

“A study to assess the knowledge regarding the impact of obesity on non-communicable diseases among adults in selected urban areas of Pune city.”

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ABSTRACT : Introduction: A non-communicable disease (NCD) is a disease that is not transmissible directly from one individual to another risk factors such as a person’s background, lifestyle and environment increase the likelihood of certain NCDs.¹ Now a days obesity caused non-communicable diseases are increased tremendously. The obesity can block the blood vessels that leads to increase in vascular resistance and in turn increases the work of the heart. This leads to increased blood pressure. That is known as hypertension. It is important to reduce the hypertension by the reduction of body weight. Both hypertension and obesity are related to a very extent and it is becoming a major health issue among the adults in India.² The present study title: A study to assess the knowledge regarding the impact of obesity on non-communicable diseases among adults in selected urban areas of Pune city.The objective of To assess the knowledge regarding impact of obesity on non- communicable disease and associate those findings with demographic variables. Material and Methods: In present study, researcher adopted non- experimental and exploratory design was used. Data analysis was done mainly using descriptive statistics. Data collected on 100 samples. Non –probability convenient sampling technique was used. Result : The finding of the study reveals that majority of adults are having average knowledge (91%) regarding the impact of obesity on non-communicable diseases, few adults are having good or excellent knowledge (8%) and only (1%) of adults are having poor knowledge. Conclusion: The study concluded that scenarios most of the adults have only an average knowledge regarding the impact of obesity on non-communicable diseases. And the knowledge or findings are associated or related to the type of family and the educational qualifications they have.

Keywords: (Assess, Knowledge, Impact, Obesity, Non communicable disease, Adult)

INTRODUCTION

A non-communicable disease (NCD) is a disease that is not transmissible directly from one individual to other risk factors such as a person’s background, lifestyle and environment increase the likelihood of certain NCDs.¹ Now days obesity caused non-communicable diseases are increased tremendously. The obesity can block the blood vessels that lead to increase in vascular resistance and in turn increase the work of the heart. This leads to increased blood pressure. That is known as hypertension. It is important to reduce the hypertension by the reduction of body weight. Both hypertension

and obesity are related to a very extent and it is becoming a major health issue among the adults in India.² Being obese or overweight can increase the chances of developing the common type of diabetes. That is known as type 11 diabetes. Recent research shows that overweight increases the stress in individual cells. Especially this overweight caused stress disturbs the membranous network inside of cells called endoplasmic reticulum. This leads to the insulin resistance inside the body and causes diabetes. Like this, obesity can cause many other non-communicable diseases like stroke, raised cholesterol especially LDL (low density cholesterol).³

NEED FOR THE STUDY

Obesity caused non-communicable diseases are becoming a major health problem among adults and the study is needed to assess the knowledge among the adults about the precautions that can be taken to prevent the consequences of obesity. Regular exercise, meditation, yoga, controlled diet, self-decision can control obesity to an extent and can reduce the non-communicable diseases. Now a days, many medical practitioners for the need of reducing the body weight and many treatments are available.⁴

OBJECTIVES OF THIS STUDY

- To assess the knowledge regarding impact of obesity on non-communicable disease.
- To associate findings with demographic variables.

REVIEW OF LITERATURE

Review of the relevant studies was carried out from the textbooks, journals, articles; review of literature for the present study is organized under the following:

According to Jaydip Sen, the prevalence of overweight and obesity was documented to be 22.00% and 19.5% respectively, the prevalence of obesity was distinctively higher among 6 females as compared to males. But in our study prevalence of overweight and obesity was 54.16% were males and 45.83% were females. In a study conducted by Yerpude and Jogdand, and overwhelming majority (85.80%) of the subjects attributed diet for obesity. In this study, the most common reason cited by the study subjects for prevention of obesity was adequate physical activity (70%). Similar results were seen in a study conducted by Srivastava, the findings were 77.5%.⁵

A research conducted by Mahesh. B. Meshram, Daniel A Saji for the assessment of knowledge, attitude, and practices of people regarding overweight and obesity among obese people regarding overweight and obesity among obese people of urban slum of Mumbai (2017). Result shows that in 350 adults of age more than 18yrs 17.9% know that there are health consequences of being obese and only 7.7% have made any effort to reduce weight 88.3% think diet control and 79.3% think exercise and 11.3% consider medication as a treatment modality for obesity.⁶

A research conducted by Khwaja Mir Islam Saeed in the year 2012 on the topic Prevalence of risk factors for Non-Communicable Diseases in adult population of Urban areas in Kabul city, Afghanistan research shows that the overall prevalence of

obesity hypertension, diabetes mellitus, was 31.2%, 46% and 13.3% in that the prevalence and obesity and hypertension were 19.1% and 45.2% in men and 37.3% and 46.5% in women. Prevalence of diabetes was 16.1 % in men and 12% in female.⁷

MATERIAL AND METHOD:

In present study, researcher adopted non- experimental and exploratory design was used. Data analysis was done mainly using descriptive statistics. Data collected on 100 samples. Non –probability convenient sampling technique was used. Data analysis was done mainly using descriptive statistics.

Description of Tool:

The tool includes two sections:

Section 1:- It deals with the demographic data like age, gender, religion, type of family, educational qualification, education, type of vehicles, and history of obesity.

Section 2:-It consists of 20 multiple choice self-structured questionnaires regarding knowledge of obesity on non -communicable disease.

Plan for Data Analysis:

Data analysis was done by using descriptive and inferential statistics based on objectives of study.

RESULT AND DISCUSSION

SECTION 1

SL NO	Demographic variable	frequency	percentage
1	age		
a	18-30	52	52
b	31-35	25	25
c	36-40	15	15
d	40-45	8	8
2	gender		
a	female	43	43
b	male	57	57
c	other	0	0
3	religion		
a	Hindu	64	64

b	Muslim	19	19
c	Christian	16	16
d	Sikh	1	1
e	others	0	0
4	type of family		
a	joint	57	57
b	nuclear	36	36
c	extended	6	6
d	others	1	1
5	educational qualification		
a	no formal education	9	9
b	primary education	11	11
c	secondary education	33	33
d	graduation	24	24
e	post-graduation	16	16
f	diploma	7	7
g	vocational courses	0	0
h	others	0	0
6	occupation		

SECTION 2

a	self employed	7	7
b	house maker	22	22
c	business	43	43
d	govt.job	9	9
e	private job	14	14
f	others	5	5
7	vehicles		
a	2 wheeler	58	58
b	3wheeler	22	22
c	4 wheeler	20	20
d	others	0	0
8	history in family/parents		
a	yes	26	26
b	no	74	74
9	history of obesity		
a	yes	27	27
b	no	73	73

Knowledge level	Frequency	Percentage%
poor(0-7)	1	1%
average(8-14)	91	91%
good(15-20)	8	8%

Majority of adults are having average knowledge 91%, 8% of few adults are having good or excellent knowledge and only 1% of adults are having poor knowledge.

ASSOCIATION BETWEEN THE FINDINGS AND DIFFERENT DEMOGRAPHIC VARIABLES

Demographic variables	Chi - square value	P - value	SIGNIFICANCE/REMARK
Age	7.07597	0.1	not significant/not associated
gender	0.8867	0.95	not significant/not associated
religion	0.8636	0.99	not significant/not associated
type of family	28.72656	0.01	significant or associated
educational qualification	22.39234	0.05	significant or associated
occupation	5.126	0.9	not significant/not associated
vehicles	7.152	0.1	not significant/not associated
history in family/parents	0.3618	0.9	not significant/not associated
history of obesity	1.23815	0.1	not significant/not associated

In analysis of data shows since p value >0.05, except type of family and educational qualification all other demographic variables have no any association with the findings.

DISCUSSION:

In the knowledge assessment of adults about the impact of obesity on non-communicable diseases show that majority of adults have only average knowledge. This indicates that the need of giving awareness among adults regarding the impact of obesity is more essential to prevent many of the non-communicable diseases by that we can make the world healthier (While maximum of the adults are males (57%) and 43% are females). The findings of section 2 show that show 91% of adults have average knowledge, 8% of few adults are having good or excellent knowledge and only 1% of adults are having poor knowledge

IMPLICATIONS:

NURSING EDUCATION

The study enhances the nursing curriculum to provide opportunities for students to learn about breast milk donation. The study will enable the student nurse to acquire knowledge about donor breast milk donation.

NURSING PRACTICE

Many of the obesity caused non-communicable diseases can be prevented by increasing the knowledge of adults during the nursing practices like the nurses can give better ideas to an obese patient to reduce the weight. Effective ways can be implicated to young adults to prevent the chances of getting obese in the future. By looking signs and symptoms, history of a patient, family history etc. may help a nurse to identify the chances of a patient to get non-communicable diseases related to obesity.

NURSING ADMINISTRATION

Nurse administrator have a major role in educating and equipping the nurses to give awareness among the patients, people, and community regarding the impact of obesity on non-communicable diseases. The skill of finding the people who are more prone to non-communicable is the responsibility of a nurse. Workshops, conferences, awareness program and health education can be conducted in hospitals, schools, colleges, community areas etc.

NURSING RESEARCH

Nursing research is essential to identify the knowledge among adults or people and to find the essentials of giving more awareness to the people. This kind of researches is needed to identify the causes and related factors or variables of obesity caused non-communicable diseases.

LIMITATION

- Limited to selected adult in urban areas.

RECOMMENDATIONS

- A similar study can be done on a large sample.
- A similar study can be done to assess the knowledge among the older adults.
- A similar study can be done to assess the knowledge among the medical professionals.
- A comparative study can be done among the adults residing in rural and urban areas.
- A comparative study can be done between males and females.

REFERENCES:

1. [https://en.wikipedia.org/wiki/Noncommunicable_disease#:~:text=A%20non%2Dcommunicable%20disease%20\(NCD,disease%2C%20cataracts%2C%20and%20others.](https://en.wikipedia.org/wiki/Noncommunicable_disease#:~:text=A%20non%2Dcommunicable%20disease%20(NCD,disease%2C%20cataracts%2C%20and%20others.)
2. Shu-Zhong Jiang Wen Lu, Xue-Feng Zong, Hong-Yun Ruan, and Yi Liu, Obesity and hypertension.National library of medicine. *Exp Ther Med.* 2016 Oct; 12(4): 2395–2399. Published online 2016 Sep 6. doi: [10.3892/etm.2016.3667](https://doi.org/10.3892/etm.2016.3667)
3. <https://www.medicinenet.com/script/main/art.asp?articlekey=39840>
4. Module for Multi-Purpose Workers (MPW) - Female/Male on Prevention, Screening and Control of Common, Female/Male on Prevention, Screening and Control of Common Non Communicable Diseases.Ministry of health and family welfare govt. of India.
5. Jagadeesan M., Prasanna Karthik S.*, Kannan R., Immaculate Bibiana C., Kanchan N., Siddharthan J., Vinitha M., A study on the knowledge, attitude and practices (KAP) regarding obesity among engineering college students. International Journal of Advances in Medicine Jagadeesan M et al. *Int J Adv Med.* 2017 Dec;4(6):1681-1684 <http://www.ijmedicine.com>.
6. Mahesh B ,Pawan V Meshram and Daniel A Saji...To assess the knowledge ,attitude and practices of people regarding over weight and obesity...DOI:<http://dx.doi.org/10.18203/2394-6040.ijcmph20173634>
7. Khwaja Mir Islam Saeed. Prevalence of Risk Factors for Non-Communicable Diseases in the Adult Population of Urban Areas in Kabul City, Afghanistan. *Cent Asian J Glob Health.* 2013; 2(2): 69. Published online 2014 Jan 3. doi: [10.5195/cajgh.2013.69](https://doi.org/10.5195/cajgh.2013.69)
8. SM Chopra ,A Misra and R Gupta ,European journal of clinical nutrition ,Page no.67,688-696(2013)
9. Laura Webber ,Martin Brown, McPherson K(2012)High rates of obesity and non-communicable diseases predicted across Latin America.PLoS ONE 7(8):e39589.doi:[10.1371/journal.pone.0039589](https://doi.org/10.1371/journal.pone.0039589)...Published on: August 13,2012
10. Khawaja Mir Islam Saeed ,Cent Asian J Glob Health 2013Prevalence of risk factors for non -communicable diseases in the adults population...Published online 2014 January 3.doi:[10.5195/cajgh.2013.69](https://doi.org/10.5195/cajgh.2013.69)