

# A Descriptive Study To Assess The Emergencies Due To Noncommunicable Diseases Among Young Adults Admitted In Intensive Care Units of Multispeciality Hospital of Metropolitan City

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**Abstract-** *Non-communicable diseases are increasing globally, specifically in developing countries leading to emergencies and hence rise in the mortality. The objective of this study is to find out the percentage of adults & their gender affected by Non-communicable diseases leading to emergencies. Based on the finding, conduct further study to decide prevention aspect. The study was conducted on 150 adults, the result shows, 67% adults are suffering with NCDs are from economically productive age group, and most affected are males with 65%.*

## I. INTRODUCTION

The health of the adult is increasingly important priority globally. Due to urbanization, rapid changes in socioeconomic environment and lifestyle, over last two to three decades non communicable diseases are increasing. According to WHO, NCDs also known as chronic Non-communicable diseases, tend to be of long duration and are the result of a combination of genetic, physiological, environmental and behavioural factors. The common NCDs are cardiovascular, cancers, chronic respiratory diseases, metabolic diseases, chronic kidney disease, arthritis, osteoporosis and cataract. These are commonly caused by lack of physical activity, unhealthy eating, alcohol, drugs and smoking. Certain non-communicable diseases appear at greater rates in young population living in the western way, their increased incidence is not related to age. Medical emergencies were found to be more frequent [45.4%] cause, could be indicative of rising epidemics of non-communicable diseases related with the lifestyle changes. Some studies found that higher burden of the disease is in the economically productive age group<sup>5,6,11,5</sup>. The objective of this study is therefore to find out the percentage of non-communicable disease [emergency] in various age group of adults. and further carry out the studies to make people aware about managing and preventing it.

## II. BACKGROUND OF THE STUDY

The prevalence of NCDs increases throughout the world. It leads to 47% of the disease burden and 63% of all mortalities<sup>2</sup>. Of which, 80% of mortalities occur in developing countries, and the majority of deaths are premature. Further, by the year 2020, global anticipated NCDs burden will rise to 80% and the majority of deaths (70%) will occur in low and middle-income countries<sup>5</sup>.

According to WHO 60% of related factors to individual health and quality of life are correlated to lifestyle. Millions of people follow an unhealthy lifestyle, hence they encounter illness, disability, and death, mostly the non-communicable diseases<sup>6</sup>.

The potential economic and societal costs of non-communicable diseases of this type rise sharply with age and have the ability to affect economic growth. WHO organization analysis in 23 low and middle income countries estimated the economic losses from the non-communicable diseases (hypertension, stroke, diabetes) in these countries would total US\$83 billion between 2006 and 2015<sup>7</sup>.

Modifiable, behavioural and metabolic risk factors contribute to increase in the risk of NCDs. India is a populous country of about 1.3 billion. Non communicable diseases contribute to around 5.87 million (60%) of all deaths in India<sup>7</sup>.

According to WHO estimates, deaths from cardiovascular disease, cancer, chronic respiratory disease and diabetes were accounted for 63% of global mortality in 2008, of which 80% was in LMICs (Low and Middle Income Countries). The NCD burden is projected to increase by 2030, NCD will be greatest killer in all low and middle income countries<sup>13</sup>.

A report by Indian Council of Medical Research (ICMR), entitled India : Health of the Nations state, contribution of NCDS to total deaths in the country were 61.8% in 2016, as compared to 37.9% in 1990.<sup>11</sup>

The WHO-NCD Progress Monitor 2017 - NCDS push large numbers of people into the poverty. The OOPE (Out Of Pocket Expenditure) attributed from 32% in 1995-96 to 47% in 2004.<sup>7</sup>

The global economic burden of NCDs is large, estimated at US \$6.3 trillion in 2010, anticipated to rise to \$13 trillion by 2030.<sup>6</sup>

**III. PROBLEM STATEMENT**

A descriptive study to assess the emergencies due to non-communicable diseases among young adults, admitted in intensive care units of multispecialty hospital of metropolitan city.

**IV. OBJECTIVES**

1. To find out non communicable diseases that lead to emergencies.
2. To find out the highest gender and age affected with the emergencies.

**V. RESEARCH METHODOLOGY**

A descriptive survey design is used for this study. 150 samples are selected by purposive sampling technique. Population are adults of age group 21 to 30 yrs.

Setting of the study: Intensive care unit of multispecialty hospital of metropolitan city.

**VI. DATA ANALYSIS**

Data collected from 10<sup>th</sup> December to 10<sup>th</sup> February, from ICU of multispecialty hospital, as per the inclusion criteria.

Data analysis is done by using descriptive statistics. Different age group selected were between 21 to 60 yrs.

Table 1: Data Analysis as per Age group of sample.

Age	Frequency	Percentage
21-30	3	2%
31-40	50	33.33%
41-50	55	36.67%
51-60	42	28%

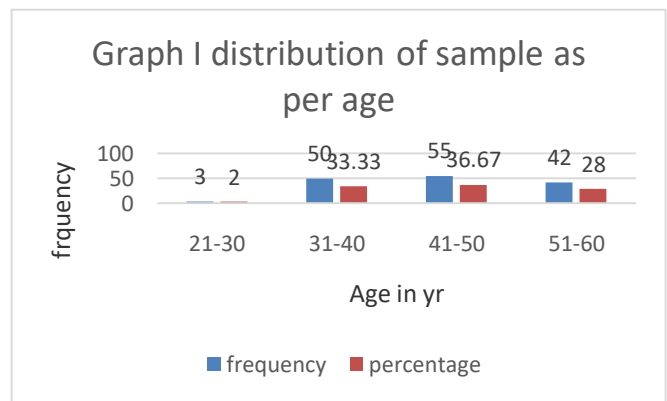


Table 2: Distribution of data as per Gender

Gender	Frequency	Percentage
Male	98	65.33
Female	52	34.67

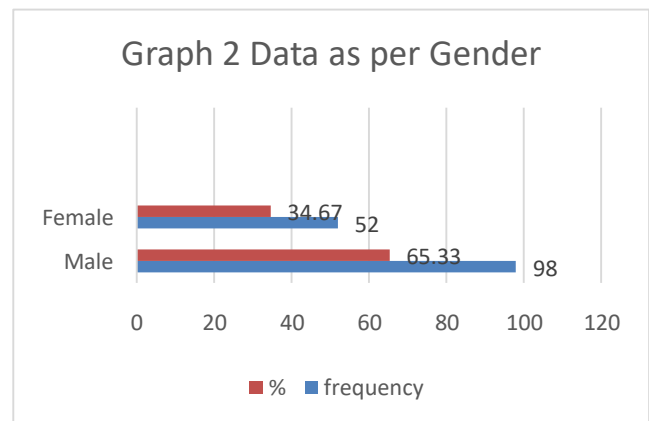
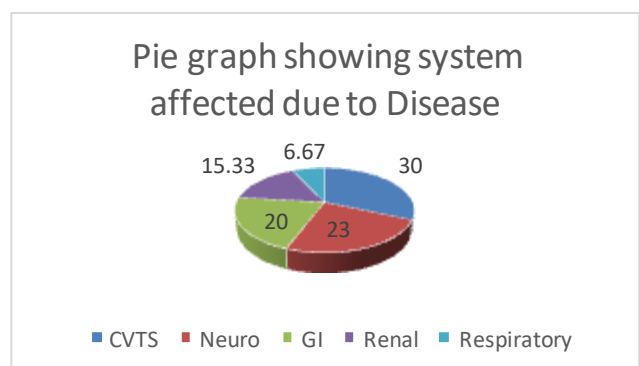


Table 3: Distribution of Data as per disease with system affected.

System affected	frequency	Percentage
Cardio vascular with DM	44	30%
Neurology	35	23%
Gastro intestinal	30	20%
Renal	23	15.33
Respiratory	10	6.67



## VII. DISCUSSION AND INTERPRETATION

Among these 70% were between age 31 to 50 yrs.(further split - 33.33% were from 31 to 40 yrs age group &36.67% were from 41 to 50 yrs age group). While 28% were from 51 to 60 yrs age group. Remaining 2% were between 21 to 30 yrs. Total deaths were 5.33%. It was observed that majority of those having NCDs were from economically productive age group. This result is supported by findings from WHO report 2018 that is, each year, 15 million people die from a NCD between the ages of 30 and 69 yrs over 85% of these premature death occur in low and middle income countries<sup>9</sup>

Also from other study –Hebe Gouda, et al, Burden of Non-communicable diseases in sub Saharan Africa. Adult mortality, death between the ages of 15 and 60 is 4 to 40 times higher in sub-Saharan Africa than in developed countries. The cause of morbidity and mortality in sub-Saharan Africa regions are predicted to undergo a significant shift towards endemic non-communicable diseases.<sup>8</sup>

When calculated based on gender, the males were 65.33%, while females were 34.67%. total deaths were 5.33% among which 7 were males and 1 was female. These finding are supported by study done by Dr. A Banerjee on Non-Communicable Diseases in India, Challenges and the way forward, Pune - Maharashtra shows that author has used data such as census 2001 to 2013 , it has provided a rough estimate of knowing how far we are from the goal of reducing mortality by the year 2025. It also shows that mortality in male is higher than females.<sup>1</sup>

The cases admitted were with different diseases like Cardiac, neurology, respiratory, gastrointestinal, renal, metabolic disorders. Among which cardiac, neurology, gastrointestinal disorders shown highest 76.33% (Cardiac with diabetes 30%, neuro 23.33%, gastrointestinal 20%) while renal cases were 15.33%, and respiratory were 6.67%. Among 150 cases total deaths were 8 at 5.33% in which 7 were male and 1 was female. These findings are supported from the report on global burden of disease populations, Ischemic heart disease, cerebrovascular disease, respiratory disease, road injuries, are major contributors of years lived with disability.<sup>4</sup>

## VIII. CONCLUSION

Non-communicable Diseases are leading causes of emergencies that leads to death if timely care is not provided. As increasing global number of NCDs are causing serious threat to global health, so there is need to pay serious attention and emphasis on prevention as well as curative aspects.

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