



A PROSPECTIVE STUDY ON PREVALENCE OF NON COMMUNICABLE DISEASES IN AN URBAN AREA

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ABSTRACT

Introduction: To provide evidence for effective NCD intervention planning, we conducted a prospective observational survey among mega camp in Suryapet to investigate the burden and determinants for high NCDs prevalence and NCD. Multi-morbidities and assess the access to NCD care. **Method:** It is a prospective observational study. Data was also collected on prevalence of NCDs. the survey is repeated annually for updating of the database. The finding of the first survey are presented in this study, if any chronic disease other than these NCDs was present, it was reported as well. The data was collected in mega Camp. 992 people involve this study among 626 male, 364 female. **Results:** It was seen that most of the problem were reported

from orthopedic related problems (502 patient 50%) and followed by others problems like urology (3 patients 0.03%), pulmonary (7 patients 0.7%), Pediatric(11 patients 1.1%), ophthalmology (132 patient 13%), oncology (2 patient 0.2%), nephrology (7 patients 0.7%), general surgery (15 patients 1.5%), gynaecology (30 patients 3.0%), general medicine (244 patients 24%), ENT (1 patient 0.1 %), dermatology (40 patients 4.0%). **Conclusion:** The prevalence of orthopedic related problems was 50% among the study population which was definitely higher Considering poor dietary quality.

INTRODUCTION

A non-communicable disease (NCD) is a disease that is not transmissible directly from one person to another. NCDs include Parkinson's disease, autoimmune diseases, strokes, most heart diseases, most cancers, diabetes, chronic kidney disease, osteoarthritis, osteoporosis, Alzheimer's disease, cataracts, and others. NCDs may be chronic or acute. Most are non-infectious, although there are some non-communicable infectious diseases, such as parasitic diseases in which the parasite's life cycle does not include direct host-to-host transmission.

Globally, the burden of non-communicable diseases (NCDs), which also bear the greatest morbidity and mortality, is rising in developing countries. Demographic and epidemiological transitions taking place in the developing countries of Asia is shifting the disease burden from communicable towards non-communicable disease. India's poor are at heightened risk of acquiring NCDs owing to high rate of smoking and tobacco use. So this paper analyses the links between socioeconomic status and non-communicable diseases in rural area. Objectives: 1. To study the prevalence of NCDs among study population. 2. To study the association between socioeconomic status and the prevalence of NCDs Non communicable diseases (NCDs) are the lead on-communicable disease continues to be an important public health problem in India, being responsible for a major proportion of mortality and morbidity. Demographic changes, changes in the lifestyle along with increased rates of urbanization are the major reasons responsible for the tilt towards the non-communicable diseases. In India, there is no regular system for collecting data on non-communicable diseases (NCDs) which can be said to be of adequate coverage or quality. Lack of trained health care workers, primary care providers armed with inadequate knowledge and skills along with ill-defined roles of various health sectors i.e. public, private, and voluntary sectors in providing care have played key hurdles in combating the growing burden of non-communicable diseases. Empowerment of the community through effective health education, use of trained public health personnel along with provision of free health care and social insurance would prove beneficial in effectively controlling the growing prevalence of NCDs.ng cause of death globally. NCD is a disease that is not transmissible directly from one person to another. NCD including cardiovascular disease, diabetes, cancer and chronic respiratory disease. The poor dietary quality in particular, high salt in take ,high saturated and trans fatty acids intake, and low fruit and vegetables consumption and insufficient physical activity are key risk factors for NCD development and mortality worldwide.

In order to better coordinate efforts around the globe, in 2009 the WHO announced the launch of the Global Non-communicable Disease Network (NCD net).^[4] NCD net will consist of leading health organizations and experts from around the world in order to fight against diseases such as cancer, cardiovascular disease, and diabetes. Ala Alwan, assistant director-general for Non-communicable Diseases and Mental Health at the WHO, said: "integrating the prevention of non-communicable diseases and injuries into the national and global development agendas is not only achievable but also a priority for developing countries. India like other countries also illustrates the health transition which puts non-communicable diseases as a major public health challenge of growing magnitude in twenty first century. The pace and process of non-communicable disease epidemic varies across the country. In India prevalence of non-communicable disease is high among urban population. The impact of globalization and urbanization in low-and-middle income countries (LMICs) has accelerated the growing burden of NCDs. However, governments in LMICs are not keeping pace with ever expanding needs for policies, legislation.

Risk factors such as a person's background; lifestyle and environment are known to increase the likelihood of certain non-communicable diseases. They include age, gender, genetics, exposure to air pollution, and behaviors such as smoking, unhealthy diet and physical inactivity which can lead to hypertension and obesity, in turn leading to increased risk of many NCDs. Most NCDs are considered preventable because they are caused by modifiable risk factors. The WHO's World Health Report 2002 identified five important risk factors for non-communicable disease in the top ten leading risks to health. These are raised blood pressure, raised cholesterol, tobacco use, alcohol consumption, and being overweight. The other factors associated with higher risk of NCDs include a person's economic and social conditions, also known as the "[social determinants of health]. It has been estimated that if the primary risk factors were eliminated, 80% of the cases of heart disease, stroke and type 2 diabetes and 40% of cancers could be prevented. Interventions targeting the main risk factors could have a significant impact on reducing the burden of disease worldwide. Efforts focused on better diet and increased physical activity have been shown to control the prevalence of NCDs. The World Health Organization is the specialized agency of the United Nations (UN) that acts as coordinating authority on international public health issues, including NCDs. In May 2008, the 193 Member States of the WHO approved a six-year plan to address non-communicable diseases, especially the rapidly increasing burden in low- and middle-income

countries. The plan calls for raising the priority given to NCDs in international development work'.

During the 64th session of the United Nations General Assembly in 2010, a resolution was passed to call for a high-level meeting of the General Assembly on the prevention and treatment NCDs with the participation of heads of state and government. The resolution also encouraged UN Member States to address the issue of non-communicable diseases at the 2010 Review Summit for the Millennium Development Goals.

In 2012 they caused 68% of all deaths (38 million) up from 60% in 2000. About half were under age 70 and half were women. Every year, at least 5 million people die because of tobacco use and about 2.8 million die from being overweight. High cholesterol accounts for roughly 2.6 million deaths and 7.5 million die because of high blood pressure. To provide evidence for effective NCD intervention planning, we conducted a prospective observational survey among mega camp in Suryapet to investigate the burden and determinants for high NCDs prevalence and NCD. Multi-morbidities and assess the access to NCD care.

METHOD

This study was conducted in mega Health Camp in Suryapet area under Telangana district. It is prospective observational study. 992 patients added to this camp. We estimate the prevalence of health related problems like orthopedic, general medicine, pulmonary, gynecology, oncology related problems. And analyse the pattern of NCD multi-morbidities. The survey was conducted on November 2018. A clinic based participative study was undertaken during November 2018. All males and females natives residing in that urban area invited to participate in general health check up camp. Participants were excluded if they were pregnant.

RESULTS

The total 992 people participated in this study of which 627 were male (63.2%) and 365 were female (36.79%). The mean age of study population was 40-60 years. In total 992 subjects were there in this study. The highest percentage of males in this study. Among the study subjects 1-20 years age group around 3.5%, 20-40 years age group around 26%, 40-60 years age group around 39%, 60-80 years age group around 26%, 80-100 years age group around 3.5%. It was seen that most of the problems were reported from orthopedic related problems (502 patients 50%) and followed by other problems like urology (3 patients 0.03%), pulmonary (7 patients 0.7%), pediatric (11 patients 1.1%), ophthalmology (132 patients 13%),

oncology (2 patient 0.2%), nephrology (7 patients 0.7%), general surgery (15 patients 1.5%), gynecology (30 patients 3.0%), general medicine (244 patients 24%), ENT (1 patient 0.1 %), dermatology (40 patients 4.0%). Among this study female reported from orthopedic related problems (153 patient 15%) and followed by other problems like urology (1 patient 0.1 %), pulmonary (4 patients 0.4%) , pediatric (6 patients 0.6 %) , ophthalmology(48 patients 4.8%), oncology (2 patients 0.2,%), nephrology (5 patients 0.5%), general surgery (2 patients 0.2%), gynecology (28 patients 2.8%), general medicine (102 patients 10.2%),ENT (1 patient 0.1%), dermatology (13 patients 1.3%). And male reported from orthopedic (349 patients 35.1%) and followed by other problems like urology (3 patients 0.3%), pulmonary(3 patients 0.3%), pediatric(5 patients 0.5%), ophthalmology (84 patients 8.4%), nephrology (2 patients 0.2%), general surgery (11 patients 1.1%), gynecology (2 patients 0.2%), general medicine (141 patients 14.1%), dermatology (27 patients 2.7%).

Table. 1. % of total number of patients.

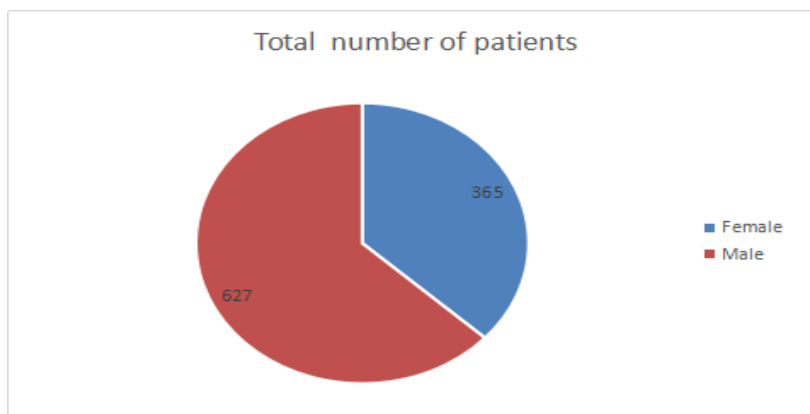
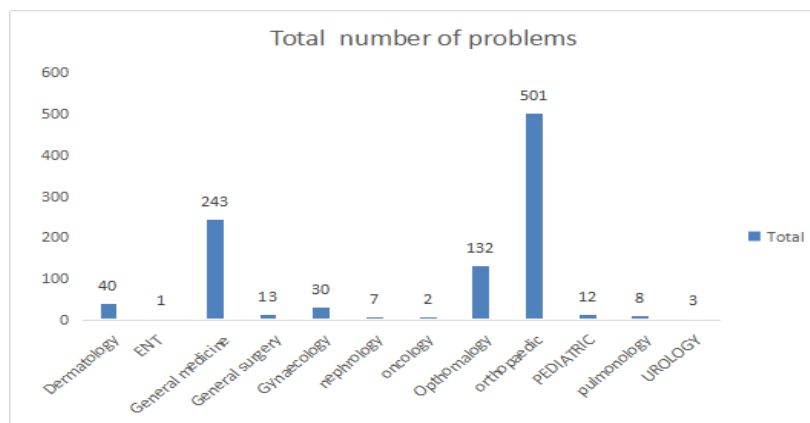
Departments	Patients	% of patients
orthopedic	502	50.60%
urology	3	0.3%
%Pulmonary	7	0.7%
ophthalmology	132	13.3%
Oncology	2	0.2%
Nephrology	7	0.7%
General surgery	15	1.5%
Gynecology	30	3.0%
General medicine	244	24.5%
ENT	1	0.1%
Dermatology	40	4.0%
pediatric	11	1.1%

Table. 2:% of female patients.

Departments	Female patients	% of patients
Orthopedic	153	15.3%
Pulmonary	4	0.4%
urology	1	0.1%
Pediatric	6	0.6%
ophthalmology	48	4.8%
oncology	2	0.2%
Nephrology	5	0.5%
General surgery	2	0.2%
Gynecology	28	2.8%
General medicine	102	10.2%
ENT	1	0.1%
dermatology	13	1.3%

Table. 3: % of male patients.

Departments	Male patients	% of patients
orthopedic	349	34.9%
Pulmonary	3	0.3%
urology	3	0.3%
pediatric	2	0.2%
ophthalmology	84	8.4%
oncology	-	-
Nephrology	2	0.2%
General surgery	11	1.1%
Gynecology	2	0.2%
General medicine	141	14.1%
ENT	-	-
dermatology	27	2.7%



CONCLUSION AND RECOMMENDATION

Though the prevalence of orthopedic related problems was 50% among the study population which was definitely higher considering poor dietary quality. Among study population with low consumption of fruits and vegetables and high proportion of study population not doing adequate daily exercise needed aggressive health education regarding life style modification to prevent further spread of non communicable disease epidemic in urban population.

India is experiencing a rapid health transition with the problem of both malnutrition and over nutrition. India must orient the health system towards prevention, screening, early intervention and new treatment modalities with the aim to reduce the burden of chronic disease. Surveillance of NCDs and their risk factors should also become an integral function of health systems. Evidence based clinical practice and appropriate use of technologies should be promoted at all levels of health care, including tertiary services. Keeping in view that chronic diseases have an impact on the health and productivity of the people, these measures are essential for the health of India as well as its economic progress.

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