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A Study to Assess the Knowledge Regarding Prevention of Pneumonia among Middle Aged Adults in Selected Rural Areas of Moodbidri with a View to Develop an Informational Booklet

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Abstract
Introduction:Pneumonia is an inflammation of lung parenchyma caused by various micro-organisms including bacteria, micro bacteria, Chlamydia micro plasma, fungi & parasites & viruses. It is usually associated with upper respiratory tract infections
Methodology: The research design selected for this study was descriptive survey design. 60 middle age adults were selected using non-probability purposive sampling technique. Study was conducted in selected rural areas of moodbidri. The instrument used for the study was structured knowledge questionnaire.
Results: The result showed that most of the of the subjects (55%) had poor knowledge, 41.67% of the subjects had average knowledge, 3.33% had good knowledge regarding prevention of pneumonia. the mean percentage of level of knowledge is 40.66.
Conclusion: the study concluded that the knowledge regarding prevention of pneumonia among middle age adults was low and there is a need to improve it.
Keywords: pneumonia, knowledge.

INTRODUCTION

Pneumonia is a highly prevalent and progressive disease associated with acute symptoms and caused mainly by aspiration of the infected materials in to the distal bronchioles & alveoli. In the third world and among the young and the middle aged, pneumonia remains a leading cause of death.[1]

The incidence of pneumonia is approximately 450 million people a year and occurring in all parts of the world. It is a major cause of death among all age groups especially in middle aged persons (7% of worlds total mortality rate). It occurs about 5 times more frequently in the developed world versus the developed world. In India 43 million people are affected by pneumonia and more prevalent in women than men.[2]

Materials and methods

The research design adopted for the present study was descriptive survey design. The sample size for the study was 60 middle aged adults who were selected by non-probability purposive sampling technique. The tools used were demographic proforma and structured knowledge questionnaire . Reliability coefficient of the knowledge questionnaire was tested using split half method following Spearman's Brown Prophecy formulae. The reliability of the structured knowledge questionnaire was found to be $r_{(10)} = 0.80$.

Data collection process

Formal written permissions were obtained from the authorities. The data was collected from 50 60 middle aged adults who met the study criteria. The samples were informed about the purpose of the study and the consent was taken from them. The necencery instructions were given to each subject and tool was administrated subjects. On various days the investigator contacted the study subjects and administered the data collection tool individually. Both descriptive and inferential statistics were used to analyze the data collection.

Results:

The findings of the study revealed that most of the subject (55%) had poor knowledge, 41.67% of the subjects had average knowledge and 3.33% had good knowledge.

Distribution of Knowledge on prevention of pneumonia among middle aged adults

n=60

Sl.No	Knowledge level	Frequency	Percentage (%)
1.	Poor	33	55
2.	Average	25	41.67
3.	Good	2	3.33
4.	Very Good	0	0

Table 2: Mean median, mean percentage and standard deviation of knowledge scores.

N=60

Max possible score	Min score obtained	Max score obtained	Mean	Median	Mean %	SD
30	4	24	12.2	30.5	40.66	3.618

The data presented in the Table 2 reveals that the mean percentage of level of knowledge is 40.66. Hence the level of knowledge is poor among the middle aged adults.

Area-wise knowledge scores.

The data presented in figure 1 shows that minimum knowledge score was in the area of diagnosis, prevention and management (35.61±1.67) which is followed by risk factors and etiology (43.5±1.43), clinical manifestation (44±1.76), introduction to pneumonia (45.42±1.42) respectively.

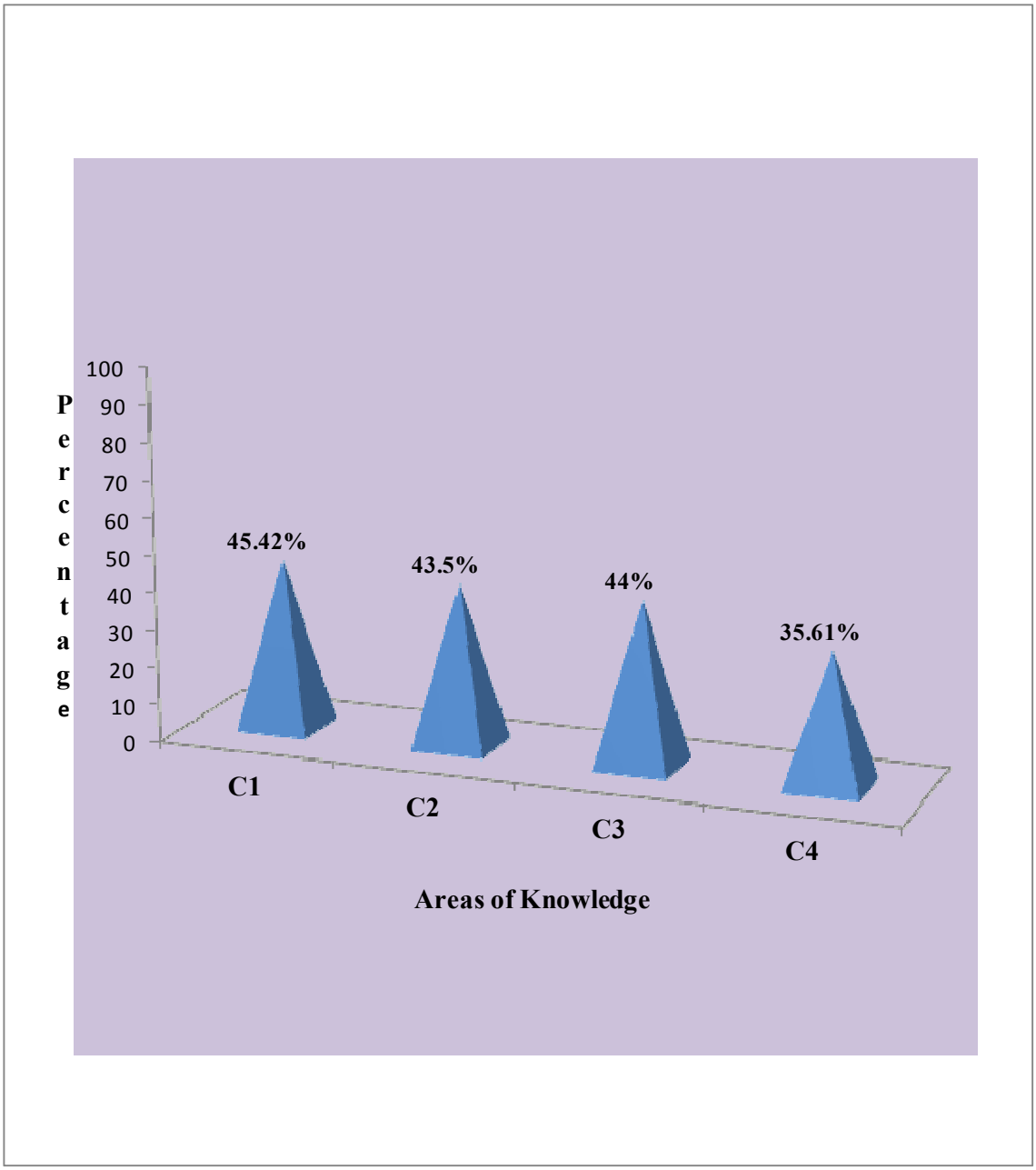

Fig-2: 3 D cone diagram showing the area wise mean percentage of level of knowledge scores of subjects.

Association between the knowledge score and selected demographic variables.

In order to find the association between the knowledge scores and selected demographic variables, the following null hypothesis was stated.

There will be no significant association between the knowledge scores and selected demographic variables.

Table 4a: Association between the knowledge scores and selected demographic variables.

n=60

Sl. No.	Demographic data	Knowledge Score		X^2
		≤ Median (12)	> Median (12)	
1.	Age in years			
	45-50	22	15	0.05
	51-55	6	8	
	56-60	7	2	
2.	Gender			
	Male	10	15	3.89*
	Female	23	12	
3.	Educational Status			
	Primary	25	17	0.08
	Secondary	10	4	
	Pre University	0	3	
	Graduate	0	1	
	Post Graduate	0	0	

Table value = 3.84, p< 0.05

Table 4b: Association between the knowledge scores and selected demographic variables.

N=60

Sl. No.	Demographic data	Knowledge Score		X^2
		≤ Median (12)	> Median (12)	
4.	Occupation			
	Coolie	10	12	2.50
	Factory Workers	1	0	
	Agriculture	6	2	
	Professional	1	4	
	House Wife	5	7	
	Beedi Rolling	4	8	
5.	Area of residence			
	Crowded	13	20	0.93
	Non crowded	14	13	
6.	Income in rupees			
	<5000	25	21	0.43
	5001-10000	7	4	
	10001-15000	2	1	
	>15000	0	0	
7.	Previous knowledge regarding pneumonia			
	a. Yes	19	12	0.55
	b. No	15	14	

Table value = 3.84, p< 0.05

Discussion

The data presented in the Table 4 a & b shows that there was significant association between knowledge score and selected demographic variables like gender.

The data presented in the Table 5 a & b shows that there was no significant association between practice score and selected demographic variables like age in years, educational status, occupation, area of residence, monthly income, previous knowledge of pneumonia.

Limitations

- The study was confined to specific geographical area which imposes a limit on generalization.
- The study did not use control group. Hence the results of the study must be generalized with caution as there is threat to internal validity due to history.

Recommendations

- A similar study can be replicated with different population.
- A survey can be conducted to find the incidence and prevalence of pneumonia.
- An experimental study can be conducted to determine the effectiveness of various therapies on pneumonia.

Conclusion

In view of the magnitude of the problem, the prevalence of pneumonia in developing country is consistently high. This indicates that there is need for health education campaign for the improvement of knowledge regarding pneumonia to the community.

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