

A Study to Assess the Knowledge on Modifiable Risk Factors for Non-Communicable Diseases Among Adults Attending Out Patient Department of Selected Urban Health Centre.

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Abstract

Background: Non-communicable diseases (NCDs) are the leading global causes of death, causing more deaths than all other causes combined, and they strike hardest at the world's low- and middle-income populations.

Aim: To assess the knowledge on modifiable risk factors for non-communicable diseases among adults in selected urban community, Navsari and develop an information booklet regarding non-communicable diseases.

Methodology: Non-experimental, descriptive research design was adopted to collect the data. Simple random sampling technique was used with the sample size of 300. Modifiable risk factors for non-communicable diseases were assessed by using checklist as risk assessment Performa including to self-structured method for knowledge questionnaire to know the level of knowledge regarding modifiable risk factor for non-communicable disease.

Result: Out of 300 sample 35.33% of adults had inadequate knowledge, 61.33% of the adults had moderate knowledge and only 3.33% adults were having adequate knowledge regarding modifiable risk factors for non-communicable diseases among adults.

Conclusion: Critical prevalence of risk factors for non-communicable diseases among adults with poor knowledge on modifiable risk factors for non-communicable diseases.

Keywords: Knowledge; Modifiable risk factors; non-communicable diseases.

1. Introduction

1.1 background of the study

Non-communicable diseases (NCDs), also known as chronic diseases, tend to be of long duration and are the result of a combination of genetic, physiological, environmental and behavioral factors. The main types of Non-communicable diseases are cardiovascular diseases (such as heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma) and diabetes. Non-communicable diseases disproportionately affect people in low- and middle-income

countries, where more than three quarters of global Non -communicable diseases deaths (31.4 million) occur.¹

In developing countries like India now non communicable diseases are emerging as significant cause of morbidity & mortality. Non -communicable diseases are caused, to a large extent, by four behavioral risk factors that are pervasive aspect of economic evolution, rapid urbanization and 21st century lifestyles. Individual's knowledge and awareness about Non -communicable diseases & their risk factors is an important part of population based preventive strategy.²

People of all age groups, regions and countries are affected by Non - communicable diseases. These conditions are often associated with older age groups, but evidence shows that 17 million Non -communicable diseases deaths occur before the age of 70 years. Of these premature deaths, 86% are estimated to occur in low- and middleincome countries. Children, adults and the elderly are all vulnerable to the risk factors contributing to Non -communicable diseases, whether from unhealthy diets, physical inactivity, exposure to tobacco smoke or the harmful use of alcohol.³

These diseases are driven by forces that include rapid unplanned urbanization, globalization of unhealthy lifestyles and population ageing. Unhealthy diets and a lack of physical activity may show up in people as raised blood pressure, increased blood glucose, elevated blood lipids and obesity. These are called metabolic risk factors and can lead to cardiovascular disease, the leading Non -communicable diseases in terms of premature deaths.⁴

Modifiable behaviours, such as tobacco use, physical inactivity, unhealthy diet and the harmful use of alcohol, all increase the risk of Non -communicable diseases. Tobacco accounts for over 8 million deaths every year (including from the effects of exposure to second-hand smoke) (1). 1.8 million annual deaths have been attributed to excess salt/sodium intake .More than half of the 3 million annual deaths attributable to alcohol use are from NCDs, including cancer. 830 000 deaths annually can be attributed to insufficient physical activity.⁵

1.2 Need of the study

Non communicable diseases are one of the major challenges for public health in the 21st century, not only in terms of human suffering they cause but also the harm they inflict on the socioeconomic development of the country. Non communicable diseases kill approximately 41 million people (71% of global deaths) worldwide each year, including 14 million people who die too young between the ages of 30 and 70. The majority of premature Non communicable diseases deaths are preventable.⁶

According to World Health Organization (WHO) projections, the total annual number of deaths from Non communicable diseases will increase to 55 million by 2030, if timely interventions are not done for prevention and control of Non communicable diseases.⁷

The WHO Global Status Report on Non communicable diseases 2020 showed that Non communicable diseases are biggest cause of death worldwide. More than 38 million people die each year due to non-communicable diseases. Almost three quarters of Non communicable diseases deaths 28 million occur in

low and middle income countries. Sixteen million Non communicable diseases deaths occur before the age of 70. Modifiable risk factors are those that can easily be changed to reduce the risk of the occurrence of the disease, while non modifiable risk factors like age and genetic makeup can't be controlled.⁸

Prevalence of non-communicable diseases in India is 116 per 1,000 population and these show a quantum jump when one crosses the age of 35 years, says a new report which also identifies air pollution as the most prevalent risk factor among the surveyed population. According to the report on 'India's Non Communicable Disease Burden' by the Associated Chambers of Commerce and Industry of India, "hypertension, and diabetes" are among the top three most prevalent non-communicable diseases (Non communicable diseases), while cancer is the least prevalent.⁹

Urbanization is driving Non communicable diseases epidemics. Urban areas have a lower number of deaths from communicable, maternal, perinatal and nutritional conditions but a higher proportion from non-communicable diseases (56%). The consumption, living and working patterns of urban residents have the potential to fuel an increase in Non communicable diseases in cities. Non communicable diseases already account for nearly 70 percent of global deaths each year, with rapid and unplanned urbanization a major factor. The urban environment limits physical activity opportunities and provides a captive market for industry to promote tobacco use, harmful use of alcohol and unhealthy foods and beverages.¹⁰

1.3 OBJECTIVES

The objectives of study were

1. To assess the knowledge regarding modifiable risk factors for non-communicable diseases among adults attending outpatient department of selected urban health centre in Navsari district.
2. To find the association between the knowledge regarding modifiable risk factors for non-communicable diseases and selected baseline characteristics among adults attending outpatient department of selected urban health centre in Navsari district.

1.4 HYPOTHESES

H₁: There will be a significant association with knowledge and selected baseline characteristics among adults attending outpatient department of selected urban health centre in Navsari district.

1.5 ASSUMPTION

The study assumes that, adults attending outpatient department of selected urban health centre may not have adequate knowledge regarding modifiable risk factors for non-communicable diseases.

1.6 OPERATION DEFINITION

Knowledge: It refers to the awareness and understanding regarding modifiable risk factors for non-communicable diseases among adults attending outpatient department of selected urban health centre.

Modifiable risk factors: It refers to individual can change or control behavioural risk factors to reduce the chance of diseases. The risk factors such as physical inactivity, imbalanced diet, exposure to tobacco use, alcoholism. to avoid the chances of developing non-communicable diseases.

Non- communicable disease: It refers to the diseases will not be spread through contact. But, in chronic condition it may leads to severe impairment or dysfunction or even death. Such diseases are hypertension, diabetes, cancer and chronic respiratory diseases.

Urban health centre: An urban reference health centre aims to support and strengthen local health centre in their role as providers of primary health care and to bring comprehensive medical care to local communities, making health services accessible to all city dwellers on a more equitable basis.

Outpatient department: Out patient department define as a part of the hospital with allotted physical facilities and medical and other staffs, with regularly scheduled hours, to provide care for patients who are not registered as inpatients.

Hypertension : A condition in which the force of the blood against the artery walls is too high.

Diabetes: Diabetes is a chronic, metabolic disease characterized by elevated levels of blood glucose (or blood sugar).

Cancer: Cancer is a large group of diseases that can start in almost any organ or tissue of the body when abnormal cells grow uncontrollably, go beyond their usual boundaries to invade adjoining parts of the body and/or spread to other organs.

Chronic respiratory diseases: Chronic respiratory diseases (CRDs) are diseases of the airways and other structures of the lung. Some of the most common are chronic obstructive pulmonary disease (COPD), asthma, occupational lung diseases and pulmonary hypertension. In addition to tobacco smoke, other risk factors

Adults: It refers to the adults within the age of 35 - 55 years.

2. Methodology

Research approach: quantitative research approach

Research design: Non- experimental, descriptive research design. design.

Target Population: All adults age group between 35-55 attending Outpatient department of urban health centre

Sampling technique: purposive sampling technique

Sample size: 300 adults

Study setting: outpatient department of urban health centre

Research variables: knowledge on modifiable risk factors for non-communicable diseases.

Demographic variables or Extraneous variable: It includes age, religion, marital status, educational status, occupation, family income, type of family, dietary pattern, habit of smoking, habit of drinking alcohol, family history of non-communicable disease, exercise and sources of information

Inclusion criteria:

- Clients who were 35-55 years of age.
- Clients who were attending outpatient department of selected urban health centre.
- Clients who were willing to participate in the study.

- Clients who able to speak and understand Gujarati/ Hindi.

Exclusion criteria

- Clients who were not include in the 35-55 years of age.
- Clients who were not willing to participate in the study.
- Client who was mentally retarded.

Ethical consideration:

- Ethical clearance was obtained from the S. S. Agrawal college of nursing training college and research centre, Navsari.
- Permission was be taken from the medical officer of urban health centre Navsari.
- A written informed consent was obtained from the participants.

DESCRIPTION OF TOOLS

SECTION I: Baseline characteristics

SECTION II: Structure knowledge questionnaire on modifiable risk factors for non-communicable diseases with 24 items.

Data collection:

Data collection period was 8/6/2022 22/6/2022 the total 300 select who will fulfil the inclusion criteria among client who attending outpatient department of urban health centre Navsari.

3. Data analysis & interpretation:

Table 1: description of demographic variables

Sr. no	Demographic variables	Frequency	Percentages
1.	Age in years		
	a) 35-40	90	30.0
	b) 41- 45	83	27.7
	c) 46-50	68	22.7
	d) 51-55	59	19.7
2.	Religion		
	a) Hindu	224	74.7
	b) Christian	018	6.0
	c) Muslim	058	19.3
	d) Other	000	0

3.	Marital status		
	a) Single	008	2.66
	b) Married	280	93.3
	c) Divorced	003	1.0
	d) Widower/widow	009	3.0
4.	Educational status		
	a) Primary education	124	41.3
	b) Secondary education	131	43.7
	c) Higher secondary	031	10.3
	d) Degree and above	014	4.7
5.	Occupation		
	a) Unemployed	094	31.3
	b) Daily wages	140	46.7
	c) Private employee	038	12.7
	d) Business / Self employ	025	8.3
	e) Government employee	003	1.0
6.	Family income in a month		
	a) Rs ≤ 10000	120	40.0
	b) Rs 10001-15000	147	49.0
	c) Rs ≥ 20001	027	9.0
	d) Rs 15001-20000	006	2.0
7.	Types of family		
	a) Nuclear family	166	55.3
	b) Extended family	118	39.3
	c) Joint family	16	5.3
8.	Diet		
	a) Vegetarian	144	48.0
	b) Non-Vegetarian	127	42.3
	c) Mixed	29	9.66
9.	Habit of Smoking		
	a) Yes	151	50.3
	b) No	149	49.7
10.	Habit of drinking Alcohol		
	a) Yes	113	37.7
	b) No	187	62.3
11.	Family history of non-communicable diseases		
	a) Yes	163	54.3
	b) No	137	45.7

Age wise distribution of the adults revealed majority that 90 (30%) of the adults belonged to the age group of 35-40, majority 224(74.7%) was Hindu, 131(43.7%) of the adults studied secondary education, majority 140(46.7%) of adults were earned from daily wages, 147(49%) of adults were having family monthly income 10001 -15000 rupees. Types of family wise distribution of adults reveals that majority 166(55.3%) of adults were lived in nuclear family. majority 144(48%) of adults were vegetarian. 151(50.3%) of adults had a habit of smoking, 113(37.7%) of adults had a habit of drinking alcohol, 163(54.3%) of adults were had a family history of non – communicable disease, 194(64.3%) of adults were not done exercise daily.

Table 2: description of components wise knowledge score means, standard deviation and mean percentage of adult

SR. NO	Aspects of knowledge on modifiable risk factors for non-communicable disease	Max. score	range	Mean	SD	Mean%
1	General Information	8	6-0	4.43	0.99	55.30%
2	Risk Factors	6	6-0	3.15	1.03	52.50%
3	Prevention Measure	10	7-0	5.3	1.07	53%
	Total	24	10	13.28	1.83	55.33%

The Above table 2 shows that component wise, prevention measures had highest mean score 5.3 and risk factor area had lowest mean score 3.15. the overall knowledge mean score with standard deviation was 13.8.

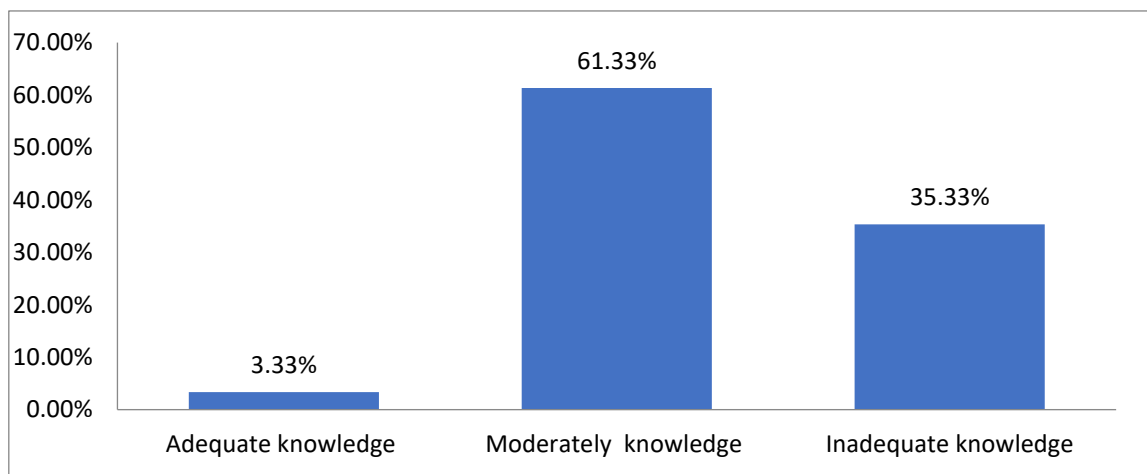


Figure 1: Percentage wise distribution of assess the level of knowledge regarding modifiable risk factors for non-communicable diseases among adults.

Table: 3 Association for level of knowledge and selected baseline characteristics.

Demographic variables	Chi- square value	p- value
Age in year	6.643 (df=3)	0.84 NS
Religion	0.145 (df=)	0.930 NS
Marital status	1.887 (df=3)	0.596 NS
Educational status	4.963 (df=3)	0.174 NS
Occupation	4.563 (df=4)	0.335 NS
Family income	2.09 (df=3)	0.566 NS
Type of family	1.732 (df=2)	0.421 NS
Dietary pattern	1.578 (df=2)	0.454 NS
Habit of smoking	0.107 (df=1)	0.744 NS
Habits of drinking alcohol	3.904 (df=1)	0.061 NS
Family history of non-communicable disease	2.556 (df=1)	0.117 NS
Daily exercise	0.013 (df=1)	0.909 NS

4. Discussion

The study revealed that, among the adults attending out-patient department of selected urban health centre only that 35.33% (106) adults had inadequate knowledge, 61.33% (184) of adults had moderate knowledge and 3.33% (10) adequate knowledge on modifiable risk factors for non-communicable disease which is similar to following study ;

A study was conducted on knowledge of modifiable risk factors of non-communicable disease from urban slum Bhopal. study was conducted with 1270 adults. A study was carried out in the filed practice area of urban health training centre of the department of community medicine of PCMS and RC Bhopal using questionnaire. Most of the respondents (62%) were having average knowledge regarding modifiable risk factors for NCDs & only 8.1% respondents were having good knowledge for same.¹¹

4.1 limitation of the study:

The study was limited to adults attending outpatient department of selected urban health centre in Navsari district.

4.2 Summary:

The aim of the study was to assess the knowledge and regarding modifiable risk factors for non-communicable diseases among adults. In this study descriptive research design was used. A total of 300 adults who met the sampling criteria were selected by purposive sampling technique. The data were collected by structured interview schedule with structured knowledge questionnaire on modifiable risk factors for non-communicable diseases who attended urban health centre Navsari district. The study results showed that 35.33% of adults had inadequate knowledge, 61.33% of the adults had moderate knowledge and only 3.33% adults were having adequate knowledge. The mean percentage of overall knowledge obtained was 55.33%.

4.3 Conclusion:

The study revealed that most adults had only moderate knowledge regarding modifiable risk factors for non-communicable diseases among adults So, there is a need to create awareness and behaviour change among community people regarding risk factors for non-communicable diseases .

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