

Original Article

## PREVALANCE OF NON-COMMUNICABLE DISEASE AMONG WOMEN IN THE TOWN OF KALYANI

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### ABSTRACT

**Introduction:** Non-communicable diseases (NCDs) may experience a quick epidemiological shift with a change in disease burden, particularly in India, where the burden of NCDs is rising at an alarming rate.<sup>1</sup> One in four Indians is at danger of passing away from an NCD before becoming 70 years old.

**Methods:** An observational study of women who live at or close to Kalyani is being conducted to ascertain the prevalence of non-communicable diseases.

**Results:** In our study, (Table 1)1723 women participated. There were 53 women from semi-urban areas, 880 women from rural areas, and 880 women from metropolitan areas. The most prevalent NCD in our study was diabetes (N= 256, 27%), followed by obesity (N = 235, 24%). Occurrence of chronic renal disease and hypertension were 19% (N = 182) and 16% (N = 153) respectively.

**Conclusion:** The two most prevalent risk factors that we identified were unhealthy eating and physical inactivity. In 95% of the women, either of these two or both was present. This is primarily the result of urban lifestyle.

**Key Words:** Non communicable disease, Multimorbidity

### INTRODUCTION

Non-communicable diseases (NCDs) may experience a quick epidemiological shift with a change in disease burden, particularly in India, where the burden of NCDs is rising at an alarming rate.<sup>1</sup> One in four Indians is at danger of passing away from an NCD (such as a heart attack, stroke, cancer, diabetes, etc.) before becoming 70 years old.<sup>2</sup> According to disease epidemiology, NCDs spread via common pathophysiological behaviours, environmental risk factors, and behavioural transmission pathways.<sup>3</sup> Multimorbidity, often known as simultaneous illness incidence, has grown due to the associative nature of NCDs.<sup>4</sup>

The time has come for programmes and policies in women's health care that go beyond outcomes of pregnancies and births.

### MATERIALS AND METHODS

An observational study of women who live at or close to Kalyani is being conducted to ascertain the prevalence of non-communicable diseases and common risk factors for their development.

### Inclusion Criteria:

- All the patients who came to Out-patient Department of Obstetrics and Gynaecology, COM & JNM Hospital, Kalyani, Nadia, West Bengal from February 2023 to July 2023 (6 months period) were included in the study.
- Patient with age more than 18years.
- Patient who are willing to participate in the study.

### Exclusion Criteria:

- Patient age less than 18 years
- Patient denial to participate.

**Study area:** The Department of Obstetrics & Gynaecology, College of Medicine & JNM Hospital, Kalyani, Nadia, West Bengal.

**Study population:** All the women with age more than 18 years who came to Out-patient Department of Obstetrics and Gynaecology, COM & JNM Hospital, Kalyani, Nadia, West Bengal from February 2023 to July 2023 (6 months period) were included in the study.

## RESULT

In our study, (Table 1)1723 women participated. There were 53 women from semi-urban areas, 880 women from rural areas, and 880 women from metropolitan areas.

Area	Number	Percentage
Urban	880	51%
Rural	790	46%
Semi-urban	53	3%
Total	1723	100%

**Table 1: Distribution of Participants according to Residence**

Table 2 shows demographic distribution among study population. The majority of the women were Hindus (N = 1426, 83%) and the 10% (N = 182) was Muslims. Total 99% of the women (N = 1707) were married. About 26% women were nulliparous, 744 women was primipara and 515 women were multipara.

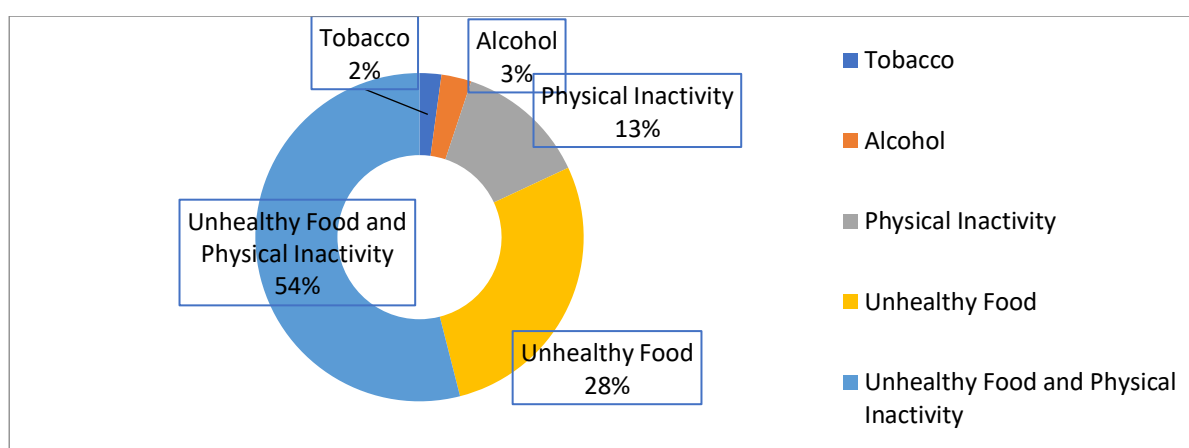
Demographic Distribution			
		Number	Percentage
Religion	Hindu	1426	83%
	Muslim	182	10%
	Christmas	15	1%
	Others	100	6%
Marital Status	Married	1707	99%
	Unmarried	16	1%
Parity	0	448	26%
	1	744	43%
	≥2	515	30%

**Table 2: Demographic Distribution among Study Population**

In our study, (Table 3) we discovered that the most frequent risk factor for NCD was the combination of unhealthy diet and physical inactivity (N = 930, 54%), which was followed by unhealthy food (N= 482, 28%) then physical inactivity (N = 223, 13%). In our study population, substance addiction was relatively less prevalent (Fig 1).

Risk Factors of NCD	No	Percentage
Tobacco	37	2%
Alcohol	51	3%
Physical Inactivity	223	13%
Unhealthy Food	482	28%
Unhealthy Food and Physical Inactivity	930	54%
Total	1693	100%

**Table 3: Risk Factors for Non-communicable diseases**

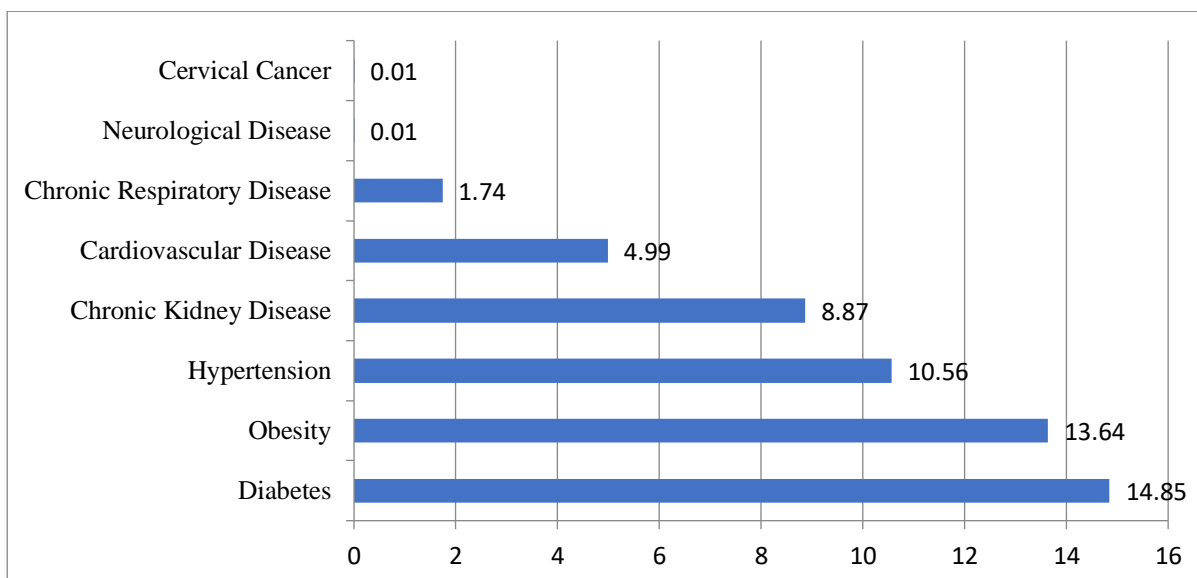


**Figure 1: Pie Diagram Showing Risk factors for NCDs**

The most prevalent NCD in our study was diabetes (N= 256, 27%), followed by obesity (N = 235, 24%). Occurrence of chronic renal disease and hypertension were 19% (N = 182) and 16% (N = 153) respectively. Eighty-Six (9%), and 30 (3%) of patients had cardiovascular disease and chronic respiratory disease conditions respectively. Less than 1% of cases had neurological disorders and cervical cancer (Fig 2).

Prevalance of Non communicable Disease	Number	Prevalance
Diabetes	256 (27%)	14.85
Hypertension	182 (19%)	10.56
Chronic Kidney Disease	153 (16%)	08.87
Cardiovascular Disease	86 (9%)	04.99
Chronic Respiratory Disease	30 (3%)	01.74
Neurological Disease	11 (1%)	00.01
Obesity	235 (24%)	13.64
Cervical Cancer	8 (1%)	00.01
Total	961 (100%)	55.77

**Table 4: Prevalance of NCDs**



**Figure 2 Bar Diagram showing Prevalance of NCDs**

## DISCUSSION

We included 1723 women from Kalyani and the surrounding areas in our study, the majority of whom were married Hindu women. The World Health Organization (WHO) reports that coexisting NCDs, often known as multimorbidity, are more prevalent in low- and middle-income countries.<sup>5</sup> Multimorbidity affects about 18% of people who are 45 years of age or older, according to recent research from the Longitudinal Ageing Study in India (LASI).<sup>6</sup>

The two most prevalent risk factors that we identified were unhealthy eating and physical inactivity. In 95% of the women, either of these two or both was present. This is primarily the result of urban lifestyle. Similar to our study, Peters R Et al<sup>10</sup> observed that poor diet and inactivity are to blame for the majority of NCDs. An individual's age, gender, educational level, marital status, employment position, and behavioral characteristics like smoking, drinking, and using tobacco can all be used to determine the likelihood of numerous chronic diseases.<sup>8</sup> Given that women are more likely than males to have many medical conditions. Gender can be an essential confounding factor for underreporting of NCDs in women.<sup>9</sup>

In our analysis, the two NCDs with the highest prevalence rates were diabetes and obesity. On the contrary cardiovascular disease is the most prevalent NCD, followed by chronic respiratory diseases and diabetes, according to the Ministry of Health and Family Welfare's Status of Non-Communicable Diseases (NCDs) in India report issued on February 8th, 2022.<sup>11</sup> Women typically outlive males, however, reporting a modest increase in life expectancy every ten years does not always imply a better health situation for women.<sup>7</sup> At UN summit in September 2011 WHO member nations have agreed to a worldwide objective, to reduce preventable NCD mortality 25% by 2025.

There are several regulation and programmes in existence in India that are primarily focused on the health of women, especially during pregnancy. However, very few policies and programmes concentrate on managing chronic diseases in women.

## CONCLUSION

NCDs are a major public health concern in the twenty-first century due to the human misery they inflict as well as the harm they do to a country's socioeconomic development. Due to the combination of medical expenses, travel expenses to and from healthcare institutions, time spent providing informal care, and lost productivity, NCDs financially impact individuals and families.

The good news is that, despite an overall rise in NCD fatalities among women, there has been a decline in CVD deaths as a result of government or non-governmental organization-mounted awareness and preventive efforts on salt restriction and tobacco control.

The outlook for women and the management of NCDs is positive. The significance of a life course approach to NCD prevention, starting with the health of girls and young women, is becoming more widely acknowledged. Given that women, girls, and other vulnerable groups who are afflicted by NCDs typically have limited access to medical services, the integration of NCD prevention initiatives within maternal and women-centric health programs has significant promise.

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