Original Research Paper

Nursing

PREVALENCE OF LIFESTYLE DISEASES: COMPARISON WITH RESPECT TO GENDER, AGE AND LIFESTYLE FACTORS IN A SELECTED URBAN COMMUNITY OF PUNE

Yamuna CB	Tutor, College of Nursing, Pune
Jiji Rajeev*	Tutor, College of Nursing, Delhi *Corresponding Author
Geetanjali Saighal	GD Matron, Pune

ABSTRACT "Non-communicable diseases (NCDs)" is a term used for chronic diseases that are non-infectious. They share common important features which include the following: They have their origin at young ages and epidemics take several years to become well recognized; NCDs to be treated, need long term systemic approach; and in view of their long duration, there are opportunities for prevention. Cardiovascular disease, chronic respiratory diseases, cancer, and diabetes were responsible for 60% of all deaths globally in 2005, with more than 75% of these deaths occurring in developing countries (World Health Organization, 2005). Some NCDs like cardiovascular diseases are increasingly affecting the working-age populations (ages 35 to 64 years) in low- and middle-income countries than in the United States and Portugal (Leeder et al, 2004). The control of NCDs has received little attention. For instance, the reduction of Non Communicable diseases is not a Millennium Development Goal (Horton, 2005). Many governments and organisations have focussed on controlling diseases like HIV/AIDS, malaria and Tuberculosis, and neglecting NCDs (Horton, 2005).

In view of the fact that the main risk factors associated with NCDs like tobacco smoking, excessive alcohol intake, sedentary lifestyles, including poor diet, are modifiable through changes in lifestyles, it is important that levels of these risk factors in the communities are identified and interventions put in place. In recent years, there has been increasing trends of lifestyle diseases worldwide. Globally, deaths from non-communicable diseases are expected to climb to 49.7 million in 2020, an increase of 77% in absolute numbers and increase in their share of the total from 55% in 1990 to 73% in 2020. According to the World Health Organization (WHO), this cluster of diseases accounted for 36 million (63%) of the 57 million total deaths in 2008 were due to non-communicable disease, comprising mainly cardiovascular diseases (48% of non-communicable diseases), cancer (21%), chronic respiratory diseases (12%) and diabetes (3.5%), (Essa & El-Shemy, 2015), (Awosan, Ibrahim, Essein, Yusuf, and Okolo, 2013).

Estimating the burden of the disease in people will help in setting strategies for prevention and control of the risk factors for lifestyle diseases. Hence, one important area of inquiry is to identify risk factors to help determine which factors are most vulnerable, or which conditions or trigger factors elicit the pathological condition.

KEYWORDS :

AIM
The aim of the survey was to determine the prevalence of common Non-Communicable Diseases (NCDs) and their associated risk factors in a Selected Urban Community of Pune.

OBJECTIVES
1. To prepare a survey tool
2. To assess the selected socio-demographic variables
3. To analyze the survey findings

STUDY SETTINGS & SAMPLE SIZE
The purpose of the study was to analyse the prevalence of lifestyle disease among people with respect to gender, type of food, lifestyle and age group. The sample included three hundred people selected though Random sampling from 90 families of Urban Community, Pune. The age of the participants ranged from 20 to 84 years. The direct personal interview method was used to collect data from the participants. The demographic and response data were analysed by using frequencies and percentages.

The demographic and response information are presented in five different categories under
(i) Gender, (ii) Type of food, (iii) Physical Activity and (iv) Age group.

RESULTS
Table 1. Prevalence of lifestyle diseases with respect to gender

Diseases	Male (N=138)		Female (N=162)	
	Frequencies	percentage	Frequencies	Percentage
Hypertension	8	5.7	7	4.3
Diabetes	5	3.6	7	4.3
Asthma	2	1.4	1	0.6
Cancer	1	0.7	-	-
Heart disease	4	2.8	1	0.6
Presence of 2 or more diseases	8	5.7	9	5.5
Prevalence Of Disease	28	20.2	25	15.4
Absence of disease	110	79.7	137	84.5
Total	138	100	162	100

Table 1 indicates that out of 138 male samples 28.2% had incidence of various lifestyle diseases while 79.7% were without any disease. Out of 162 female samples 15.4% had prevalence of lifestyle diseases and 84.5% were without lifestyle diseases.
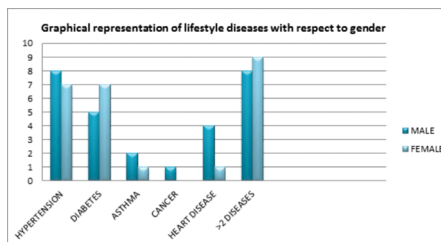

Graphical representation of lifestyle diseases with respect to gender

Table 2. Prevalence of lifestyle diseases with respect to diet

Diseases	Vegetarian (N=99)		Non-vegetarian (N=201)	
	Frequencies	percentage	Frequencies	Percentage
Hypertension	5	6.0	10	4.9
Diabetes	4	4.0	8	3.9

Asthma	1	1.0	2	0.9
Cancer	-	-	1	0.4
Heart disease	2	4.0	3	0.6
Presence of 2 or more diseases	4	8.0	13	6.4
Prevalence Of Disease	16	16.1	37	18.4
Absence of disease	83	76.7	164	81.6
Total	99	100	201	100

Table 2 indicates that out of 99 vegetarian samples 16.1% had incidence of lifestyle diseases while 76.7% of vegetarians were without any disease. Out of 201 non-vegetarian samples 18.4% had incidence of lifestyle diseases while 81.6% were without lifestyle diseases.
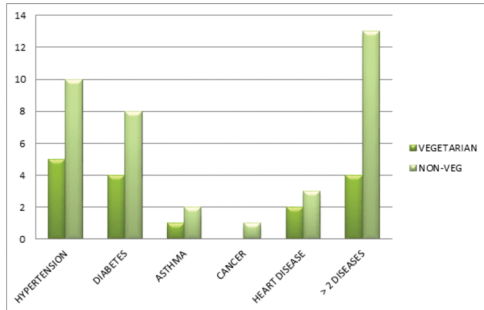

Table 3. Prevalence of lifestyle disease with respect to physical activity

Diseases	Physically active (N=134)		Sedentary (N=166)	
	Frequencies	percentage	Frequencies	Percentage
Hypertension	6	4.4	9	5.4
Diabetes	5	3.7	7	4.2
Asthma	-	-	3	1.8
Cancer	-	-	1	0.6
Heart disease	3	2.2	2	1.2
Presence of 2 or more diseases	7	5.2	10	6.0
Prevalence Of Disease	21	15.6	32	19.2
Absence of disease	113	84.3	134	80.7
Total	134	100	166	100

Table 3 indicates that out of 134 active samples 15.6% had incidence of various lifestyle diseases while 84.3% of active samples were not having any disease. Out of 166 sedentary samples 19.2% had incidence of various lifestyle diseases while 80.7% were without any disease.
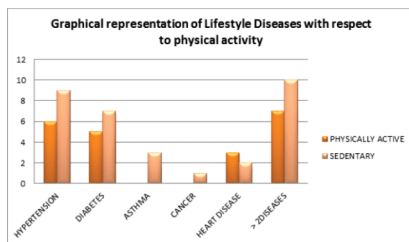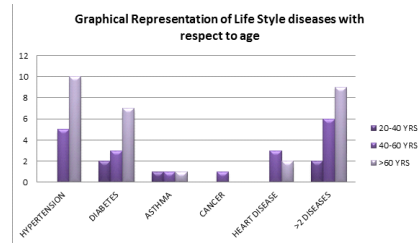

Table 4: Prevalence of life style diseases with respect to age

Diseases	20-40 years (N=115)		40-60 years (N=105)		>60 years (N=80)	
	Frequencies	Percentage	Frequencies	Percentage	Frequencies	Percentage
Hypertension	-	-	5	4.7	10	12.5
Diabetes	2	1.7	3	2.8	7	8.7
Asthma	1	0.8	1	0.9	1	1.2
Cancer	-	-	1	0.9	-	-
Heart disease	-	-	3	2.8	2	2.5
Presence of 2 or more diseases	2	1.7	6	5.7	9	11.2

Prevalence of Disease	5	4.4	19	18.1	29	36.3
Absence of disease	110	95.6	86	81.9	51	63.7
Total	115	100	105	100	80	100

Table 5 indicates that 4.4 % of the 115 sample under the age range of 20 to 40 years is with lifestyle diseases and 95.6% without lifestyle diseases. 18.1% of the 105 sample under the age range of 40 to 60 years is with lifestyle diseases and 81.9% without lifestyle diseases. 36.3% of the 40 sample under the age range of 60 and above are with lifestyle diseases and 63.7% without lifestyle diseases.

DISCUSSION

Gender, age and lifestyle have significance impact on incidence of lifestyle diseases. The present study analysed the prevalence of lifestyle disease among people with respect to gender, age, diet, and physical activity among three hundred people from an urban community called Ghorpadi in Pune Cantonment, Pune. The percentage of lifestyle diseases was higher in males than females. It may possibly because the male participants of this study follow unhealthy lifestyle pattern including consumption of intoxicated items than female participants. The harmful use of alcohol is a particularly grave threat to men. Globally, 6.2% of all male deaths are attributed to alcohol, compared to 1.1% of female deaths. Men also have far greater rates of total burden attributed to alcohol than women – 7.4% for men compared to 1.4% for women (WHO, 2011b), (Awosan et al., 2013). The percentages of lifestyle diseases in vegetarians are less when compared to non-vegetarians as various studies (Craig, 2009) concluded that vegetarian food helps to reduce the risk of lifestyle diseases. The lifestyle diseases are very less in those who are physically active when compared to sedentary people. A sedentary lifestyle increases the propensity to lifestyle disease and premature death. The lifestyle diseases are very less in the age group of 20 to 40 years when compared to other age groups. And the lifestyle diseases are also less in the age group of 40-60 when compared to the age group of 60 and above. "Inactivity may diminish life expectancy not only by predisposing to aging-related diseases but also because it may influence the aging process itself," researchers report in the January 29, 2008 issue of Achieves of Internal Medicine.

Summary

Based on the results of the study the following conclusions were drawn.
1. Incidence of lifestyle disease among male participants was 28.2% and among females it was 15.2%.
2. In case of vegetarians the percentage incidence of lifestyle disease was 16.1% and among non vegetarians it was 18.4%.
3. In physically active participants the incidence of lifestyle disease was 15.6% and among sedentary participants it was 19.2%.
4. In age wise categorization, in the age group of 20 to 40 years the incidence of lifestyle disease was 4.4%, in the age of 40 to 60 years it was 18.1%, and in the age of 60 and above it was 36.3%.

RECOMMENDATIONS

The study having demonstrated a high prevalence of lifestyle diseases and their risk factor warrants serious consideration

for development and implementation of relevant health promotion and intervention programmes that will improve the general health and reduce the risk factors.

REFERENCES

1. Thomas D Q & Kotecki J E. (2007). Physical Activity and Health, An Interactive Approach. USA: Jones and Bartlett Publishers.
2. Rathee B. S, Nain B & Sharma S. (2008). Our Health is in our Hands. Delhi: New Gyan Offset Printers.
3. Edlin G & Golanty E. (2004). Health and Wellness. USA: Jones and Bartlett Publishers.
4. Service UD. (1998). Physical Activity and Health. USA: Jones and Bartlett Publishers
5. Sochaliya KM, Parmar DV, Yadav SB. A Study on Prevalence of Lifestyle Diseases and its Risk Factors in Urban Area of Jamnagar City. National Journal of Community medicine; 2012 : 595 – 600
6. CraigWJ. (2009). Health Effects of Vegan Diets. The American Journal of Clinical Nutrition (2009) http://www.ncbi.nlm.nih.gov/pubmed/19279075.
7. Pappachan M J. Increasing Prevalence of Lifestyle Diseases: High Time for Action. Indian Journal of Medical Research; 2011: 143 – 145.
8. Jack A, Jose M. Dietary pattern, lifestyle, nutrition status and prevalence of hypertension among traders in Sokoto Central market, Sokoto, Nigeria. International Journal of Nutrition and Metabolism; 2014 : 9-17
9. Kanniyappan, D, Kalidhas, P, Aruna R M. Age, gender related prevalence of cardiovascular risk factors in overweight and obese south Indian adults. International Journal of Biological and Medical Research ; (2011): 513-522.
10. Kumar A, Garg S, Gupta H L. (2005). A Study of Prevalence of Risk Factors for Coronary Artery Diseases in Asymptomatic Middle Aged and Elderly Subjects. JK Science: Journal of Medical Education and Research: (2005); 81-83.