge & 09% have good knowledge with mean of 08.55 & S.D is 2.16.

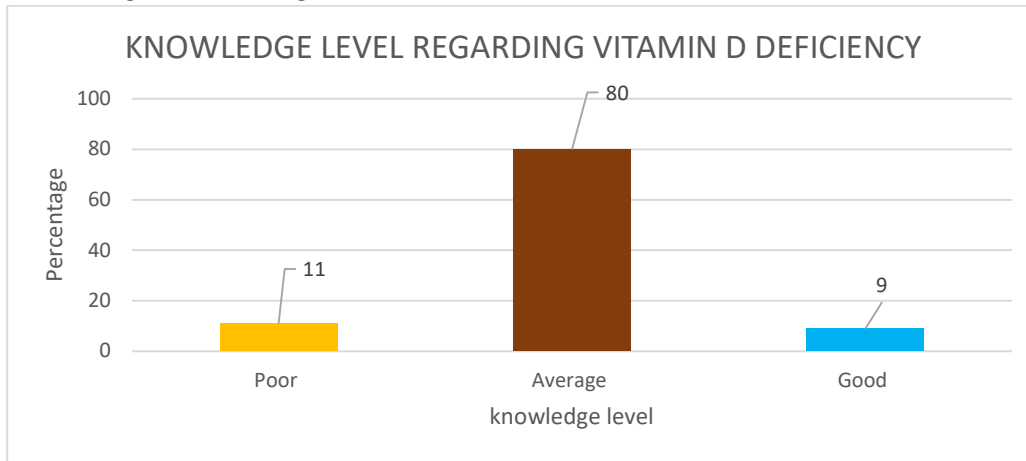


Figure: BAR DIAGRAM SHOWING THE LEVEL OF THE KNOWLEDGE REGARDING VITAMIN D DEFICIENCY

Section III:

The association between knowledge and demographic variables. Age, education, socio-economic status, child ages, gender & weight are not significantly associated with p value at the level of <0.05.

SUMMARY

The analytical portion, 200 samples, and data gathered using structured questionnaires are covered in this chapter. The outcome demonstrates that there is no correlation between knowledge of demographic factors relating vitamin D insufficiency in preschooler mothers and those characteristics.

DISCUSSION

Al-Mutairi et al. (2018) used a cross-sectional design to examine mothers' awareness of, practices for, and attitudes about vitamin D deficiency among children in the Qassim region, Kingdom of Saudi Arabia. The study discovered that mothers' attitudes, practices, and understanding regarding vitamin D deficiency in children were lacking. The study also

discovered that mothers' knowledge was substantially correlated with their level of education, occupation, income, and number of children.

A study conducted by Christie-de Jong, Floor & Mason, Linda. (2011). Vitamin D insufficiency knowledge, attitudes, and practises among Saudi female students. The purpose of the study was to look at a sample of Saudi Arabian female students' knowledge, attitudes, and practises (KAP) on vitamin D deficiency, sun exposure, supplementation, and fortification. Eight in-depth one-on-one semi-structured interviews and a focus group were performed, and both were then thematically examined. Participants' understanding of vitamin D and vitamin D insufficiency was low. Due to the extreme heat, cultural norms that call for body covering, and a system that makes it challenging to get out in the sun, they reported having little exposure to the sun. The prevention of vitamin D insufficiency in Saudi Arabia faces significant obstacles, which were highlighted. There are suggestions for additional research in particular areas, such as the prevalence of vitamin D insufficiency and suggested daily doses of supplementation. Governmental initiatives are required, including raising awareness of the value of vitamin D and providing instructions on how to obtain it. This issue could be addressed in part by building spaces where women, especially those from lower socioeconomic backgrounds, can enjoy sun exposure and by fortifying more meals. In this study The finding shows majority 80% have average knowledge, 11 % have poor knowledge & 09% have good knowledge with mean of 08.55 & S.D is 2.16.and the association between knowledge and demographic variables. Age, education, socio- economic status, child ages, gender & weight are not significantly associated with p value at the level of <0.05.

CONCLUSION

There was no statistically significant correlation between the demographic factors of the preschooler mother and vitamin D insufficiency. Even so, the mother of a preschooler had only average knowledge of vitamin D inadequacy. Health care practitioners should place more emphasis on health education to raise awareness of vitamin D in the population.the association between knowledge and demographic variables. Age, education, socio- economic status, child ages, gender & weight are not significantly associated with p value at the level of <0.05.The analytical portion, 200 samples, and data gathered using structured questionnaires are covered in this chapter. The outcome demonstrates that there is no correlation between knowledge of demographic factors relating vitamin D insufficiency in preschooler mothers and those characteristics.The demographic information is shown in the table above. The majority, or 45%, are between the ages of 25 and 30. 25% are between the ages of 31 and 40. The majority are secondary school graduates (41%), higher school graduates (29%), graduates (8%), diploma recipients (16%), and illiterates (7%). 39% of people reported incomes over \$100,000, 29% below \$100,000, 26% over \$20,000, and 9% over \$30,000. 40% of parents had children older than 4 years old, 39% had children older than 5 years old, and 22% had infants.

RECOMMENDATIONS

1.A correlation study on the Relationship between Vitamin D Status and Maternal Mental Health among Mothers of Preschoolers

2.A study to assess the effectiveness of a health literacy intervention on the self-care behaviors, health service utilization, with vitamin D deficiency compared with standard education.

3.A study to assess the impact of a tailored nutritional counseling program on the nutritional status, quality of life, and survival of patients with vitamin D deficiency compared with usual care.

CONFLICT OF INTEREST

The author certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in paper.

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