

Assessment of Knowledge and Estimated Burden of Life Style Diseases in a Rural Community

Suresh K.N.¹, Mithu Joy^{2*}, Ruby V.P.³

Abstract

Although rapid human evolution has brought about advancement, it has also caused several lifestyle ailments. People's daily routines have drastically changed as a result of emerging technologies, and it paved the way for numerous life style disorders. According to reports, lifestyle diseases are a major cause of increased mortality globally. Our study highlights the prevalence of life style diseases in the rural community and the need for early identification and treatment to reduce the rate of such diseases. A quantitative approach with descriptive method was adopted to achieve the objectives of the study. Data were collected from 2,827 participants residing in Ward 16 of the Mooppainadu panchayat, Wayanad district with a study duration of 4 months from June to October 2022. A survey was conducted by visiting households to enroll participants, utilizing a convenient sampling method. Participants were interviewed using a pre-designed, pre-tested, and semi-structured questionnaire comprising 20 questions. The data collected were entered into an Excel and analyzed using SPSS. This study findings reveals that out of the total 2,827 population, 1,397 (49%) were males and the rest 1430 (51%) were female and among them 968 people (26%) have life style diseases. Out of the 968 people, 360 have hypertension, 256 have Diabetes, 198 have both diabetes and hypertension, 33 were affected with cardiac problems, 65 with respiratory problems, 8 have neurological problems, 44 were affected with gastro problems, and 4 among them have cancer. Moreover, majority of the population 43.5% had poor knowledge, 30.8% had moderate knowledge, and 25.6 % had good knowledge.

Keywords: Lifestyle diseases, hypertension, diabetes, NCDs, COPD

INTRODUCTION

India is one of the nations that is rapidly developing in the world, and as a result, countless diseases have been left behind in its wake. These illnesses typically fall into either the communicable or non-communicable category (NCDs). NCDs are occasionally known as diseases related to one's lifestyle [1]. Over the past few decades, India has experienced a demographic and epidemiological revolution that is having an impact on public health, causing a rapid shift from infectious diseases to non-

communicable diseases (NCDs) [2]. A person's lifestyle has a crucial role in how they manage their day-to-day physical, social, psychological, and financial well-being. Physical limits are caused by lifestyle disruptions, which, if ignored, can lead to non-communicable diseases [1].

Lifestyle diseases are ailments primarily attributed to individuals' daily habits and routines. Engaging in behaviors that discourage physical activity and promote a sedentary lifestyle can lead to various health issues, including chronic non-communicable diseases that can have severe and fatal consequences [3, 4]. There are many factors that contribute to lifestyle diseases, but improper

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eating habits, physical inactivity, biological clock disturbances, and poor body posture are the major reasons. Sedentary lifestyles, unhealthy dietary choices, alcohol and substance abuse, as well as tobacco use (HT), contribute to the development of heart disease, stroke, obesity, type 2 diabetes, and hypertension [1].

According to the World Health Organization, non-communicable diseases, or NCDs—of which lifestyle illnesses are a subset—take the lives of 41 million people each year, accounting for more than 70% of all fatalities worldwide. Approximately 15 million of these fatalities involve individuals aged 30 to 69 years. Six million people in India die from NCDs [2]. Non-infectious diseases are a bigger concern today. The attention needs to be on lifestyle diseases since the epidemic is upending our lives, making work more difficult to manage, and significantly destroying the work–life balance. These diseases can insidiously do enormous damage. The number one lifestyle disease in India as experts claim is diabetes and rapidly increasing nationwide, particularly in metropolitan areas. Aside from obesity, other conditions that should be taken into consideration include HTN, COPD, arteriosclerosis, heart illnesses, cancer, mental health issues, liver cirrhosis, and ear issues. Moreover, drastic changes in the life style as well as lack of awareness or rather misconceptions are also main causes of rapid spreading of life style diseases.

Despite the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases, and Stroke (NPCDCS) being implemented by the Indian government as part of the National Health Mission, the incidence and prevalence of lifestyle diseases are at an all-time high due to lack of knowledge about prevention, early detection, screening, and referral. Thus, early detection of disorders linked to bad lifestyle is essential. The authors examine the current state of life style diseases and associated risk factors in the affected rural community.

STATEMENT OF THE PROBLEM

A study to assess the knowledge and estimate burden of life style diseases in a rural community in Wayanad district.

OBJECTIVES

- To identify the burden of lifestyle diseases in a rural community of Wayanad district.
- To assess the knowledge regarding life style disease in a rural community of Wayanad district

HYPOTHESIS

Hypothesis 1: 20% or more population will be suffering from life style diseases.

Hypothesis 2: The study participants will have poor knowledge regarding lifestyle diseases.

MATERIALS AND METHODS

A quantitative approach with descriptive method was adopted to achieve the objectives of the study. Following an in-depth examination of the region, a few parameters were evaluated and analyzed to determine the prevalence of lifestyle diseases. After obtaining ethical clearance from Institutional Ethics Committee, a pilot survey was conducted among 200 participants residing in Ward 16 of the Mooppainadu panchayat, before the main study, to test the significance of the questions prepared. The data collected during pilot survey was analyzed by performing statistical analysis.

During the course of main study, data was collected from 2,827 participants above 18 years and residing in Ward 16 of the Mooppainadu panchayat, Wayanad district with a study duration of 4 months from June to October 2022. A survey was conducted by going from house to house to enlist study participants, employing a convenient sampling method. Participants were interviewed by using the pre-designed, pre-tested, and semi-structured questionnaire consisting of 15 questions to estimate the disease burden and 27 questions to assess the knowledge regarding life style diseases. Data was then entered in Excel and analyzed with SPSS.

RESULT

Figure 1 depicts that out of the total 2,827 population, 1,397 (49%) were males and the rest 1,430 (51%) were female.

Figure 2 represents that out of the total population, 968 people (26%) had life style diseases.

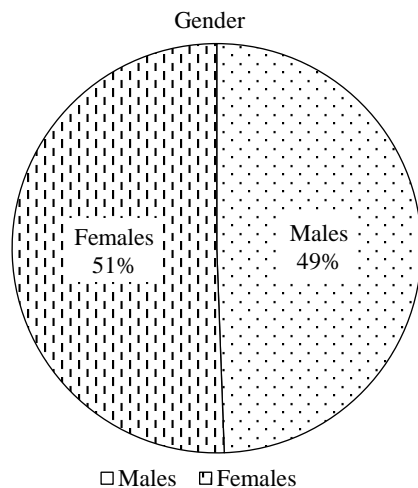


Figure 1. Frequency and percentage distribution of subjects according to gender.

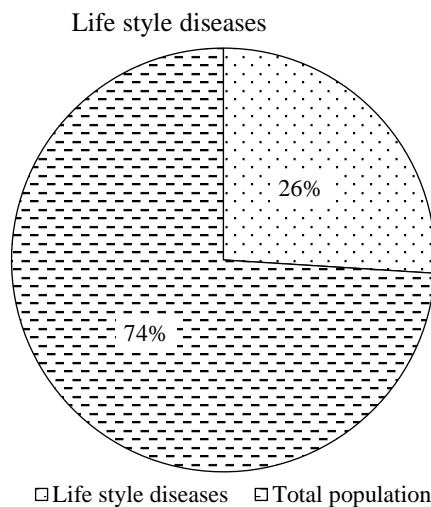


Figure 2. Frequency and percentage distribution of subjects according to lifestyle diseases.

Table 1 suggests that out of the 968 people, 360 have hypertension, 256 have diabetes, 198 have both diabetes and hypertension, 33 are affected with cardiac problems, 65 with respiratory problems, 8 have neurological problems, 44 are affected with gastro problems, and 4 among them have cancer.

Figure 3 suggests that among the total population (2,827), 13.8% males and 11.67% females have hypertension, and 8.01% of males and 10.06% females are diabetic. Whereas both hypertension and DM was affected by 6.15 males and 7.83 females, respectively. Males affected with cardiac issues are 1.86% on the contrary, females are just 0.48%. Difference in respiratory problems among males and females is 1.69%, whereas males have more predominant respiratory issues than females. However, the neurological problems between them are almost the same. But males show a higher rate of gastro problems when compared with females and the cancer issues in the community is a little more among the females (0.2%) than the male population.

Table 1. Life style disease pattern in population distributed by gender (n = 2,827).

Life style diseases	Total	Percentage	Males	%	Females	%
Hypertension	360	12.7	193	53.6	167	46.3
Diabetes	256	9.0	112	43.7	144	56.2
HTN &DM	198	7.0	86	43.4	112	56.5
Cardiac	33	1.16	26	78.7	7	21.2
Respiratory	65	2.2	44	67.6	21	32.3
Neurological	8	0.28	5	62.5	3	37.5
Gastro	44	1.55	28	63.6	16	36.3
Cancer	4	0.14	1	25	3	75

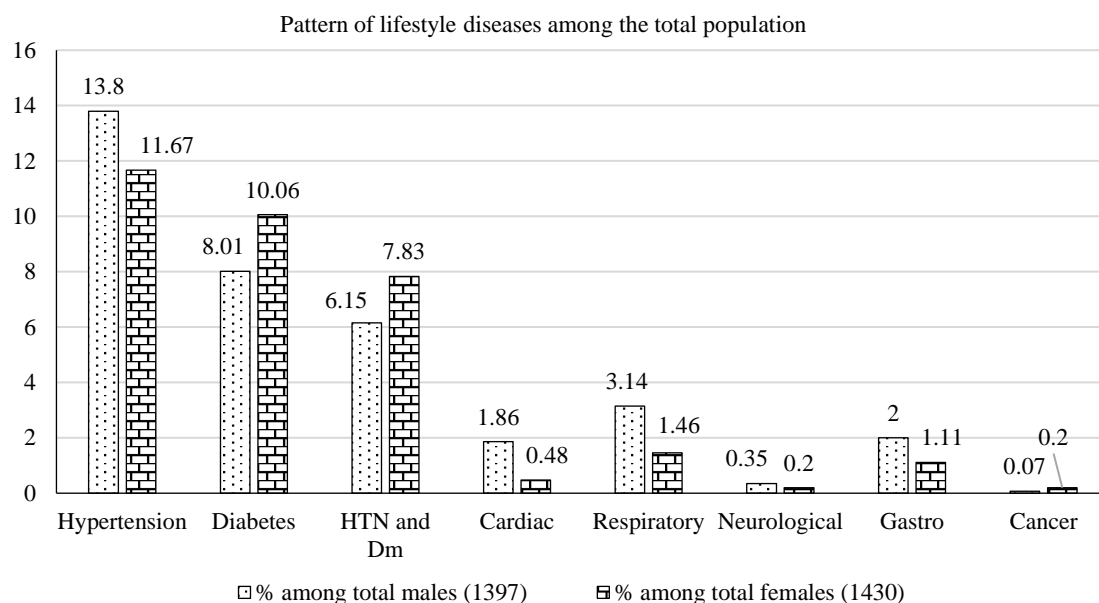


Figure 3. Pattern of lifestyle diseases among total population.

Figure 4 suggests that out of the total population, 43.5% had poor knowledge, 30.8% had moderate knowledge, and 25.6% had good knowledge.

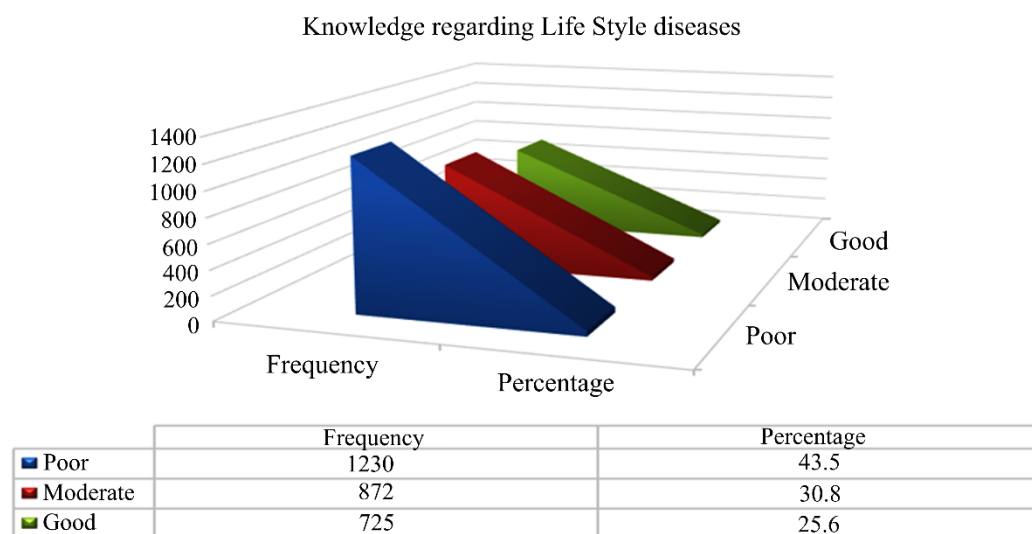


Figure 4. Frequency and percentage distribution of subjects based on knowledge regarding life style diseases (n = 2,827).

DISCUSSION

A cross sectional study was conducted during January to June 2012 in two villages under the Department of Community Medicine, NRI Medical College in Guntur District of Andhra Pradesh. A total of 1,960 households with a population of 9,067 were surveyed. Individuals aged 60 years and above were given a pretested questionnaire to assess their perceived health status and known disease conditions. The data was entered into the World Health Organization Epi Info package and analyzed to determine percentages. Chi-square tests were used where appropriate. Among the population, there were 509 (11.2%) elderly female patients and 517 (11.4%) male patients aged over 60 years. Approximately 52.3% of women and 44.5% of men reported having some chronic illness. Hypertension affected 19% of males and 28% of females. The overall prevalence of diabetes was 14%, while arthritis was reported by 9%. Among women, higher rates of lifestyle diseases were associated with illiteracy, being a housewife, and being widowed [5–7].

In the present study, out of the total 2,827 population, 1,397 (49%) were males and the rest 1,430 (51%) were female and among them 968 people (26%) have life style diseases. out of the 968 people, 360 have hypertension, 256 have Diabetes, 198 have both diabetes and hypertension, 33 are affected with cardiac problems, 65 with respiratory problems, 8 have neurological problems, and 44 are affected with gastro problems and 4 among them have cancer [8–11].

CONCLUSION

According to the results of the current survey, significant percentage of rural residents have lifestyle diseases and a majority are unaware about lifestyle diseases and its management. Our work underlines the importance of early risk factor identification and monitoring to lower the incidence of lifestyle disorders. The majority of rural residents are reluctant to undergo medical screening because they are unaware of the significance of lifestyle disorders and their repercussions. Consequently, the rural population, despite experiencing greater physical limitations, tends to overlook initial symptoms and exhibits hesitancy in seeking early treatment. Therefore, our research emphasizes the importance of implementing population-based screening initiatives and providing awareness and counselling services at the primary level (households) to promote healthier routines and prevent further complications of lifestyle diseases among the rural population.

REFERENCES

1. Singh KRB, Fernandes M, Sarkar T, Sridevi P. Assessment and analysis of lifestyle disease burden in tribes of central India. *J Infect Non Infect Dis.* 2019; [Online] Available at <https://www.heraldopenaccess.us/openaccess/assessment-and-analysis-of-lifestyle-disease-burden-in-tribes-of-central-india> [Accessed on June 2023]
2. World Health Organization. (2017). Fact sheet: noncommunicable diseases. Available at <http://www.who.int/mediacentre/factsheets/fs355/en/> [Accessed on June 2023]
3. Tabish SA. (2017). Lifestyle diseases: consequences, characteristics, causes and control. Available at https://www.researchgate.net/publication/318792974_Lifestyle_diseases_consequences_characteristics_causes_and_control [Accessed on June 2023]
4. Dr. Kutty's Alliance. (2022). 10 lifestyle diseases that are common in India. Available at <https://nura.in/cpw/10-lifestyle-diseases-that-are-common-in-india/> [Accessed on June 2023]
5. Nallapu SSR, Sai TSR. (2014). Estimation of lifestyle diseases in elderly from a rural community of Guntur district of Andhra Pradesh. *J Clin Diagn Res.* 2014; 8 (4): JC01-4. Available at <https://pubmed.ncbi.nlm.nih.gov/24959465/> [Accessed on June 2023]
6. Swarnalatha N. The prevalence of depression among the rural elderly in Chittoor District, Andhra Pradesh. *J Clin Diagn Res.* 2013; 7 (7): 1356–1360. doi: 10.7860/JCDR/2013/5956.3141.
7. Reddy NB, Pallavi M, Reddy NN, Reddy CS, Singh RK, Pirabu RA. Psychological morbidity status among the rural geriatric population of Tamil Nadu, India: a cross-sectional study. *Indian J Psychol Med.* 2012; 34 (3): 227–231. doi: 10.4103/0253-7176.106016.
8. Sinha SP, Shrivastava SR, Ramasamy J. Depression in an older adult rural population in India. *MEDICC Rev.* 2013; 15 (4): 41–44. doi: 10.37757/MR2013V15.N4.10.

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9. Akhtar SN, Saikia N, Muhammad T. Self-rated health among older adults in India: Gender specific findings from National Sample Survey. *PLoS One*. 2023 Apr 17;18(4):e0284321. doi: 10.1371/journal.pone.0284321. PMID: 37068072; PMCID: PMC10109469.
 10. Dey AB, Soneja S, Nagarkar KM, Jhingan HP. Evaluation of the health and functional status of older Indians as a prelude to the development of a health programme. *Natl Med J India*. 2001; 14 (3): 135–138.
 11. Audit Commission. (2004). Older people: independence and well-being: the challenge for public services. Available at <https://housingcare.org/downloads/kbase/1969.pdf> [Accessed on June 2023]