Impact of Physical Inactivity on Non - Communicable Diseases: A Risk Factor Influencing the Health of Men in Colombo District

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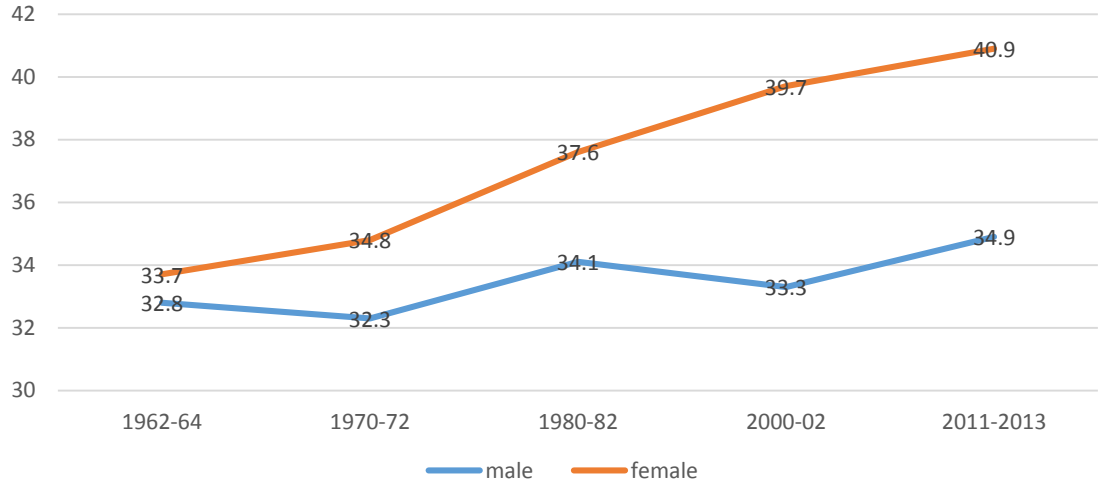
Introduction

Mortality in Sri Lanka has declined substantially over the latter half of the twentieth century and then in to the millennium. The decline of mortality during the past one hundred years has occurred at all ages and for both sexes, where the rapidity of improvement has been greater for females (Dissanayake, 1987). Life expectancy has resulted in a substantial male-female gap in Sri Lanka, one of the largest in the world. Male-female gap at birth is identified as almost 7 years (Department of Census and Statistics, 2015).This phenomenon is further presented through the figure given below.

Figure 1: Life Expectancy at Age 40 by Sex, 1963-2012



Source: Department of Census and Statistics - Sri Lanka - 2016

As indicated by figure 1, it is noticeable that over the years, the gap between the life expectancy of males and females at the age of 40 years has increased. The gap between the life expectancy at birth at age 40, which was at a value closer to zero, has eventually increased by the years 2011-2013 to a gap of six years; 40.9 years for females and 34.9 years for males.

Sri Lanka has come a long way from its focus on controlling of communicable diseases, improving maternal and child health, and virtually eliminating vaccine preventable diseases.

Currently, chronic non-communicable diseases (NCDs) are overtaking communicable diseases as dominant health problem and are now the leading cause of mortality, morbidity, and disability in Sri Lanka especially for men. Smoking, physical inactivity, the harmful use of alcohol and unhealthy diets are the behavioural risk factors for NCDs (World Health Organization, 2015). Physical inactivity can be identified as one of the main behavioural risk factors that cause NCDs.

Rationale

The research is concerned with the role played by non-communicable diseases in creating the aforementioned disparity in life expectancy. It has been identified that men are vulnerable to suffer from NCDs more than its female counterparts. Many of the non-communicable disease burdens occur in the mid-life period. Middle and old aged men are known to have a shorter life expectancy and higher mortality compared to women. This affects men over 40 years of age the most. Smoking, physical inactivity, the harmful use of alcohol and unhealthy diets increase the risk of dying from NCDs. Physical inactivity can be identified as one of the main behavioural risk factors that cause NCDs. Although there are general discussions about the gender gap in life expectancies, a serious attempt has not been taken so far to provide a rational explanation for such a significant difference. Therefore an awareness of the actual disparity that exist with men's health in Sri Lanka still remains ignored (Dissanayake, 2014).

Methodology

In the process of data collection, Colombo district has been selected as the location of study as the highest number of deaths caused by non-communicable diseases has been reported from this district according to the Self-reported Health Survey (Department of Census and Statistics, 2015). It is also justifiable as majority of the hospitals are located in the Colombo district and it presents a higher prevalence rate for NCDs.

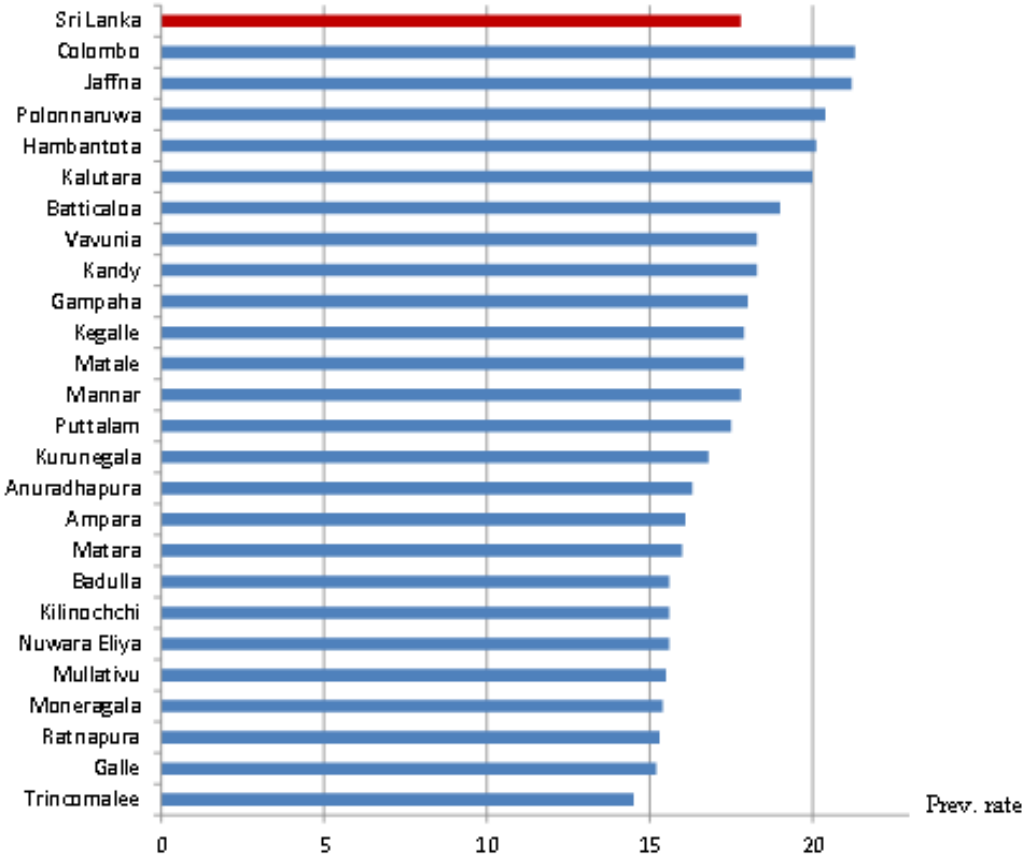
Considering that, 128 male respondents were sought equally from patients visiting 2 medical institutions: a public hospital and a private hospital. Sample was selected from those who came for screening to the above mentioned medical institutions using the purposive sampling method. Those fitting to the above criteria a questionnaire was given with their consent and either before or after their checkups as time permitted. Ten key Informants from the field were selected using the purposive sampling method to obtain more knowledge on patients' life styles behavioural risk factors. The key informants included selected medical officers and medical specialists.

Analysis

Non-communicable diseases (NCDs) can be observed as a leading cause of mortality in Sri Lanka. This affects men over 40 years of age the most. Smoking, physical inactivity, the harmful use of alcohol and unhealthy diets all increase the risk of dying from an NCD (World Health Organization, 2015). Physical inactivity can be identified as one of the main behavioural risk factors that cause NCD and its contribution to NCD has been proved through many research studies. Doctors also agree that there is a direct impact on NCDs due to the physical inactivity. This study tries to identify the impact of physical inactivity on

the morbidity of men aged 40 years and above and the extent in which they have controlled the disease after being diagnosed with a NCD.

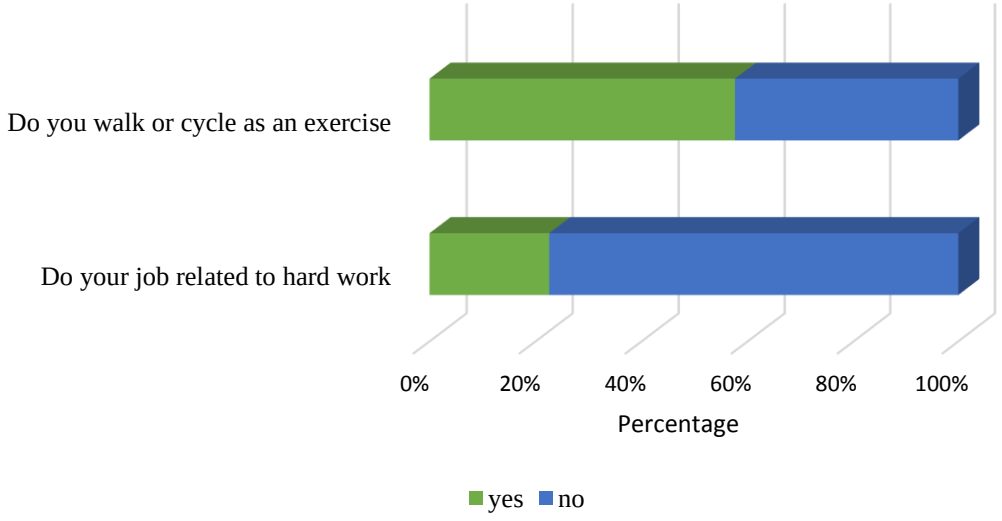
Figure 2: Prevalence of any NCD by District, 2012



Source: Ministry of Health - 2016

When considering the behavioural factors that cause NCD, it is important to focus on the physical activity of an individual. Physical activity has also been identified as one of the main risk factors and the question such as “do you walk or cycle as an exercise” has been directed in order to measure the physical activity. Half of the respondents replied yes and other half as no to this question and it is evident that there are no significant differences among the situations of before and after being diagnosed. When the respondents were asked whether their employment is related with hard work, it was identified that one out of five individuals is engaged in an employment related to hard work. Majority of the respondents’ employment was not related to hard work and this could be identified through figure 3 given below.

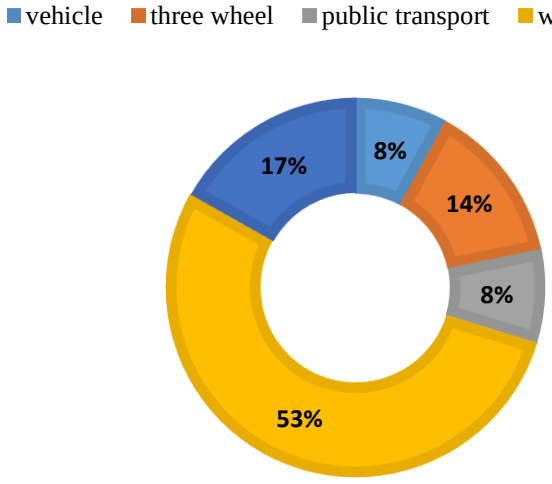
Figure 3: Means of Physical Activity



Source: Field survey - 2016

This study sought data on mode of travel to a close by place and nearly 53 per cent have replies that they walked to a close by place and the close by place was defined as a place situated in less than a KM away. It was also identified that 17 per cent used a vehicle and 14 percent used three wheelers while minority of 8 percent used cycles.

Figure 4: Means of Travelling to a Close by Place

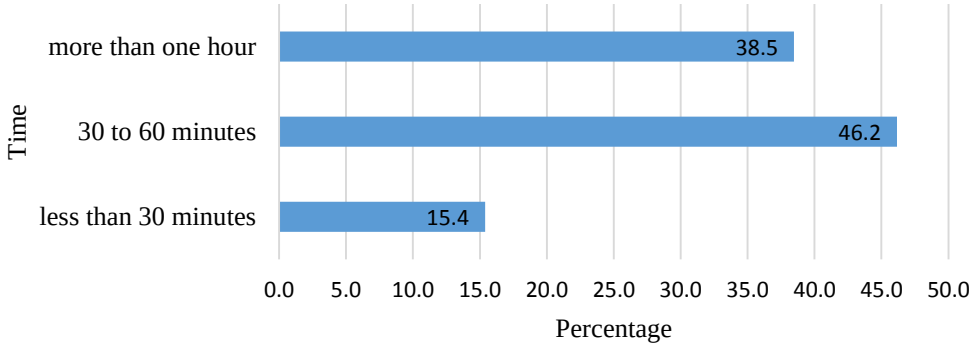


Source: Field survey - 2016

Among the respondents, the individuals who do the exercises and the duration that they are engaged in exercises were recognized. Nearly half of the respondents were identified to do exercises for 30 minutes. 38.5 percent of the respondents were identified to do exercises for more than one hour while 15 percent were to do exercises for less than 30 minutes. It

can be analysed that only half of the respondents are engaged in doing exercises and they would continue the exercises for more than 30 minutes.

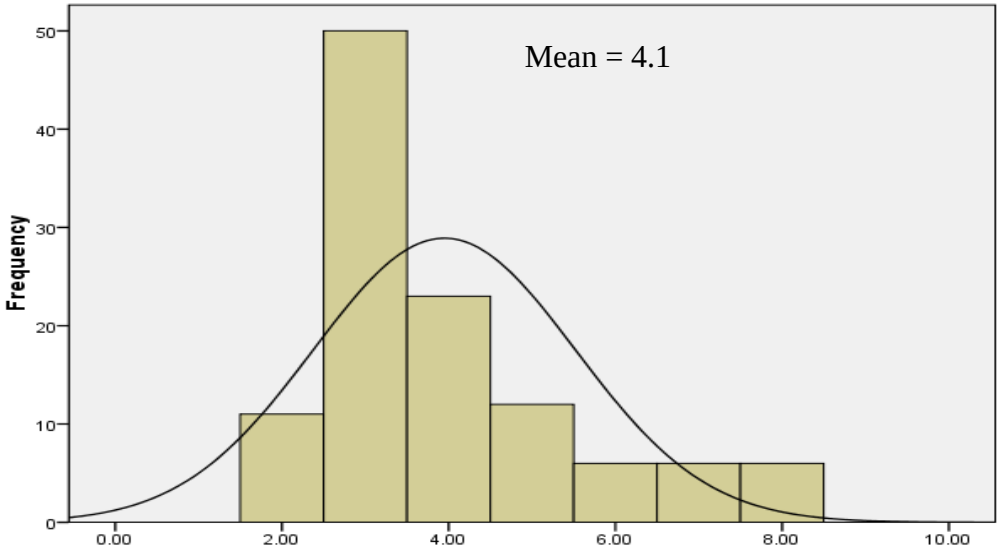
Figure 5: Time Spent on Exercises by the Respondents



Source: Field survey - 2016

Figure 6 explains the time spent leisurely by the respondents who are males over 40 years of age. The figure depicts that mean number of hours spent leisurely per day as 4.1 which means nearly 4 hours a day is spent leisurely. When the contribution of the age group is examined, it was recognized that males over the age of 55 years spent more time leisurely as majority of them are retired.

Figure 6: Mean no of Hours Spent Leisurely by the Respondents

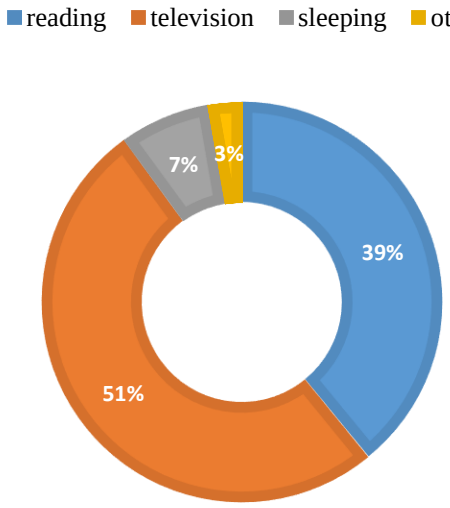


Source: Field survey - 2016

On ways of spending the leisure time is considered, according to the figure 7 half of the respondents were identified to spend their leisure time watching the television while 39 percent was found to spend their leisure time reading books and newspapers. This has

helped in creating a clear picture on the way that the respondents spend their leisure time. So it would be a timely initiative to create more awareness on this phenomenon.

Figure 7: Means of Spending Leisure Time



Source: Field survey - 2016

Conclusion

There is a wide gap between the male and female life expectancy in Sri Lanka and it is identified as 7 years which is a linger gap compared to other countries. Many of the existing literature have been proved by the study as the study also discovered physical inactivity as a risk factor for NCDs. Through the study it has been revealed majority of the respondents has concerned about their physical health after the diagnosis. More than 50 percent of the individuals have started to engage in exercises and for about 30-60 minutes and take rest for about 04 hours per day, but majority of the leisure hours are spent on watching the television. This study identifies that to minimize the mortality through NCDs, physical inactivity has to be addressed.

Keywords: Non-Communicable Diseases; Physical Inactivity; Life Expectancy; Behavioural Risk Factors

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