



# International Journal of Advance Research in Medical Surgical Nursing

E-ISSN: 2663-2268  
P-ISSN: 2663-225X  
IJARMSN 2021; 3(1): 04-06  
Received: 05-11-2020  
Accepted: 08-12-2020

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## To assess the effectiveness of structured teaching programme on knowledge regarding prevention of community acquired pneumonia among the adult of age group 25-60 yrs. in Sunderpur Varanasi

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### Abstract

**Background:** Pneumonia is a type of lung infection. It can cause breathing problems and other symptoms. In community-acquired pneumonia (CAP), it will get infected in a community setting. It doesn't happen in a hospital, nursing home, or other healthcare center.

Our lungs are part of your respiratory system. This system supplies fresh oxygen to your blood and removes carbon dioxide, a waste product. When you breathe in air through your nose and mouth, it reaches the tiny air sacs of the lung (alveoli) through a series of tubes. From here, oxygen flows into your blood. Carbon dioxide flows out into the alveoli. You then breathe it out.

Many germs can grow inside your body and cause disease. Specific types of germs can cause lung infection and pneumonia when they invade. These germs can cause your respiratory system to work poorly. For example, oxygen may not be able to get into your blood as easily. That can cause shortness of breath. If your body can't get enough oxygen to survive, pneumonia may lead to death.

**Method:** we conducted this study in selected area of Sunderpur Varanasi. The study is approved by institutional ethical committee. Work practices procedure during the study is multiple choice question is used to assess the knowledge regarding prevention of community acquired pneumonia among the adult in rural area of Sunderpur Varanasi.

**Result:** In this study out of 60 adult people of Sunderpur Varanasi age group 20-60 years, in which 13 had poor knowledge regarding the CAP, 12 had average knowledge, 10 had a very good command on subject matter and 25 had an excellent level of knowledge gain after giving structured teaching programme regarding prevention of community acquired pneumonia (CAP).

**Conclusion:** Community acquired pneumonia is mostly occurred in rural area than urban area. After intervention, knowledge was improved among study participants.

**Keywords:** Prevention, assess, effectiveness, knowledge, community acquired pneumonia (CAP)

### Introduction

Community-acquired pneumonia (CAP) remains as an infectious cause of mortality and morbidity globally. The common etiological agents of CAP are *Klebsiella pneumoniae*, *Haemophilus influenzae*, *Streptococcus pneumoniae*, and *Pseudomonas aeruginosa*. Pneumonia is reported more in older patients and those with comorbidities, such as chronic liver, cardiac, lung and/or renal diseases, metabolic disorders such as diabetes mellitus, chronic alcoholism, malignancies, absence of spleen (asplenia), immune-compromising conditions or the use of immune-suppressing drugs, exposure to radiation or chemotherapy, and administration of antimicrobials, within the previous 3 months. In India, the incidence of CAP is 4 million cases/year with 20% requiring hospitalization. The mortality rate of CAP patients in outpatient settings is 1%–5%, and in Intensive Care Unit, it is 25%.

### Need of the study

Public awareness of health dangers and health education, prevents the community acquired pneumonia. Promote cessation by running tobacco cessation clinics. Knowledge and awareness among adult. Banning tobacco use in public places, work places and at home.

### Material and Methods

This pre-experimental study was conducted between at a Sunderpur rural area Varanasi. 50 sample were taken whose age group 20-60yrs include in this study. All the procedure

for knowledge were performed with purposive sampling technique.

**Sample selection criteria**

**Inclusion criteria**

Adult people whose age group 20-60 yrs. from Sunderpur rural area in Varanasi.

**Exclusion criteria**

Who are not willing to participate in this study who are not Present.

**Description of tool**

Tool divided into two sections

**Section A**

Deals with the demographic data that consist of seven items-age, gender, types of family, area of living, family income, knowledge exposure and past history of community

acquired pneumonia in family members.

**Section B**

Knowledge criteria tool comprises of poor, average, very good and excellent.

**Result**

**Section I**

Demographic variables of the study population of the total study population 75% were male and 25% were female. age wise distribution revealed that 33 (55%) were above 41 years of age. around 13 (22%) were educated till higher secondary education; economic status shows that 26 (44%) were having no income, most of all 31 (52%) were having joint family and 40 (67%) were having urban area and 20 (33%) were having rural area, most of all gain knowledge through television i'e33 (55%) they have not concern about internet.

**Table 1:** Demographic variables of the study population

Sr. No.	Item	Distribution	Frequency	Percentage (%)
1.	Age	20-30 yrs.	11	18
		31-40 yrs.	16	27
		41-50 yrs.	12	20
		51-60 yrs.	21	35
2.	Gender	Male	45	75
		Female	15	25
3.	Educational Status	Illiterate	0	0
		Primary	29	48
		Middle	18	30
		Higher Secondary & Above	13	22
4.	Family Type	Nuclear	31	52
		Joint	29	48
5.	Area of Living	Urban	40	67
		Rural	20	33
6.	Family Income	Below 5000	0	0
		5001-10,000	23	38
		10,001-15000	11	18
		No Income	26	44
7.	Knowledge Exposure	Television	33	55
		Internet	0	0
		Newspaper	22	37
		Others	05	8
8.	Past History of CAP	Yes	05	8
		No	55	92

**Section II**

All the people assessed according to their knowledge criteria from poor to excellent in pre-test and post-test. Most

of them 23 people were covered very good knowledge criteria than pre-test.

**Table 2:** Data analysis of knowledge as per criteria n = 60

Knowledge evaluation criteria	Pre-test		Post-test	
	Frequency	%	Frequency	%
Excellent (16-20)	0	0	25	0
Very-Good (11-15)	0	0	10	16
Average (6-10)	14	23	12	20
Poor (1-5)	46	77	13	21

**Section III**

Association between knowledge regarding prevention of community acquired pneumonia among adult people with selected socio-demographic data:

No association has been found with age, family income, knowledge exposure, gender, family [ast history and area of

living. significant association was observed with the educational status and family type.

**Association of knowledge with demographic variable**

- Significant association of knowledge with educational status was observed in study population.

- Significant association of knowledge with family type was observed in study population.

### **Conclusion**

Despite the ready availability of antibiotics and vaccines for important respiratory pathogens, CAP remains a significant and increasingly common medical problem in the industrialised world, with a substantial rate of complication and mortality.

### **Limitation**

The study was carried out in small population size and was restricted to the people who was not willing for the study and clinically ill analysis was done as per responses given by the participants.

### **Recommendations**

The study must be extended to larger population consisting of urban and rural population. Knowledge has given to prevent the disease along with their causes and prevention strategy of disease and their associating problem may be studied.

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