

## “A Study to Assess the Prevalence of Pneumonia Among General People Residing At Selected Community Area, Puducherry”.

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### ABSTRACT

Pneumonia is an inflammatory condition of the lung primarily affecting the small air sacs known as alveoli. Symptoms typically include some combination of productive or dry cough, chest pain, fever, and difficulty breathing. The severity of the condition is variable. Pneumonia is usually caused by infection with viruses or bacteria, and less commonly by other microorganisms. Identifying the responsible pathogen can be difficult. Diagnosis is often based on symptoms and physical examination. Chest X-rays, blood tests, and culture of the sputum may help confirm the diagnosis. The disease may be classified by where it was acquired, such as community- or hospital-acquired or healthcare-associated pneumonia. Management Antibiotics by mouth, rest, simple analgesics, and fluids usually suffice for complete resolution. However, those with other medical conditions, the elderly, or those with significant trouble breathing may require more advanced care. If the symptoms worsen, the pneumonia does not improve with home treatment, or complications occur, hospitalization may be required. This study was conducted in selected community area for general people by using convenience sampling technique, 50 sample. It revealed that general people 16(32%) had low level and 34(68%) had moderate level of pneumonia among general people. Hence the nurse administrators can function effectively in giving care to pneumonia among general people. The overall result shows that significant and non-significant relationship with the demographic variables the level of  $p < 0.05$

**Keywords:** prevalence of pneumonia

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### I. INTRODUCTION

Pneumonia is an inflammatory condition of the lung primarily affecting the small air sacs known as alveoli. Symptoms typically include some combination of productive or dry cough, chest pain, fever, and difficulty breathing. The severity of the condition is variable.

Pneumonia is usually caused by infection with viruses or bacteria, and less commonly by other microorganisms. Identifying the responsible pathogen can be difficult. Diagnosis is often based on symptoms and physical examination. Chest X-rays, blood tests, and culture of the sputum may help confirm the diagnosis. The disease may be classified by where it was acquired, such as community- or hospital-acquired or healthcare-associated pneumonia.

Risk factors for pneumonia include cystic fibrosis, chronic obstructive pulmonary disease (COPD), sickle cell disease, asthma, diabetes, heart failure, a history of smoking, a poor ability to cough (such as following a stroke), and a weak immune system. Vaccines to prevent certain types of pneumonia (such as those caused by Streptococcus pneumoniae bacteria, linked to influenza, or linked to COVID-19) are available. Other methods of prevention include hand washing to prevent infection, not smoking, and social distancing.

Treatment depends on the underlying cause. Pneumonia believed to be due to bacteria is treated with antibiotics. If the pneumonia is severe, the affected person is generally hospitalized. Oxygen therapy may be used if oxygen levels are low.

Each year, pneumonia affects about 450 million people globally (7% of the population) and results in about 4 million deaths. With the introduction of antibiotics and vaccines in the 20th century, survival has greatly improved. Nevertheless, pneumonia remains a leading cause of death in developing countries, and also among the very old, the very young, and the chronically ill. Pneumonia often shortens the period of suffering among those already close to death and has thus been called "the old man's friend".

**Prognosis** With treatment, most types of bacterial pneumonia will stabilize in 3–6 days. It often takes a few weeks before most symptoms resolve. X-ray findings typically clear within four weeks and mortality is low (less than 1%). In the elderly or people with other lung problems, recovery may take more than 12 weeks. In persons requiring hospitalization, mortality may be as high as 10%, and in those requiring intensive care it may reach 30–50%. Pneumonia is the most common hospital-acquired infection that causes death. Before the advent of antibiotics, mortality was typically 30% in those that were hospitalized. However, for those whose lung condition deteriorates within 72 hours, the problem is usually due to sepsis.

Complications may occur in particular in the elderly and those with underlying health problems. This may include, among others: empyema, lung abscess, bronchiolitis obliterans, acute respiratory distress syndrome, sepsis, and worsening of underlying health problems.

### **AIM OF THE STUDY**

The Aim of the study to assess the prevalence of pneumonia among general people residing at selected community area, puducherry.

### **OBJECTIVES OF STUDY**

- To assess the prevalence of pneumonia among general people.
- To associate prevalence of pneumonia at selected demographical area.

## **II. METHODOLOGY**

The resource approach used for this study was quantitative research approach. A descriptive research design was prevalence of pneumonia in the community area.

By using convenience sampling technique, 50 sample was selected for the present study. The period of data collection was 2 weeks. The tool consists of demographic data, assessment tools for prevalence of pneumonia. The outcome of study was evaluated by using descriptive and inferential statistics.

### **DESCRIPTION OF TOOL:**

#### **SECTION A:**

Demographic variables such as age, gender, religion, education, occupation, marital status, types of family, having children, types of residence, family status, do you know about pneumonia.

#### **SECTION B:**

Assessment tools for prevalence of pneumonia among general people in silukarapalayam, puducherry. It consists of totally 50 questions. Each question carries one mark.

### **SCORING INTERPRETATION:**

<b>SCORING INTERPRETATION</b>	
<b>0 - 10</b>	Low level
<b>11-15</b>	Moderate level
<b>16-25</b>	High level

### **PROCEDURES FOR THE DATA COLLECTION:**

After the validation of the tool and content from the consent authority , the date and time will be fixed for collecting data . The sample of 50 general people , who was selected by convenience sampling technique , after introducing and maintained relationship with the caregivers who are interested to be.

**Section A: Description of the demographic variables among general people.**

**Table 1:- Frequency and percentage wise distribution of demographic variables among general people. (N=50)**

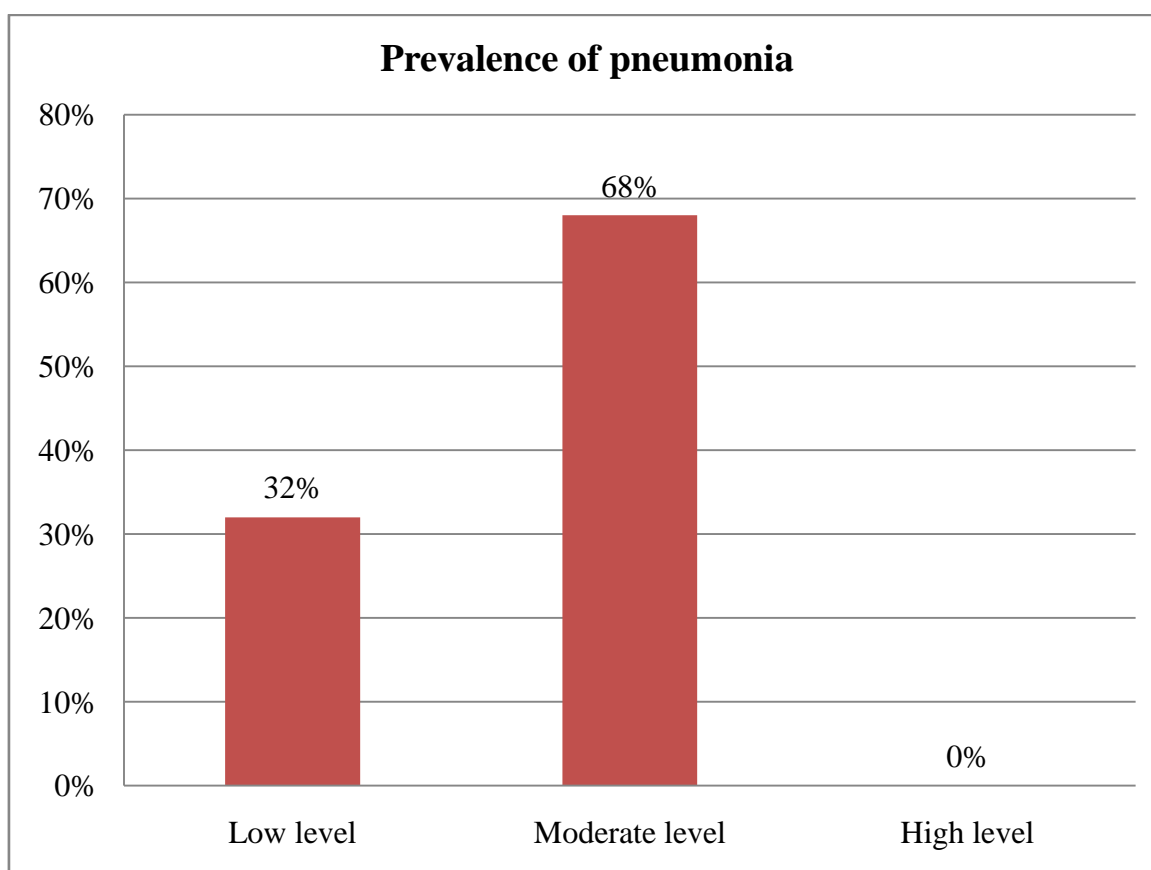
SL. NO	DEMOGRAPHIC VARIABLES	FREQUENCY (N)	PERCENTAGE (%)
<b>1</b>	<b>Age</b>		
	a) 20-30 years	14	28
	b) 30-40 years	10	20
	c) 40-50 years	20	40
	d) Above 50 years	6	12
<b>2</b>	<b>Sex</b>		
	a) Male	23	46
	b) Female	27	54
<b>3</b>	<b>Religion</b>		
	a) Hindu	40	80
	b) Muslim	6	12
	c) Christian	4	8
	d) Others	0	0
<b>4</b>	<b>Educational status</b>		
	a) Primary	16	32
	b) Secondary	16	32
	c) Graduate	10	20
	d) Non formal education	8	16
<b>5</b>	<b>Occupation</b>		
	a) Government	9	18
	b) Private	13	26
	c) Business	18	36
	d) Not working	10	20
<b>6</b>	<b>Marital status</b>		
	a) Married	42	84
	b) Unmarried	8	16
	c) divorced	0	0
<b>7</b>	<b>Family type</b>		
	a) Nuclear family	24	48
	b) Joint family	26	52
<b>8</b>	<b>Number of children's</b>		
	a) 1	13	26
	b) 2	22	44
	c) More than 3	7	14
	d) No	8	16
<b>9</b>	<b>Residential area</b>		
	a) Urban	15	30
	b) Rural	35	70
<b>10</b>	<b>Family status</b>		
	a) Poor economic status	7	14
	b) Middle class	39	78

	c) Rich economic status	4	8
<b>11</b>	<b>Do you know about respiratory disease</b>		
	a) Yes	21	42
	b) No	29	58

**Section B: Assessment of the prevalence of pneumonia among general people.**

**Table 2:- Frequency and percentage wise distribution of the prevalence of pneumonia among general people.**

(N=50)		
Prevalence of pneumonia	FREQUENCY (n)	PERCENTAGE (%)
Low level	16	32
Moderate level	34	68
High level	0	0
<b>Total</b>	<b>50</b>	<b>100</b>
<b>Mean±Standard deviation</b>	9.74 ±2.380	



**Section C: Association between the prevalence of pneumonia among general people at selected demographical variables.**

**Table –3: Association between the prevalence of pneumonia among general people at selected demographical variables.**

SL. NO	DEMOGRAPHIC VARIABLES	PREVALENCE OF PNEUMONIA				Chi-square X <sup>2</sup> and P-Value
		LOW		MODERATE		
		N	%	N	%	
<b>1</b>	<b>Age</b>					X <sup>2</sup> =2.862 Df=3 p =0.413 NS
	a) 20-30 years	3	18.8	11	32.4	
	b) 30-40 years	2	12.5	8	23.5	
	c) 40-50years	8	50	12	35.3	
	d) Above 50 years	3	18.8	3	8.8	
<b>2</b>	<b>Sex</b>					X <sup>2</sup> =0.684 Df=1 p =0.408 NS
	a) Male	6	37.5	17	50	
	b) Female	10	62.5	17	50	
<b>3</b>	<b>Religion</b>					X <sup>2</sup> =2.053 Df=2 p =0.358 NS
	a) Hindu	14	87.5	26	76.5	
	b) Muslim	2	12.5	4	11.8	
	c) Christian	0	0	4	11.8	
	d) Others	0	0	0	0	
<b>4</b>	<b>Educational status</b>					X <sup>2</sup> =4.719 Df=3 p =0.188 NS
	a) Primary	8	50	8	23.5	
	b) Secondary	5	31.3	11	32.4	
	c) Graduate	1	6.3	9	26.5	
	d) Non formal education	2	12.5	6	17.6	
<b>5</b>	<b>Occupation</b>					X <sup>2</sup> =0.678 Df=3 p =0.878 NS
	a) Government	2	12.5	7	20.6	
	b) Private	5	31.3	8	23.5	
	c) Business	6	37.5	12	35.3	
	d) Not working	3	18.8	7	20.6	
<b>6</b>	<b>Marital status</b>					X <sup>2</sup> =0.132 Df=1 p =0.716 NS
	a) Married	13	81.3	29	85.3	
	b) Unmarried	3	18.8	5	14.7	
	c) divorced	0	0	0	0	
<b>7</b>	<b>Family type</b>					X <sup>2</sup> =1.039 Df=1 p =0.308 NS
	a) Nuclear family	6	37.5	18	52.9	
	b) Joint family	10	62.5	16	47.1	
<b>8</b>	<b>Number of children's</b>					X <sup>2</sup> =6.988 Df=3 p =0.072 NS
	a) 1	2	12.5	11	32.4	
	b) 2	6	37.5	16	47.1	
	c) More than 3	5	31.3	2	5.9	
	d) No	3	18.8	5	14.7	
<b>9</b>	<b>Residential area</b>					X <sup>2</sup> =0.630 Df=1 p =0.427 NS
	a) Urban	6	37.5	9	26.5	
	b) Rural	10	62.5	25	73.5	
<b>10</b>	<b>Family status</b>					X <sup>2</sup> =

	a) Poor economic status	2	12.5	5	14.7	Df= p =0. NS
	b) Middle class	11	68.8	28	82.4	
	c) Rich economic status	3	18.8	1	2.9	
<b>11</b>	<b>Do you know about respiratory disease</b>					<b>X<sup>2</sup>=5.221</b> <b>Df=1</b> <b>p =0.022*</b> <b>S</b>
	a) Yes	3	18.8	18	52.9	
	b) No	13	81.3	16	47.1	

\*-p < 0.05 significant, , NS-Non significant

### III. RESULTS

Major findings of the study,

❖ It shows frequency and percentage wise distribution of the prevalence of pneumonia among general people. Majority of general people 16(32%) had low level and 34(68%) had moderate level of pneumonia and the mean and standard deviation of the prevalence of pneumonia among general people is 9.74 +2.380 respectively.

❖ It depicts that the demographic variable Do you know about respiratory disease had shown statistically significant association between the prevalence of pneumonia among general people at selected demographic variables.

The other demographic variable had not shown statistically significant association between the prevalence of pneumonia among general people at selected demographic variables respectively.

### IV. RECOMMENDATIONS:

- The study can be conducted to assess the prevalence of pneumonia among general people.
- Comparative study can be done between urban and rural areas.
- A quasi experimental study can be conducted with control group for the effective comparison.
- Similar study can be conducted in a large group to generalize the study findings.

### V. CONCLUSION:

The study concluded that the prevalence of pneumonia among general people. Out of 50 general people 16(32%) had low level and 34(68%) had moderate level of pneumonia among general people. Hence the nurse administrators can function effectively in giving care to pneumonia among general people. A different study has to be conducted further to assess the prevalence of pneumonia among general people.

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