



**Research
Article**

Effectiveness of Information Booklet on knowledge regarding Vitamin A deficiency and its prophylaxis among mothers of under five year children in selected slum area Bhopal

Anshupik Singh Kushwaha¹, Dr. Karesh Prasad²

¹M.Sc. Nursing Student, Principal People's College of Nursing & Research Centre, People's University, Bhopal, India

²Principal People's College of Nursing & Research Centre, People's University, Bhopal, India

ABSTRACT

Vitamin A deficiency is a noteworthy nutritional issue among under five year children in undeveloped nations, but rarely seen in more developed nations. Vitamin A deficiency or hypovitaminosis A is an inadequate of Vitamin A in blood and tissues. Vitamin A deficiency is a systemic ailment with major impact on eyes. Vitamin A deficiency happens due to inadequate intake of Vitamin A.¹ A quasi experimental approach one group pretest post-test design was undertaken in the present study to Effectiveness of Information Booklet on knowledge regarding Vitamin A deficiency and its prophylaxis among mothers of under five year children in selected slum area Bhopal. 60 subjects were selected through non probability purposive sampling technique. They were assessed by the investigator with the help of self structured questionnaire and administered Information Booklet on knowledge regarding Vitamin A deficiency and its prophylaxis among mothers of under five year children. The study findings shows that majority of mothers 24 (40%) belongs to age group of 21-25 years, 40 (66.7%) were belongs to Hindu religion, 22 (36.7%) were secondary education, 38(63.3%) were house wife, 27 (45%) of mothers were having two children, 20 (33.3%) of mothers were having family income 5000/-Rs or below, and 36 (60%) of mothers were having vegetarian. Before giving Information booklet lowest 6(10%) of mothers had knowledge to the items "Which disease leads to Vit-A deficiency" and after given information booklet highest 60(100%) of mothers had knowledge to items, "First sign of Vit-A deficiency". Before giving Information booklet, lowest Mean 15, SD 6.95 of mothers to the area "Definition and sources of Vitamin A" and after given Information booklet, highest Mean 44.71, SD 19.39 of mothers to the area. In Pretest majority 38 (63.3%) of the mothers had poor knowledge, Mean score 9.1833 and SD 3.00560 and after providing Information Booklet post-test knowledge score majority 33(55%) had good knowledge, Mean score 21.1667 and SD 2.84734. After comparison proved that the Information Booklet was effective for increasing the knowledge score of mothers of under five year children. The finding showed that the significant association between knowledge of mother under five children with education (21.483) $P=0.000$, Occupation (10.258), $P=0.006$, family income 8.634 and $P=0.035$ whereas there are non significant association between age (2.172) and $P=.538$, religion (1.861) and $P=0.602$, Number of children (6.534) $P=0.88$, type of diet (4.498) $P=0.106$ with knowledge of mother under five year children.

Key words: Knowledge, Vitamin A deficiency, mothers, and under five year children.

Corresponding Author:

Mrs. Anshupik Singh Kushwaha

M.Sc. Nursing Student, Principal People's College of Nursing & Research Centre, People's University, Bhopal, India

E-Mail: anshupik.singh29@gmail.com

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Introduction

Vitamin A deficiency happens due to inadequate intake of Vitamin A. Vitamin A deficiency is a major medical concern in more than 75 nations. The children of developing nations are mostly affected from this condition, which is to a great extent preventable. It is evaluated that up to 230 million children are in danger of Vitamin A deficiency and more than one million Vitamin A deficiency related death that happen every year.¹

Due to Vitamin A deficiency, the eyes of 14 million pre-school going children have been damaged,

every year 350 000 (or more) pre-school going children have become blind partially or totally, about 60% children die after going blind within few months. Lack of Vitamin A is related with an expansion in the seriousness of infection, especially measles and diarrheal illness; Vitamin A deficiency adds to the evaluated 1.1 million deaths from measles consistently through synergism with measles disease. In developing nations 50% of all childhood corneal blindness is because of Vitamin

A deficiency, and 50% of that is due to added measles disease.²

Internationally 285 million individuals are visually impaired, of whom 39 million are blind. A quickly maturing populace implies that the effect of vision loss is relied upon to rise. Numerous individuals who are visually challenged face a lifetime of imbalance, as they regularly have to face barriers of instruction and services. It is assessed that 80% of all vision impediment can be prohibited or cured. Nations ought to give high quality and reasonable eye care services to all and teach individuals about the significance of eye sickness aversion and care. In 2013, the World Health Assembly approved Universal eye health: a global action plan 2014-2019, a roadmap for Member States, WHO and partners to achieve a measurable reduction of 25% of avoidable visual impairments by 2019.

- Fact -285 million people are visually impaired
- Cause- 90% of visual impairment results from chronic eye diseases
- Opportunity - 1.4 million children could benefit from vision rehabilitation.⁴

Objectives

- 1) To assess the pretest information score of mother of under five year children in regards to Vitamin A deficiency and its prophylaxis.
- 2) To give knowledge by Information Booklet with respects to Vitamin A deficiency and its prophylaxis.
- 3) To assess the post test knowledge score of mother of under five year children with respect to Vitamin A deficiency and its prophylaxis.
- 4) To assess the adequacy of Information Booklet on knowledge with respect to Vitamin A deficiency and its prophylaxis among mother of under five year children.
- 5) To findout the association between sociodemographic and post-test knowledge score regarding Vitamin A deficiency and its prophylaxis among mothers of under five year children.

Hypothesis

H₀- There will be no significant difference between the pre -test and post- test knowledge scores of

mothers of under five children regarding Vitamin-A deficiency and its prophylaxis.

H₁- There will be a significant difference between the pre -test and post- test knowledge scores of mothers of under five children regarding Vitamin-A deficiency and its prophylaxis.

Methodology

A quasi experimental approach one group pretest post-test design was undertaken 60 subjects were selected through non probability purposive sampling technique. A structured questionnaire was used for assessment of knowledge. The validation of the tool was done by experts. The reliability of the instrument was established by Karl Pearson method with $r = 0.945$. The investigator assessed knowledge with the help of self structured questionnaire and administered Information Booklet on knowledge regarding Vitamin A deficiency and its prophylaxis among mothers of under five year children. The analysis of the collected data was done with the help of descriptive and inferential statistics according to the objectives of the study.

Results

Organization of study findings:-

The analysis of data is organized and presented under the following headings:-

- Section – A The frequency and per cent distribution of mothers of under year children according to sociodemographic.
- Section – B Analysis of knowledge score mothers of under five year children regarding Vitamin A deficiency and its prophylaxis
- Section – C Association between the sociodemographic variables and post knowledge score of mothers of under five year children regarding Vitamin deficiency and its prophylaxis.

SECTION A: The frequency and percentage distribution of mothers of under five year children according to their sociodemographic

Figure: 1 The Percentage Distribution of mothers of under five year children according to age group

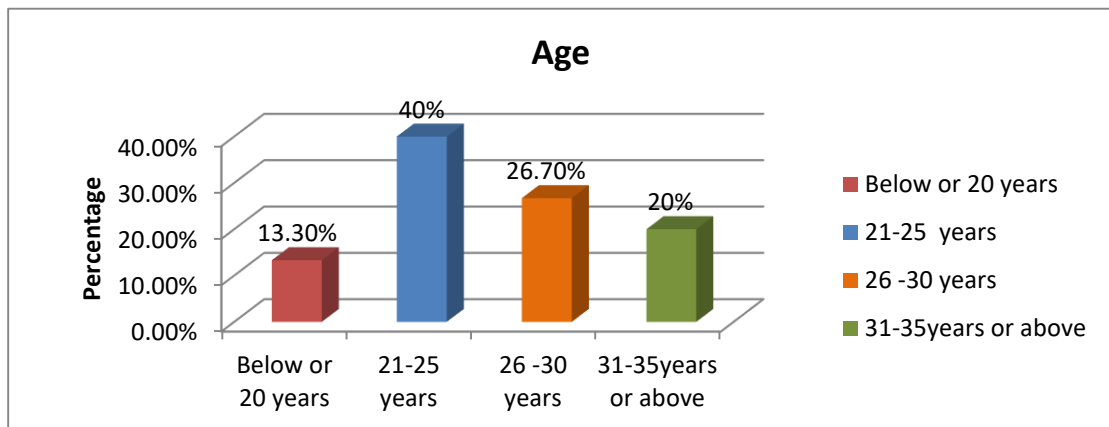


Figure: 2 The Percentage Distribution of mothers of under five year children according to religion

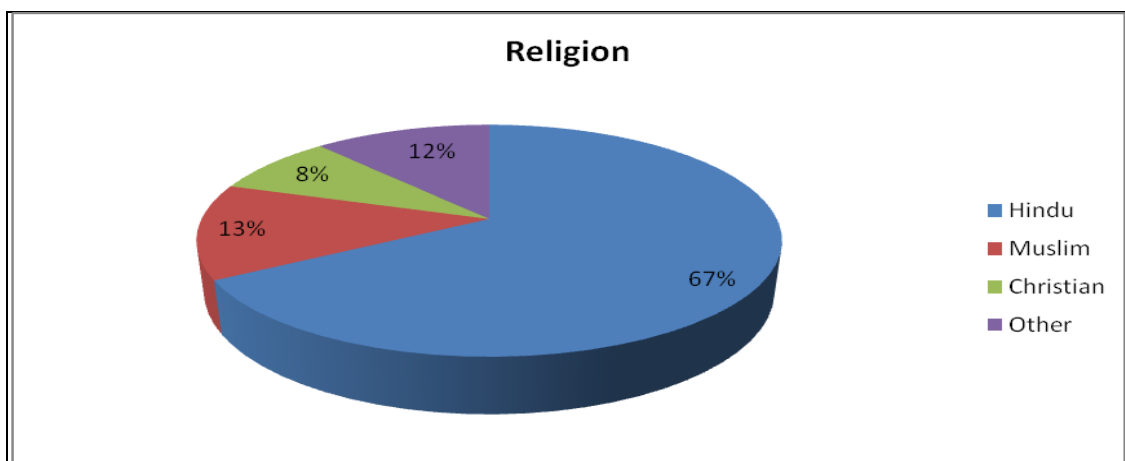


Figure 3:Percentage Distribution of mothers of under five year children is according to Education status

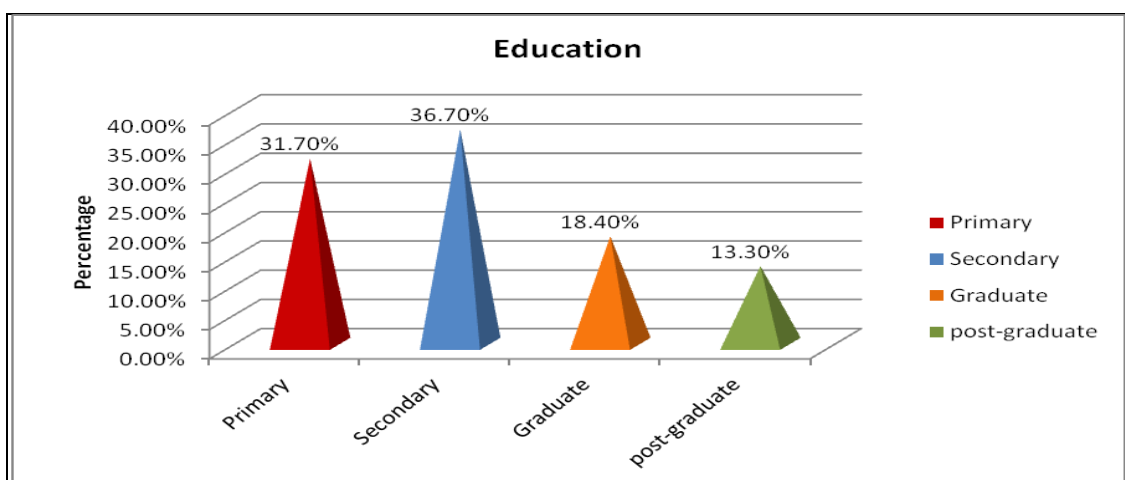


Figure: 4 The Percentage Distribution of mothers of under five year children according to Occupational status

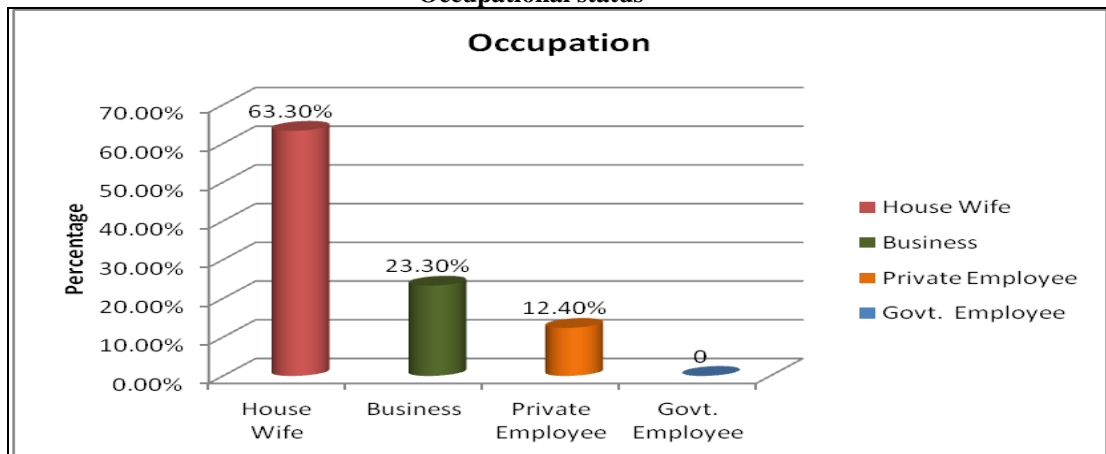


Figure: 5 The Percentage Distribution of mothers of under five year children in slum area according to number of children

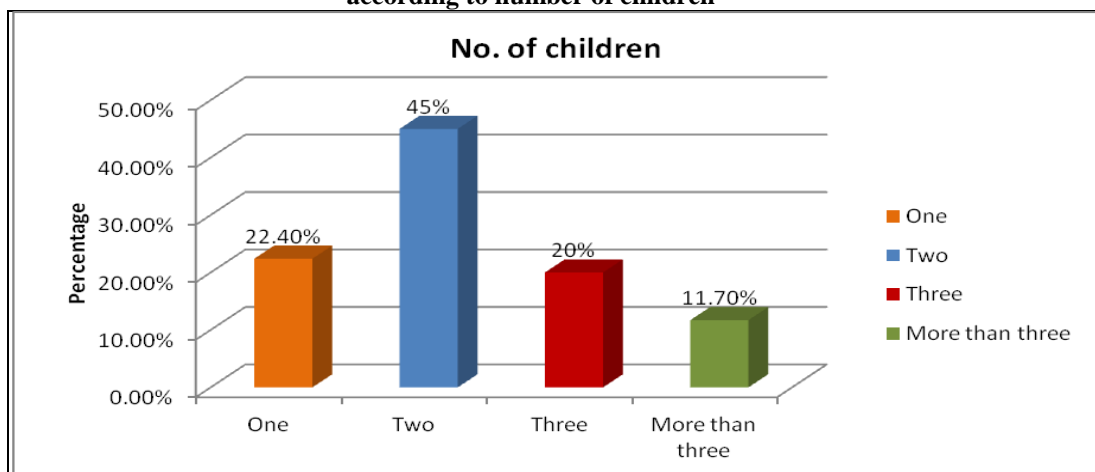


Figure: 6 The Frequency & Percentage Distribution of mothers of under five year children in slum area according to Family income

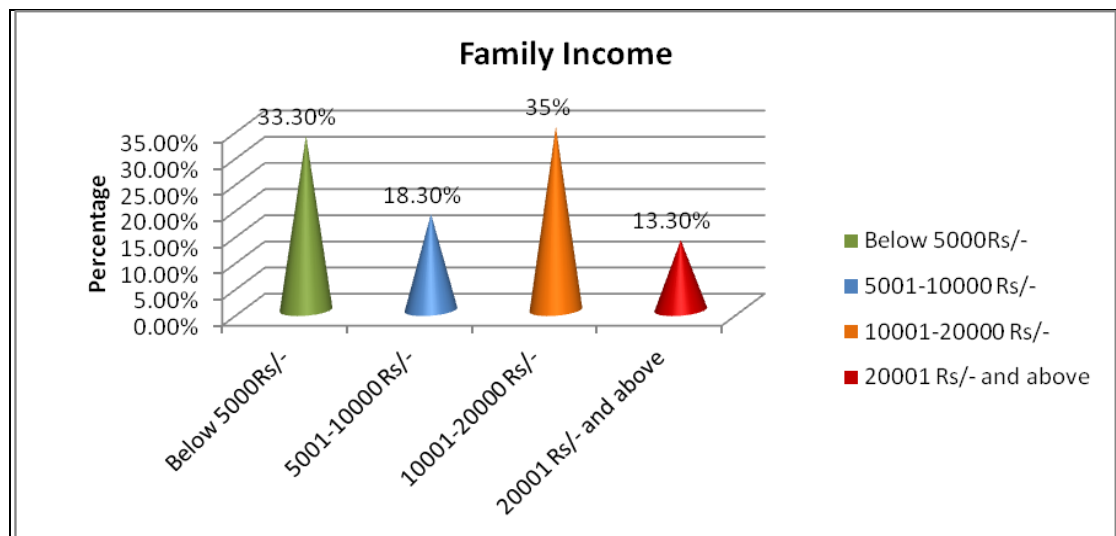
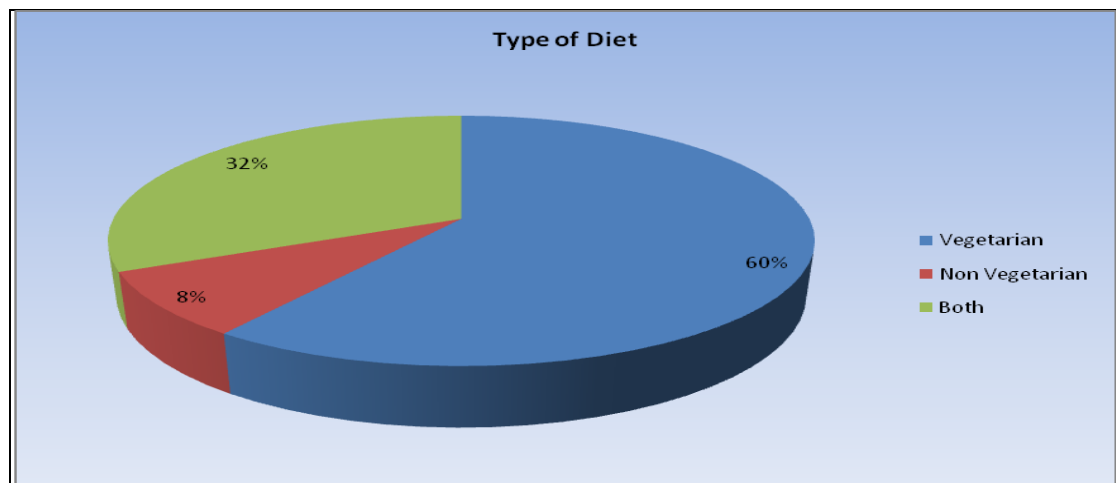


Figure: 7The Percentage Distribution of mothers of under five year children in slum area according to type of diet



Section II Analysis knowledge score of mothers underfive year children regarding vitamin a deficiency and its prophylaxis

Table 1: Area wise Mean, SD and Mean score percentage of the knowledge scores in pre-test and post test

Areas	Maximum possible score	Pre-test(X)		Post –test (Y)		Effectiveness (Y-X)	
		Mean \pm SD	Mean score %	Mean \pm SD	Mean score %	Mean	Mean score %
Introduction of Vit-A	4	20.75 \pm 16.3	34.58	40 \pm 19.39	66.67	19.25	32.08
Anatomy of eye	4	17.5 \pm 12.15	29.17	44.25 \pm 10.21	73.75	26.75	44.58

n=60

Meaning and sources of Vit-A	8	15 ± 6.95	25	38.37 ± 13.04	63.95	23.38	38.97
Meaning,, cause, Sign & symptoms, Diseases, Treatment, and Prophylaxis of Vit-A deficiency	14	19.86 ± 12.34	33.1	44.71 ± 14.29	74.52	24.86	41.43
Total	30	73.11 ± 47.74	30.46	167.33 ± 56.93	69.72	94.24	39.27

Table: 2 Distribution of mothers of under five year children with comparison of pretest and post test knowledge score

	Good	Average	Poor	Mean	SD	T value	df	P Value
Pre Test	0 (00%)	22(36.7%)	38(63.3%)	9.1833	3.0056	30.711	59	.000*
Post Test	33(55%)	27(45%)	0 (00%)	21.1667	2.84734			

Section-C Association between the socio-demographic variables and post-test knowledge score of mothers of under five year children regarding vitamin a deficiency and its prophylaxis

Table: 03(a) Association of post-test knowledge score regarding Vitamin A deficiency and its Prophylaxis according to age, religion, and educational, occupational, number of children, family income, and type of diet

	Average	Good	Total	Chi Square	df	P value
Age						
Below 20 years	4	4	8	2.172	3	0.538
21-25 years	13	11	24			
26 -30 years	5	11	16			
31-35years or above	5	7	12			
Total	27	33	60			
Religion						
Hindu	19	21	40	1.861	3	0.602
Muslim	2	6	8			
Christian	2	3	5			
Other	4	3	7			
Total	27	33	60			

Table: 03(b) Association of post-test knowledge score regarding Vitamin A deficiency and its Prophylaxis according to educational, occupational

	Average	Good		Chi Square	df	P value
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Education			Total			
Primary	15	4	19	21.483	3	.000*
Secondary	11	11	22			
Graduate	0	11	11			
post-graduate	1	7	8			
Total	27	33	60			
Occupation						
House Wife	15	23	38			
Business	11	3	14	10.258	2	.006*
Private Employee	1	7	8			
Total	27	33	60			

Table: 03(c) Association of post-test knowledge score regarding Vitamin A deficiency and its Prophylaxis according to number of children, family income, and type of diet

	Average	Good		Chi Square	df	P value
No. of children			Total			
One	4	10	14	6.534	3	0.088
Two	11	16	27			
Three	6	6	12			
More than three	6	1	7			
Total	27	33	60			
Family Income						
Below 5000Rs/-	14	6	20	8.634	3	.035*
5001-10000 Rs/-	5	6	11			
10001-20000 Rs/-	6	15	21			
20001 Rs/- and above	2	6	8			
Total	27	33	60			
Type of Diet						
Vegetarian	18	18	36	4.498	2	0.106
Non Vegetarian	0	5	5			
Both	9	10	19			
Total	27	33	60			

Conclusion

The study finding shows that Pretest majority 38 (63.3%) of the mothers had poor knowledge, Mean score 9.1833 and SD 3.00560 and after providing Information Booklet post-test knowledge score majority 33(55%) had good knowledge, Mean score 21.1667 and SD

2.84734. After comparison proved that the Information Booklet was effective for increasing the knowledge score of mothers of under five year children. It will helps to prevent further diseases.

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