

ROLE OF LIFESTYLE FACTORS IN THE DEVELOPMENT OF NON-COMMUNICABLE DISEASES - A SOCIOLOGICAL STUDY OF DOCTORS IN AMRITSAR CITY OF PUNJAB

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Abstract

Faulty lifestyle has emerged as a major reason for the development of non-communicable diseases. Four major lifestyle factors commonly known as behaviour risk factors are unhealthy diet, physical inactivity, an excessive use of alcohol and tobacco consumption. There are other lifestyle factors such as sleeping habit, stress at work place, sociality and leisure activities which are studied less but are equally important in the onset of chronic health issues and thus, affecting the health of an individual. In this study, a comparison of healthy and unhealthy doctors (suffering from non-communicable diseases) on the basis of their lifestyle habits related to sleep, occupational stress, leisure activity etc. is done to infer the role of lifestyle factors in emergence of non-communicable diseases. The study found that these lifestyle factors present in day to day life of people are significant for the emergence of non-communicable diseases.

Introduction

Lifestyle factors have a great influence on the health and physical and mental wellbeing of an individual. WHO (2005) recognized four major lifestyle factors also known as behaviour risk factors such as unhealthy diet, physical inactivity, smoking and harmful consumption of alcohol responsible for onset of non-communicable diseases. In addition to these factors, there are other lifestyle related factors existing both in personal and professional life of a person which play a central role in defining the health status of an individual. These lifestyle factors other than four major lifestyle factors (physical activity, healthy diet, excessive use of alcohol, tobacco use) are sleeping habit of a person, type of leisure activities a person commonly pursues, stress level at the work place, habit of associating with the people.

According to World Health Organization (2011), lifestyle factors are the root cause for the onset of non-communicable diseases like cancer and heart diseases etc. There is a significant association between the lifestyle related factors and health status of the people. There are many studies exploring the association of physical activity as well as healthy diet with the physical wellbeing of a person. Besides, U.S. Department of Health and Human Services (2018) stressed that to be physically active is very important for the people of every age group to keep themselves healthy. These lifestyle factors persist in the daily habits consequently affect the health of the people.

Objective of the Study

- To explore the role of lifestyle factors like sleeping habit, occupational stress, sociality, and choice of leisure activities in the development of non-communicable diseases.

Materials and Methods

The present study is conducted on the doctors with a purposive sample of 140 respondents in Amritsar city of Punjab. For the selection of 140 respondents, the list of IMA (Indian medical Association) from Amritsar district of Punjab was consulted. In this list, there were 700 doctors and a sample of approximate 20 percent of doctors i.e. 140 doctors was selected from this list. These doctors were from different areas of specializations of medical field and they were from both private and public sector. It is pertinent to mention here that among 140 respondents, 65 were healthy and 75 were unhealthy. The unhealthy respondents were suffering from different types of

non-communicable diseases like coronary heart diseases, respiratory diseases, cancer, diabetes, arthritis, spondilitis, thyroid or immune system problems etc.

Effect of Lifestyle Factors

Since the effect of the above said lifestyle factors other than the behaviour risk factors have been explored very little in the development of non-communicable diseases, so the present research paper is solely focused on these lifestyle habits of respondents so as to recognize the role of such lifestyle factors in the emergence of non-communicable diseases among doctors.

Sleeping Habit

According to U.S. National Library of Medicine (August 3, 2018), there is well established relationship between sleep and overall physical well-being. Physical and mental recovery of the body depends upon a person's sleep habit. If a person is having a poor sleep both in quality and quantity on regular basis, then he or she is at the risk of developing the serious medical problems like heart diseases, diabetes and obesity. Thus, sleep deprivation not only results in to tiredness in the body but also invites a number of diseases and health related problems (National Heart, Lung and Blood Institute, 2011).

Further, National Heart, Lung and Blood Institute (2011) mentioned that daily required ideal sleep duration is 7-8 hours in case of an adult. The duration of sleep less and more than this ideal range may have negative effect on the health of an individual. This is confirmed in the studies that a U-shaped relationship exists between duration of sleep (both long and short) and diabetes & coronary diseases (Ayas et al., 2003) and hypertension (Gottlieb et al., 2006). This is discovered by Ayas et al. (2003) that there is 1.5 times more possibility of having diabetes among the people with short and long duration of sleep as compared to those having ideal duration of sleep (7-8 hours).

Further, Kohatsu et al. (2006) have found a positive relationship between lack of sleep and increase in body weight whereas sleep deprivation has been revealed as the main cause of diabetes (Gottlieb et al., 2005) and cardiovascular diseases, stroke as well as hypertension (Kasasbeh, Chi & Krishnaswamy, 2006).

The studies by Philibert (2005) and Lockley's (2007) focused on the problem of sleep deprivation among doctors because doctors have to work not only for long durations but also at the odd hours

of the day. This way both quality and quantity of the sleep may suffer. As said above that a healthy sleep habit is must for the overall wellbeing of a person, so the focus was on to be acquainted with the sleep habit of the respondents so as to discern the role of this lifestyle factor in developing chronic illness.

Findings of the study suggested that among the 9 respondents who were having more than 8 hours of sleep, 3 (33.33%) were healthy and 6 (66.67%) were unhealthy i.e. the number of unhealthy respondents was double as compared to healthy respondents. Further, there were 41 respondents with duration of sleep of 7-8 hours. Among these 41 respondents, 21 (51.21%) were healthy and 20 (48.78%) were unhealthy whereas there were 41 (45.56%) healthy and 49 (54.44%) unhealthy respondents with a sleep habit of less than seven hours a day.

The data depict that more than 70% of the respondents were not having the healthy sleep habit. They were either deprived of the minimum required sleep (7-8 hours per day) or they were having this habit in excess i.e. more than 8 hours a day. It is interesting to find that in both the cases, the number of unhealthy respondents were more than the healthy respondents. Besides, the number of healthy and unhealthy respondents was almost same who were having an ideal duration of 7-8 hours of sleep. The present finding points up that duration of sleep is determining factor for the health of an individual.

Occupational Stress

Colligan and Higgins (2005) defined workplace or occupational stress as, “the change in ones physical or mental state in response to workplace that pose an appraised challenge or threat to that employee.” This type of situation originates when expectation or demand “exceeds his or her real or perceived abilities to successfully cope with the demand, resulting in disturbance to his or her physical and psychological equilibrium” (as cited in Colligan and Higgins, 2005). The expectations or demands may be in the form of duration as well as time of working hours, role ambiguity or role conflict, communication gap with the co-workers, excessive work load etc.

Studies have also found that chronic stress results in to emergence of serious health issues. For instance, the study by Johnson et al., (1996) revealed that occupational stress is responsible for nearly 35% of deaths in case of cardiovascular diseases.

The present study is focused on doctors and medical profession is recognized as the profession with high stress level (Cooper, Rout & Faragher, 1989) because in this profession the life of human beings is on stake (Caplan et al., 1975). Studies by Menon and Munalula (2007) and Govender et al. (2012) recognized the reason for the high stress level among doctors and acknowledged excessive demands related to their work as the main cause of stress.

The present study indicated that among 86 respondents who considered their job as ‘moderately’ stressful, 38 (44.18%) were healthy and 48 (55.81%) respondents were unhealthy. There were 21 respondents who said that their job is ‘very stressful’ and among these, 9 (42.85%) were healthy whereas 12 (57.14%) were unhealthy. For 33 respondents, the job was ‘not at all’ stressful and in this group 18 (54.54%) were healthy and 15 (45.45%) were unhealthy.

Hence, data depict that there were higher number of unhealthy respondents who perceived their job stressful in comparison to healthy respondents whereas there were higher number of healthy respondents who are not at all stressful at their work place. Thus, stress affects the health of respondents negatively.

‘Sociality’

‘Collin English Dictionary’ (2014) defines Sociality “as a state or quality of being sociable or tendency to associate with others.” So sociality measures the extent to which people have inclination to associate with others and form groups. Personal life of a person may be solitary or gregarious. A person having a propensity of living alone without much social interaction is connected with solitary type of personal life whereas gregarious nature believes in associating with the people. ‘Sociality’ affects the overall physical and mental health of people in an affirmative way. Studies have found that a decrease in social ties both in quantity as well as in quality is not good for cardiovascular and endocrine wellbeing and also for the strength of immune systems (Everson-Rose, Susan & Lewis, 2005; Robles & Kiecolt-Glasser, 2003).

The present study depict that among 93 respondents who were living gregarious life, 49 (52.68%) were healthy and 44 (47.31%) were unhealthy and out of 38 respondents having solitary life, 12 (31.57%) were healthy whereas 26 (68.42%) were unhealthy. Rest 9 respondents [3 (33.33%) healthy and 6 (66.67%) unhealthy] said that they can not say anything about this.

Data illustrate that 68.42% of respondents living a solitary life were found to be unhealthy in comparison to their healthy counterparts (31.57%) whereas there were higher number of healthy respondents (52.68%) as compared to unhealthy ones (47.31%) who were having a gregarious life. Hence, connecting and maintaining good relationships with the people is advantageous for physical and psychological wellbeing of people.

Choice of Leisure Activity

Leisure activities are described as favored and pleasurable activities that people participate in during one's free time (Kleiber & Nimrod, 2009) or leisure activities are the intended non-work activities in which the people are involved for pleasure (Hills & Argyle, 1998). A number of different kind of activities come under the domain of leisure activities such as reading, watching television, listening to music, interacting with people etc. So, choice of leisure time activities indicates a lot about the lifestyle of people.

Leisure activities may be passive i.e. sedentary or these may be active i.e. involve some extent of physical activity. Sedentary or passive lifestyle always instigates the health related issues whereas a physically active lifestyle protects a person against diseases. Thus, role of active leisure time activities is very important in keeping oneself healthy. A number of studies explored the positive effect of leisure time activities on the health status of people. For instance, studies by Sundquist, Lindström, & Malmström et al. (2004) and Ellaway & Macintyre (2007) observed that leisure activities shield the people against the emergence of chronic diseases like coronary heart disease.

In Present study, the respondents gave multiple responses as far as the preferred leisure time activities were concerned. The study found that the most preferred leisure time activities were watching T.V. and reading books. Among 71 respondents watching television in their free time, 25 (35.21%) were healthy and 46 (64.78%) were unhealthy. For those 62 who preferred reading books as their leisure activity, 30 (48.38%) were healthy and 32 (51.61%) were unhealthy. Further, the number of healthy and unhealthy respondents was same who pursue no leisure time activity. But 11 (40.74%) healthy and 16 (59.25%) unhealthy respondents were involved in other leisure time activities e.g. in dancing, listening music, cooking etc. whereas 9 (50%) healthy and 9 (50%) unhealthy respondents were spending time with their families. Other 9 (42.85%) healthy and 12 (57.14%) unhealthy respondents were spending time with the relative and friends in their leisure time.

In all the above given activities, higher indulgence is found in sedentary leisure time activities like watching television and reading books which results in to negative effect on the health of an individual That's why most of the unhealthy respondents suffering from chronic illness were found among the respondents preferring the sedentary leisure time activities.

Discussion

The present study examined the role of lifestyle factors other than the behavior risk factors in the emergence of non-communicable diseases and found that healthy or ideal sleep habit was missing among doctors due to their professional compulsion. More than two third of doctors with more or less of healthy sleep hours were unhealthy i.e. suffering from non-communicable diseases, thus, emphasis the importance of healthy sleep habit for the health of the people. Further, occupational stress was found to a determining factor for the emergence of these diseases because doctors who perceived their job as stressful were found to be unhealthy.

The study also revealed that the respondents with good interpersonal relationships were healthy as compared to those who were not maintaining these relationships. Moreover, the choice of sedentary leisure time activities had negative effect on the health status of doctors.

Conclusion

This research paper explored the causative role of lifestyle factors other than the four major risk factors in emergence of chronic non-communicable diseases. The study revealed that other lifestyle factors such as sleeping habit, sociality, occupational stress and leisure time activities are equally important for the development of non-communicable diseases. In this study, it was observed that respondents with long and short duration of sleep, sedentary leisure activities, less interaction with the people i.e. sociality and with high occupation stress fall in the unhealthy range, hence, illustrating the significance of these lifestyle factors in predicting the health status of people.

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