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Research Article

**FREQUENCY AND PATTERN OF COMMUNITY ACQUIRED
PNEUMONIA IN CHILDREN AND ADULT POPULATION****¹Dr. Abdul Rahim Memon, ²Dr. Muhammad Amir Memon, ¹Dr. Muhammad Sohail Baig,
³Dr. Hamid Nawaz Ali Memon, ¹Dr. Samar Raza and ⁴Muhammad Jan Khetrana**¹Liaquat University Hospital Hyderabad / Jamshoro, ²Isra University Hospital Hyderabad,³Zulekha Hospital Dubai United Arab Emirates, ⁴Liaquat University of Medical and Health
Sciences (LUMHS) Jamshoro**Article Received:** May 2019**Accepted:** June 2019**Published:** July 2019**Abstract:****Objective:** To explore the frequency and pattern of community acquired pneumonia in children and adult population.**Patients and Methods:** A total of fifty patients with pneumonia were included in this study. The criterion for the selection of the patients for the study was those patients diagnosed case of pneumonia as chest x-ray infiltrate and ≥ 2 additional symptoms includes temperature $>38.3^{\circ}\text{C}$ or $<36^{\circ}\text{C}$, chills, new cough, chest pain, or new onset of dyspnea while the patients with upper respiratory tract infections, tuberculosis, malaria, HIV and already on immunosuppressive medications were placed in exclusion criteria whereas the frequency / percentages (%) and means \pm SD computed for study variables.**Results:** During six-month study period total fifty patients had community acquired pneumonia i.e. children and teenagers (25 patients) and adult and elderly populations (25 patients) were explored and study. The mean \pm SD for age of population of children and adult population was 7.62 ± 5.94 and 58.61 ± 7.72 respectively. Regarding gender among children population male 18 (72%) and female 07 (28%) and in adult population male 15 (60%) and female 10 (40%) while the pathogens *Streptococcus pneumoniae* 29 (58%), *Haemophilus influenzae* 09 (18%), virus detected 07 (14%) and *Moraxella catarrhalis* 05 (10%) and other parameters Hospital stay (days) 19.74 ± 5.72 , ICU admission 14 (28%) and mortality 05 (10%).**Conclusion:** Pneumococci are the most well-known pathogen related with CAP requiring emergency clinic affirmation, and they all have a comparable rate that increment with age.**KeyWords:** Pneumonia, consolidation and community acquired.**Corresponding author:*****Muhammad Jan Khetrana,**

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INTRODUCTION:

Community-acquired pneumonia (CAP) alludes to contaminations obtained in the community, barring social related infection. Gentle cases can be dealt with effectively at home, yet serious cases require emergency clinic affirmation and are related with more prominent expense and endure higher mortality [1]. Convenient and suitable anti-infection treatment is essential to improving results; however limiting superfluous utilization of wide range antibiotics is similarly significant [2]. Past investigations looking at the etiology of CAP have given generally varying outcomes. Examination is hampered by intrinsic epidemiologic contrasts notwithstanding absence of uniform incorporation criteria; consider settings, and analytic techniques [3]. Lower respiratory tract contaminations are a main irresistible reason for death around the world, concurring the as of late distributed 2015 Global Burden of Disease Study, with rates expanding in many developed nations [4]. There is a shortage of populace based observational investigations with high consideration rates looking at pneumonia frequency and etiology while keeping away from excessively specific incorporation criteria and applying present day analytic strategies. The point of the present examination was to tentatively explore the recurrence and etiology of CAP in a characterized populace, considering estimation of frequency, applying current demonstrative tests, and contrasting etiology and indications, chance elements, and results.

PATIENT AND METHODS:

A total of fifty patients with pneumonia were included in this study. The criterion for the selection of the patients for the study was those patients diagnosed case of pneumonia as chest x-ray infiltrate and ≥ 2 additional symptoms includes temperature $>38.3^{\circ}\text{C}$ or $<36^{\circ}\text{C}$, chills, new cough, chest pain, or new onset of dyspnea while the patients with upper respiratory tract infections, tuberculosis, malaria, HIV and already on immunosuppressive medications were placed in exclusion criteria. After having selected cases for the study, careful history & examination was carried out in each patient in particular relation to respiratory system examination. The demographical and clinical profile of subjects was also noted. The co-morbidities were also explored while the data was collected on pre-designed proforma and analyzed in SPSS to manipulate the frequencies and percentages.

RESULTS:

During six-month study period total fifty patients had community acquired pneumonia i.e. children and teenagers (25 patients) and adult and elderly populations (25 patients) were explored and study. The mean \pm SD for age (yrs) of population of children and adult population was 7.62 ± 5.94 and 58.61 ± 7.72 respectively. The demographical and clinical profile of study population is presented in Table 1.

TABLE 1: The Demographical and Clinical Profile Of Study Population

Parameter	Frequency (N=50)	Percentage (%)
AGE (yrs)		
<1	06	24
1-9	09	36
9-19	10	40
20-29	03	12
30-39	04	16
40-49	04	16
50-59	05	20
60-69	07	28
70+	02	8.0
CHILDREN POPULATION		
Male	18	72
Female	07	28
ADULT POPULATION		
Male	15	60
Female	10	40
RESIDENCE		
Urban	30	60
Rural	20	40
PATHOGENS		
Streptococcus pneumonia	29	58
Haemophilus influenzae	09	18
Virus detected	07	14
Moraxella catarrhalis	05	10
OTHER PARAMETERS		
Hospital stay (days)	19.74±5.72	
ICU admission	14	28
Mortality	05	10

DISCUSSION:

A few examinations have been distributed in the course of the most recent decade using nucleic acid amplification procedures to evaluate the etiology of pneumonia. In an ongoing report, Jain et al [5] enlisted 68% of qualified grown-up patients and assessed the general frequency of CAP to be 24.8 cases per 10000 grown-ups every year. Holter et al [6] as of late recuperated pneumococci in 30% of conceded CAP patients in Norway. Torres et al [7] as of late decided in a survey that the general rate of CAP in Europe was around sixteen for every ten thousand populaces. A conceivable clarification might be that Jain et al [5] recouped excellent sputum tests from just 12% of their members. Gadsby et al [8] accomplished pathogen location in 87% of patients utilizing PCR strategy. All things considered, fundamental variables and various limits for ICU confirmation, timing of changing from intravenous to oral, and move to outpatient the board may clarify a portion of these distinctions [9]. Rates of ICU confirmations, utilization of helped ventilation, and length of hospital stay were comparative for patients regardless of living beings distinguished.

A noteworthy quality of this study was the high consideration rate from an all around characterized populace, permitting direct evaluation of the rate of CAP requiring clinic confirmation

CONCLUSION:

Pneumococci are the most well-known pathogen related with CAP requiring emergency clinic affirmation, and they all have a comparable rate that increased with age.

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