



## **PATTERN OF RESPIRATORY DISEASES REPORTING TO THE TERTIARY CARE HOSPITAL AT KAKINADA, ANDHRA PRADESH: PROSPECTIVE OBSERVATION STUDY**

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### **Abstract**

An attempt to study the Prospective, observation study was conducted In-patient department of Pulmonology, Siddhartha Multi Speciality Hospital Kakinada, and Andhra Pradesh India. In our study we aim incidence and prevalence of respiratory diseases based up on the study population. The Research study begins with standard questionnaire for collecting patient's demographic details, diagnosis of the presenting disease condition. The case study was reported for a period of six months and the data obtained from the questionnaires was analyzed in Microsoft excel 2013. In this study strictly followed by inclusion and exclusion criteria, the study was conducted in for six months we conclude most of were interviewed in the study among whom the majority were Males who constituted a count of 57% (n=69) and females constituted 43% (n=51).According to the study, the age group distribution 31- 40 years constituting 27% (n=30) were more affected, followed by 71-80 years constituting 11% (n=15) followed by the rest of the age groups. For the environmental analysis conducted the majority of population affected were found in Rural 70% (n=84), where as urban is 30% (n=36). Daily Wages 38 % (n=45) followed by House Wife's and students 23% and 17% respectively followed by others such as Employees, farmers. Illiterates mainly affected those who are Daily Wages when compare to the others. COPD is the most Common One 22% (n=28), Followed by Pulmonary KOCHS 13% (n=16) Viral pneumonia 12 % (n=14).

**Key Words:** Respiratory Diseases, Case study, Six months, 120 Patients, COPD.

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**Article History** Received: 01.12.2018, Accepted: 22.12.2018, Published: 28.02.2019.

### **Introduction**

Respiratory complaints such as cough and catarrh are some of the commonest symptoms encountered in medicine<sup>1</sup>. This is due in part to the large surface area; nearly 70m<sup>2</sup> of the lungs present to the atmosphere. The atmosphere that we breathe is more than just "air." In reality, it is a complex mixture of ambient gases and environmental particulates to which pathogen containing droplets are added when respiratory secretions are coughed or sneezed out by others. Respiratory diseases constitute a major cause of morbidity and mortality worldwide. The top four respiratory diseases, lower respiratory tract infections, chronic obstructive pulmonary disease (COPD), tuberculosis, and lung cancer, are among the ten leading causes of death worldwide<sup>[2,3]</sup>. In developed countries, respiratory diseases feature prominently in the top ten causes of morbidity and mortality. Health care demands are rapidly expanding and the trends are changing in developing countries<sup>4</sup>. Upgrading of the health care systemic a pressing need and the priorities are not always easy to define especially in a resource constrained system<sup>5,6,7</sup>. The changes necessary to improve the health care.

### **Aim and Objectives**

To evaluate the Prevalence and incidence of different types of Pulmology cases reporting to the Siddhartha Multi Speciality Hospital, Kakinada Andhra Pradesh.

- To find out the Prevalence and incidence of Pulmology Cases reporting to the population based study

- Occupational comparison of patients those who are belongs to the Pulmology Department.
- To find out which type of diagnose is most commonly one.

### **Materials and Methods**

**Type of Study:** Prospective, observation study.

**Study Site:** The study was conducted at Siddhartha Multi Speciality Hospital Kakinada Andhra Pradesh India.

**Department:** In-patient department of Pulmonology, Siddhartha Multi Speciality Hospital Kakinada.

**Study Period:** The study was conducted from June 2018 - November 2018.

**Study Population:** A total of 120 random participants, both male and female were included in the study.

### **Study Criteria**

#### **Inclusion Criteria**

- Patients of all age groups were included in this study.
- Patients who were belong to Pulmology Department.

- Patients who were willing to participate in the study.

## Exclusion Criteria

- Patients suffering with other than the Multiple Complications.
- Patients not willing to participate in the study were taken under exclusion criteria.

## Questionnaire Design

We are preparing a standard questionnaire for collecting patients demographic details were designed which included all the data of the patient (name, age, gender, educational and employment status Etc.).The questionnaire also included the diagnosis of the presenting disease condition. Along with these details few other questions were also included to assess the status of the patients, previous medical history, family history and duration of exposure.

## Data Collection

All the patients were directly interviewed by the researchers. Initially the patient was explained about the type and need of study and the details were collected as per the patients will. The demographic details were collected by asking open ended questions in local language.

## Data Analysis

The data obtained from the questionnaires was analyzed in Microsoft excel 2013 (Microsoft Corporation).

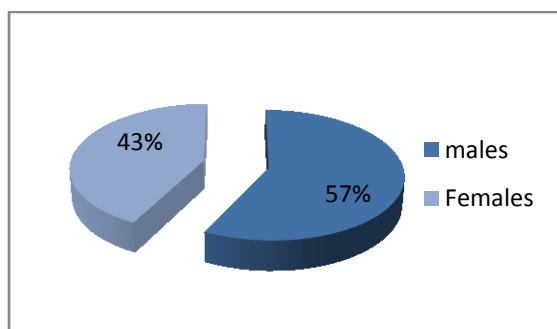
## Results and Discussion

### Gender distribution of Study Population

A total of 120 patients attending Tertiary care hospital were interviewed in the study among whom the majority were Males who constituted a count of 57% (n=69) and males constituted 43% (n=51).

**Table No: 01**

Gender	Frequency	percentage
Male	69	57%
Female	51	43%



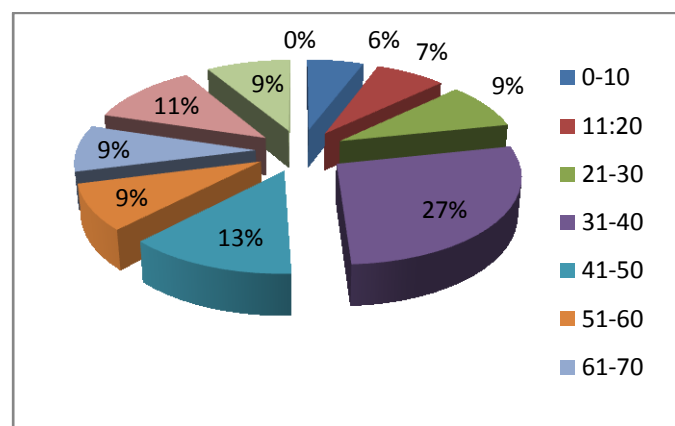
**Figure No: 01**Based up on the gender distribution of the study population

### Age Distribution of Study Population

According to the study, the age group distribution 31- 40 years constituting 27% (n=30) were more affected, followed by 71-80 years constituting 11% (n=15) followed by the rest of the age groups. Here, in the following table are cited by age group distribution relatively presenting to the Tertiary care Hospital.

Age	Males	Females	Percentage%
0-10	04	02	6%
11-20	05	02	7%
21-30	06	08	9%
31-40	19	11	27%
41-50	09	04	13
51-60	06	03	9%
61-70	06	09	9%
71-80	08	07	11%
81-90	06	04	9%
91-100	00	01	0%

**Table No: 02**



**Figure No: 02** Based up the age distribution of the study

### Based On the Environmental Analysis of Study Population

According to the environmental analysis conducted the majority of population affected were found in Rural 70% (n=84), where as urban is 30% (n=36).

**Table No: 03**

	Frequency	Percentage%
Urban	36	30%
Rural	84	70%

followed by literates 39% (n=47). Illiterates mainly affected those who are Daily Wages when compare to the others.

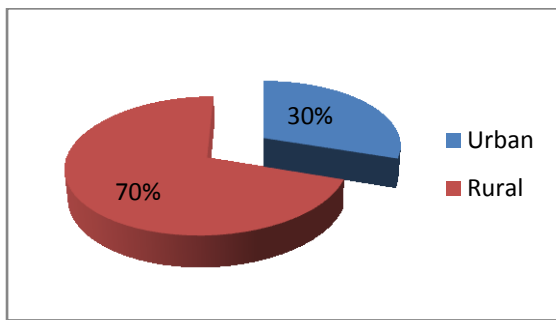


Figure No: 03 based on the environmental analysis of study population

### Based on the occupational comparison of the study population

From an occupational prospective the highest percentage of them affected were Daily Wages 38% (n=45) followed by House Wife's and students 23% and 17% respectively followed by others such as Employees, farmers. Here in the following table are cited the distribution of the study population as per patients professional data.

Table No: 04

occupation	Frequency	Percentage%
Students	20	17%
Employees	16	13%
Daily Wages	45	38%
Farmers	11	9%
House Wife's	28	23%

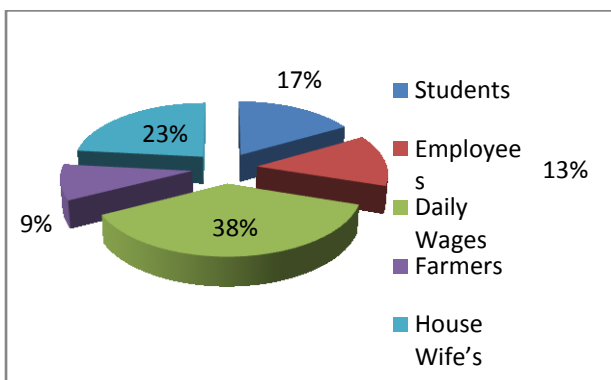


Figure No: 04 based on the occupational comparison of the study population

### Based on the educational comparison of the study population

From an educational perspective the highest percentage of them attending the hospital were illiterates constituting 61% (n=73)

Table No: 05

	Frequency	Percentage
Literates	47	39%
Illiterates	73	61%

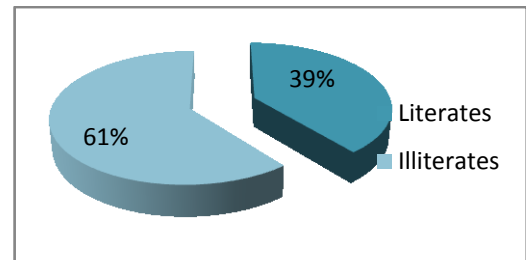


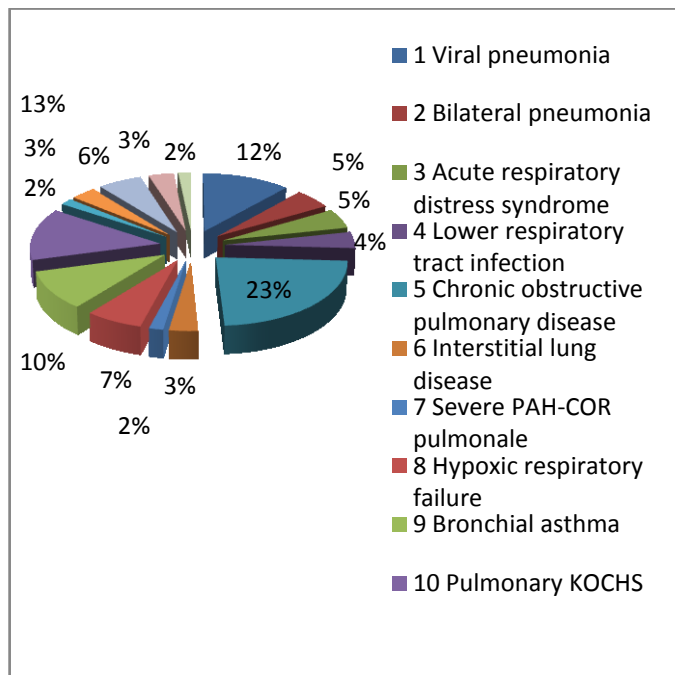
Figure no: 05 based on the educational comparison of the study population

### Based on the Disease Distribution of the study population

A total of 120 patients attending Tertiary care hospital were diagnosed by the chief complaints and clinical investigations. Among which the majority were diagnosed with Chronic obstructive pulmonary disease (COPD) 22% (n=28) followed by Pulmonary KOCHS 13% (n=16), Viral pneumonia 12% (n=14) followed by other types.

Table No: 06

S.No	Name Of The Disease	Frequency	Percentage %
01	Viral pneumonia	14	12%
02	Bilateral pneumonia	06	5%
03	Acute respiratory distress syndrome	06	5%
04	Lower respiratory tract infection	05	4%
05	Chronic obstructive pulmonary disease	28	22%
06	Interstitial lung disease	04	3%
07	Severe PAH-COR Pulmonale	02	2%
08	Hypoxic respiratory failure	08	7%
09	Bronchial asthma	12	10%
10	Pulmonary KOCHS	16	13%
11	Chronic pulmonary fibrosis	02	2%
12	Tubercular meningitis	04	3%
13	Lung carcinoma	07	6%
14	Acute bronchitis	04	3%
15	Bronchiectasis	02	2%



**Figure no: 06 Based on the Disease Distribution of the study population**

## Discussion

A total of 120 patients attending Tertiary care hospital were interviewed in the study among whom the majority were Males who constituted a count of 57% (n=69) and males constituted 43% (n=51). According to the study, the age group distribution 31- 40 years constituting 27% (n=30) were more affected, followed by 71-80 years constituting 11% (n=15) followed by the rest of the age groups. For the environmental analysis conducted the majority of population affected were found in Rural 70% (n=84), where as urban is 30% (n=36). Daily Wages 38% (n=45) followed by House Wife's and students 23% and 17% respectively followed by others such as Employees, farmers. Illiterates mainly affected those who are Daily Wages when compare to the others. COPD is the most Common One 22% (n=28), Followed by Pulmonary KOCHS 13% (n=16) Viral pneumonia 12% (n=14).

## Conclusion

We Are Concluded According Our Survey COPD Having A More Prevalence And Incidence Following By Other Diseases. Illiterates are more prone to the Respiratory diseases due to Lack of Knowledge. As a Clinical pharmacist we are conducting awareness programmes and Diseases Based counselling those who are affected from respiratory Diseases.

## Conflict Of interests

The authors have no conflict of interests.

## Acknowledgement

The authors specially thank Dr. M. Aditya Krishna, Managing Director, Siddhartha Hospital, for providing an opportunity to carry out the research work.

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