# PREVALENCE OF LIFESTYLE DISEASES: COMPARISON WITH 

 RESPECT TO GENDER, LOCALE, AGE AND LIFESTYLE${ }^{1}$ NANDYA V ${ }^{2}$ DR ANIL RAMACHANDRAN ${ }^{3}$ DEEPAK G<br>${ }^{1}$ Research Scholar, Department of Physical Education,Kannur University, Kerala, India<br>${ }^{2 \& 3}$ Asstt. Prof.,Department of Physical Education and Sports Sciences Kannur University, Kerala, India


#### Abstract

The purpose of the study was to analyse the prevalence of lifestyle disease among people with respect to locale, gender, type of food, physical activity and age group. The participants of the study were between the age of 20 to 94 ( $N=200$ ) from various regions of Palakkad district, Kerala during the year 2015. 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 result shows that, incidence of lifestyle disease in rural area was $33.85 \%$ and in urban area was $37.14 \%$; among male participants the incidence was $35.87 \%$ and among females it was $31.48 \%$, In the case of vegetarians the percentage of incidence of lifestyle disease was $28 \%$ and among non vegetarians it was $36.67 \%$; among physically active participants the incidence was $9 \%$ and among sedentary participants it was $62 \%$. In age wise categorization, in the age group of 20 to 40 years the incidence was $9.76 \%$, in the age of 40 to 60 years it was $38.46 \%$, and in the age of 60 and above it was $72.5 \%$. 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.


Key word: Lifestyle Disease, Physical Activity and Factors.

## INTRODUCTION:

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 \& EIShemy, 2015), (Awosan, Ibrahim, Essein, Yusuf, and Okolo, 2013)


Today, the health of people is critically linked to the health related behaviours they choose to adopt. The main risk factors that were acknowledged in are known for decades and are similar in almost all countries. Lifestyle diseases are a group of diseases the onset and progress of which are concerned with lifestyle and behaviour factors. All experts agree that health related quality of life can be understood as a multidimensional concept, which comprises physical, emotional, mental, social and behaviour-related components of wellbeing. World Health Organisation (WHO) defines quality of life as, "an individual's perceptions of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, and concerns" (Essa and EI-Shemy, 2015). Primary Health Care (PHC) is an important setting for addressing lifestyle risk factors because of its accessibility, continuity, and comprehensiveness of the care provided.

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.

## METHODOLOGY

The purpose of the study was to analyse the prevalence of lifestyle disease among people with respect to locale, gender, type of food, lifestyle and age group. The sample included two hundred peoples from various regions of Palakkad district, Kerala during the year 2015. The age of the participants ranged from 20 to 94 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.

## ANALYSIS OF DATA

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


The details regarding the frequencies and percentages of the total sample with respect to locale is shown in table 1.

Table 1: Prevalence of lifestyle diseases with respect to locale

| Diseases | Rural |  | Urban |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Frequencies | Percentage | Frequencies | Percentage |
| Hypertension | 12 | 9.2 | 2 | 2.9 |
| Diabetes | 5 | 3.8 | 2 | 2.9 |
| Cholesterol | 4 | 3.1 | 1 | 1.4 |
| Asthma | 2 | 1.5 | 3 | 4.3 |
| Obesity | 1 | .8 | 4 | 5.7 |
| Cancer | 2 | 1.5 | - | - |
| Heart disease | 2 | 1.5 | 1 | 1.4 |
| 2 or more <br> disease | 16 | 12.3 | 13 | 18.6 |
| Prevalence of <br> disease | 44 | 33.85 | 26 | 37.14 |
| Absence of <br> disease | 86 | 66.2 | 44 | 62.9 |
| Total | 130 | 100.0 | 70 | 100.0 |

Table 1 indicates that, in rural area $33.85 \%$ of the total sample is suffering from various lifestyle diseases and $66.2 \%$ without any lifestyle diseases. In urban area the percentage of the total sample with lifestyle diseases is $37.14 \%$ and without lifestyle disease is $62.9 \%$.

Figure 1: Graphical representation of lifestyle diseases with respect to locale



The details regarding the frequencies and percentages of the total sample with respect to gender is shown in table 2 .

Table 2: Prevalence of lifes tyle diseases with respect to gender

| Diseases | Male |  | Female |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Frequencies | Percentage | Frequencies | Percentage |
| Hypertension | 5 | 5.4 | 7 | 6.5 |
| Diabetes | 6 | 6.5 | 1 | .9 |
| Cholesterol | 2 | 2.2 | 3 | 2.8 |
| Asthma | - | - | 3 | 2.8 |
| Obesity | 4 | 4.3 | 1 | .9 |
| Cancer | 1 | 1.1 | 1 | .9 |
| Heart disease | 1 | 1.1 | 1 | .9 |
| 2 or more <br> disease | 14 | 15.2 | 17 | 15.7 |


| Prevalence of <br> disease | 33 | 35.87 | 34 | 31.48 |
| :--- | :---: | :---: | :---: | :---: |
| Absence of <br> disease | 59 | 64.1 | 74 | 68.5 |
| Total | 92 | 100.0 | 108 | 100.0 |

Table 2 indicates that out of 92 male samples, $35.87 \%$ had incidence of various lifestyle diseases and $64.1 \%$ were without lifestyle diseases. Out of 108 female samples, $31.48 \%$ had incidence of lifestyle diseases and $68.5 \%$ were without lifestyle diseases.

Figure 2: Graphical representation of lifestyle diseases with respect to gender


The details regarding the frequencies and percentages of the total sample with respect to type of food is shown in table 3.

Table 3: Pre vale nce of lifestyle diseases with respect to type of food

| Diseases | Vegetarian |  | Non Vegetarian |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Frequencies | Percentage | Frequencies | Percentage |
| Hypertension | 3 | 6.0 | 10 | 6.7 |
| Diabetes | 2 | 4.0 | 5 | 3.3 |
| Cholesterol | 1 | 2.0 | 6 | 4.0 |
| Asthma | - | - | 3 | 2.0 |
| Obesity | 1 | 2.0 | 5 | 3.3 |
| Cancer | - | - | 2 | 1.3 |
| Heart disease | - | - | 2 | 1.3 |
| 2 or more <br> disease | 7 | 14.0 | 22 | 14.7 |
| Prevalence of <br> disease | 14 | 28 | 55 | 36.67 |
| Absence of <br> diseases | 36 | 72.0 | 95 | 63.3 |
| Total | 50 | 100.0 | 150 | 100.0 |

Table 3 indicates that out of 50 vegetarian samples $28 \%$ had incidence of various lifestyle diseases and $72 \%$ were without lifestyle diseases. Out of 150 non vegetarian samples, $36.67 \%$ had incidence of lifestyle diseases and $63.3 \%$ were without lifestyle diseases.

Figure 3: Graphical representation of lifestyle diseases with respect to type of food


The details regarding the frequencies and percentages of the total sample with respect to type of food is shown in table 4

Table 4: Pre vale nce of lifestyle diseases with respect to physical activity

| Diseases | Physically Active |  | Sedentary |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Frequencies | Percentage | Frequencies | Percentage |
| Hypertension | 4 | 4.0 | 6 | 6.0 |
| Diabetes | 2 | 2.0 | 5 | 5.0 |
| Cholesterol | - | - | 5 | 5.0 |
| Asthma | - | - | 3 | 3.0 |
| Obesity | 1 | 1.0 | 4 | 4.0 |
| Cancer | 1 | 1.0 | 1 | 1.0 |
| Heart disease | - | - | 2 | 2.0 |
| 2 or more disease | 1 | 1.0 | 36 | 36.0 |


| Prevalence of <br> disease | 9 | 9 | 62 | 62 |
| :--- | :---: | :---: | :---: | :---: |
| Absence of <br> disease | 91 | 91.0 | 38 | 38.0 |
| Total | 100 | 100.0 | 100 | 100.0 |

Table 4 indicates that out of 100 physically active samples, $9 \%$ had incidence of various lifestyle diseases and $91 \%$ were without lifestyle diseases. Out of 100 sedentary samples, $62 \%$ had incidence of lifestyle diseases and $38 \%$ were without lifestyle diseases.

Figure 4: Graphical representation of lifestyle diseases with respect to physical activity


The details regarding the frequencies and percentages of the total sample with respect to age group is shown in table 5

Table 5: Pre vale nce of lifestyle diseases with respect to age group

| Diseases | $20-40$ Years |  | $40-60$ years |  | $60+$ years |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Frequencies | Percentage | Frequencies | Percentage | Frequencies | Percentage |
| Hypertension | - | - | 3 | 3.8 | 8 | 20.0 |
| Diabetes | 1 | 1.2 | 3 | 3.8 | 3 | 7.5 |
| Cholesterol | 2 | 2.4 | 1 | 1.3 | 1 | 2.5 |
| Asthma | 2 | 2.4 | 1 | 1.3 | - | - |
| Obesity | - | - | 3 | 3.8 | 2 | 5.0 |
| Cancer | 1 | 1.2 | - | - | - | 1 |
| Heart <br> diseases | - | - | - | 24.4 | 13 | 32.5 |
| 2 or more <br> disease | 2 | 2.4 | 19 | 30 | 27.5 |  |
| Prevalence <br> of disease | 8 | 9.76 | 30 | 38.46 | 29 | 72.5 |
| Absence of <br> diseases | 74 | 90.24 | 48 | 61.53 | 11 | 27.5 |
| Total | 82 | 100.0 | 78 | 100.0 | 40 | 100.0 |

Table 5 indicates that $9.76 \%$ of the 82 sample under the age range of 20 to 40 years is with lifestyle diseases and $90.24 \%$ without lifestyle diseases. $38.46 \%$ of the 78 sample under the age range of 40 to 60 years is with lifestyle diseases and $61.53 \%$ without lifestyle diseases. $72.5 \%$ of the 40 sample under the age range of 60 and above are with lifestyle diseases and $27.5 \%$ without lifestyle diseases.

Figure 5: Graphical representation of lifestyle diseases with respect to age group


## DISCUSSION

Gender, locale, age and lifestyle have significance impact on incidence of lifestyle diseases. The present study analysed the prevalence of lifestyle disease a mong people with respect to gender, locale, age, type of food, and physical activity among two hundred people from various regions of Palakkad district in Kerala. The percentage of lifestyle diseases were comparatively less in people who are living in rural area. It may be because of the healthy environmental factors. 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

IMPACT FACTOR:
0.816
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.

## CONCLUSION

Based on the results of the study the following conclusions were drawn.

1) Incidence of lifestyle disease in rural area was $33.85 \%$ and in urban area was $37.14 \%$.
2) Incidence of lifestyle disease among male participants was $35.87 \%$ and among females it was $31.48 \%$.
3) In case of vegetarians the percentage incidence of of lifestyle disease was $28 \%$ and among non vegetarians it was $36.67 \%$.
4) In physically active participants the incidence of lifestyle disease was $9 \%$ and among sedentary participants it was $62 \%$.
5) In age wise categorization, in the age group of 20 to 40 years the incidence of lifestyle disease was $9.76 \%$, in the age of 40 to 60 years it was $38.46 \%$, and in the age of 60 and above it was $72.5 \%$.

## RECOMMENDATIONS

The study having demonstrated a high prevalence of lifestyle diseases and their risk factor warrants serious consideration for de velopment and implementation of relevant health promotion and intervention programmes that will improve the general health and reduce the risk factors.

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