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Research Paper

# OCCUPATIONAL LIFESTYLE DISORDERS AMONG BANK CLERICAL STAFF IN HYDERABAD, TELANGANA

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There is overwhelming scientific evidence highlighting the health, social and psychological benefits associated with an active lifestyle. The job requirements of a bank clerical staff make them sit for hours together encouraging a sedentary life style and making a high risk group for development of occupational lifestyle disorders. In the survey, we have made an attempt to determine the prevalence of these disorders among them and determine the possible causes of the disorders. We also imparted health education to the professionals about importance of physical exercise, ergonomics. The study was a case control study conducted between March 2015 to June 2015 including the subjects between the age group of 25-50 yrs and who have been working for 5 years or greater among the banks of Hyderabad. A sample of 520 subjects was taken. The findings from the study show that a high percentage of the respondents indicated evidence of lifestyle disorders. For those with sedentary life style, there is a tendency to develop disorders. The study also revealed that there is no difference between male and female respondents in the prevalence of the disorders. There was little knowledge of ergonomics among the staff.

Keywords: Bank clerical staff, Occupational life disorders, Prevalence, Determinants

## INTRODUCTION

A report, jointly prepared by the World Health Organization (WHO) and the World Economic Forum says India will incur an accumulated loss of \$236.6 billion by 2015 on account of unhealthy lifestyles and faulty diet (Preventing noncommunicable diseases in the workplace through diet and physical activity:WHO, 2008). According to the report, 60% of all deaths

worldwide in 2005 (35 million) resulted from non-communicable diseases and accounted for 44% of premature deaths. According to a survey conducted by the Associated Chamber of Commerce and Industry (ASSOC-HAM), 68% of working women in the age bracket of 21-52 years were found to be afflicted with lifestyle ailments such as obesity, depression, chronic backache, diabetes and hypertension. There is

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overwhelming scientific evidence highlighting the health, social and psychological benefits associated with an active lifestyle. However, physical activity remains the most underutilized low cost health resource in the world (Travil Poverty, 2003). Increased exposure to western lifestyle and eating habits which are characteristics of urban environment and decreased participation in physical activity are contributing factors to increase in health problems. There has been a shift away from traditional diets to high density diets with high levels of fats, sugar and salts (Derek Yach *et al.*, 2010). A sedentary lifestyle has been linked to development of coronary artery diseases of adulthood that are major causes of death and disability. Modern technology has also lessened the physical demands of everyday activities like cleaning the house, washing clothes, mowing the lawn and travelling to work. As a result, more time is available to pursue leisure activities. The unfortunate fact, however, is that many individuals pursue sedentary activities. What would have once required an hour of physical work can now be accomplished in just a few seconds by pushing a button or setting a dial (Committee on Sports Medicine and Fitness, 1992).

Although exercise is only one important factor associated with reduced risk of lifestyle diseases and nutrition, smoking, lifestyle, hereditary, stress, age and active people have lower incidence of myocardial infarction and mortality from coronary heart disease (CHD) and tend to develop CHD at a later age compared to other sedentary subjects (Berlin and Colditz, 1990). An inverse relationship between blood pressure and physical activity level in men and women was also reported.<sup>6</sup> Physical activity also reduces one's risk of developing non-

insulin dependent diabetes mellitus.

## MATERIALS AND METHODS

The study was undertaken during March 2015 to June 2015 among clerical staff of banks in Hyderabad, Telangana. A total of 520 subjects were selected. All those in the age group of 25-50 yrs and who have been working in the banks for five years or greater were included in the survey. A pre-designed and pre-tested questionnaire interview method was used for data collection. The questionnaire had two sections, section A consists of items on demographic data of respondents while section B consists of items used to elicit data on nature of occupational lifestyle diseases experienced by the respondents and the various determinants of the disorder like diet pattern, exercise, insomnia, anxiety related to job. A three point rating scale of yes, no, not sure was used. A test-re-test reliability using 40 respondents gave a reliability coefficient of 0.81 which was considered high enough. For each subject, the weight, height, BMI and blood pressure was measured. The recordings of the subjects were taken personally through a team of research assistants. Out of 600 questionnaires distributed, a total of 520 were completed and returned. The data collected was entered and analyzed using epi\_info 6.04d.

## RESULTS AND DISCUSSION

Males overpowered the females in number in the population. Maximum subjects fall between the age group of 41 to 45 years followed by age group of 36 to 40 years. Maximum population (68%) had atleast one disorder. The prevalence of arthritis, spondylitis in the age group of 35 to 40 years was very high and greater than that of 46 to 50 years age group. Maximum subjects were obese grade

1 (42%). Only 18% of the subjects had B.M.I in the normal range. A positive correlation was established between B.M.I and the disorders by chi-square test. Maximum of the population had been in the job for more than 5 years and had work hours between 7 to 9 per day. A rise in the disorders was seen with the increase of duration of work and the relation was found significant. Only 22% of subjects regularly exercised. Maximum of them exercised by jogging followed by cycling. A positive correlation was found between not exercising and the disorders. Tobacco (48%) and alcohol (42%) consumption was very rampant among the subjects. Only 22% of these subjects had knowledge of ergonomics and 78% of them did not.

Studies showing that people who migrate from one country to another generally acquire the cancer rates of the new host country, suggesting that lifestyle factors rather than genetic factors are the key determinants of the international variation in cancer rates (Zöllner, 1990; Sobra and Ceska, 1992; and Lichtenstein *et al.*, 2000). The study 'Preventive Healthcare and Corporate Female Workforce' also said that long hours and working under strict deadlines cause up to 75% of working women to suffer from depression or general anxiety disorder, compared to women with lesser levels of psychological demand at work (Preventive Health Care and Corporate Female Workforce: ARB, 2009). According to a research paper published in the prestigious Lancet, there is corroborative evidence that diet and lifestyle is playing a major role in predisposition to various diseases like cancer (Key *et al.*, 2002). With advancement of our lifestyle, we have become dependent on technology and gadgets which directly have an impact on our health.

The findings from the present study show that a high percentage of the respondents indicated lifestyle disorders. There is a tendency of having low productivity and incapacitation of the subjects. These disorders are highly associated with inactivity among people of all ages. Our study also revealed that there is no difference between male and female respondents in the prevalence of the reported disorders. The findings show that there was a significant age difference in the prevalence of the disorders. It is very important to note that ageing can bring about degeneration in the body with the prevalence of degenerative diseases like the disorders reported in the results. Physical activity definitely reduces the debilitating effects of these diseases in the body.

## CONCLUSION

The study shows the need to modify the lifestyle from a sedentary to an active one by regular exercise, healthy diet which can reduce the complications of the disorders in those who have it and prevent genesis of the disorder in new recruits. It also brings out the need for giving importance to ergonomics to prevent the disorders.

## ACKNOWLEDGMENT

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## REFERENCES

1. "Committee on Sports Medicine and Fitness, American Academy of Paediatrics: Fitness, Activity, and Sports Participation in the Preschool Child", *Paediatrics*, Vol. 90, No. 6, December 1, 1992, pp. 1002-1004.
2. "Preventive Health Care and Corporate Female Workforce: ARB" (2009), March.

3. Benjamin O Alli, "Fundamental, Principles of Occupational Health and Safety ILO Geneva", p. 1.
4. Berlin J A and Colditz G A (1990), "A Meta-Analysis of Physical Activity in the Prevention of Coronary Heart Disease", Vol. 132, No. 4, pp. 612-628.
5. Derek Yach, Mehmood Khan, Dondena Bradley, Rob Hargrove, Stephen Kehoe and George Mensah (2010), "The Role and Challenges of the Food Industry in Addressing Chronic Disease", *Globalization and Health*, Vol. 6, p. 10.
6. Key T J, Allen N E and Spencer E A (2002), "The Effect of Diet on Risk of Cancer", *Lancet.*, Vol. 360, pp. 861-868.
7. Lichtenstein P, Holm N V and Verkasalo P K (2000), "Environmental and Heritable Factors in the Causation of Cancer", *N Engl J Med.*, Vol. 343, pp. 78-85.
8. Mukesh Sharma and Majumdar P K (2009), "Occupational Lifestyle Diseases: An Emerging Issue", *Indian J Occup Environ Med.*, Vol. 13, No. 3, pp. 109-112.
9. "Preventing Noncommunicable Diseases in the Workplace Through Diet and Physical Activity: WHO/World Economic Forum Report of a Joint Event", 2008, ISBN: 978924-1596329.
10. Sobra J and Ceska R (1992), "Diseases of Civilization from the Aspect of Evolution of the Human Diet", *CasLek Cesk.*, Vol. 131, pp. 193-197.
11. Travil A Poverty (2003), "Physical Urbanization Inactivity and Health in African Societies", *Af. J. Physical Health Education, Recreation and Dance*, Vol. 9, No. 2, pp. 217-223.
12. Zöllner N (1990), "The Relevance of Diet for Civilization Diseases, Especially Atherosclerosis", *Wien Med Wochenschr Suppl.*, Vol. 106, pp. S11-S12.

APPENDIX X

Table 1: Age and Sex Distribution

Sex			
Age	Male	Female	Total
25 to 30	52	46	98
31 to 35	62	38	100
36 to 40	78	47	125
41 to 45	88	45	133
46 to 50	42	22	64
Total	312	208	520

Table 5: Prevalence of Arthritis Among the Subjects

Arthritis			
Age	Yes	No	Total
25-30	0	98	98
31-35	28	72	100
36-40	94	31	125
41-45	91	42	133
46-50	44	20	64
Total	192	328	520

Table 2: Occupational Lifestyle Disorders Frequency

Occupational Lifestyle Disorders	Frequency	Percent
No	166	32%
Yes	354	68%
Total	520	100%

Table 6: Distribution of Spondylitis Among Subjects

Spondylitis			
Age	Yes	No	Total
25-30	24	74	98
31-35	36	64	100
36-40	109	16	125
41-45	46	87	133
46-50	31	33	64
Total	377	143	520

Table 3: Occupational Lifestyle Disorders Distribution

Number of Occupational Lifestyle Disorders	Frequency	Percent
0	58	11%
1	60	12%
2	170	33%
>3	66	12%
Total	354	68%

Table 7: Prevalence of Exercise Among Subjects

Exercise	
Yes	115(22%)
No	405(78%)

Table 4: -Occupational Lifestyle Disorders Distribution

Occupational Lifestyle Disorders	Yes	No
Hypertension	421(81%)	99(19%)
Diabetes type 2	385(71%)	135(26%)
Arthritis	270(52%)	250(48%)
Spondylitis	317(61%)	203(39%)
Back pain	333(64%)	187(36%)
Anemia	250(48%)	270(52%)
Chronic headache	302(58%)	218(42%)

Table 8: Type of Exercise

Type of Exercise	
Yoga	21(4%)
Jogging	374(72%)
Cycling	94(18%)
Walking	31(6%)

APPENDIX (CONT.)

Table 9: Duration of Exercise per Session

Duration of Exercise	
30 minutes per session	213(41%)
>30 minutes	307(59%)

Table 10: Frequency of Exercise per Week

Frequency	
1-5 sessions per week	270(52%)
>5 sessions per week	250(48%)

Table 11: Relationship Between Occupational Lifestyle Diseases and Exercise

Occupational Lifestyle Diseases			
Exercise	No	Yes	Total
Yes	76	39	115
No	90	315	405
Total	166	354	520

Table 12: Body Mass Index

Body Mass Index	Frequency
<18.5	0
18.5 To 24.9	94(18%)
25 To 29 (Pre-Obese)	109(21%)
30 To 34 (Obese Grade 1)	218(42%)
35 To 39 (Obese Grade 2)	73(14%)
Greater Than or Equal To 40 (Obese Grade 3)	26(5%)

Table 13: Body Mass Index and Occupational Lifestyle Diseases

Occupational Lifestyle Diseases			
Body Mass Index	No	Yes	Total
Below 25	62	32	94
25 To 29	41	68	109
30 To 34.9	42	176	218
35 Above	21	78	99
Total	166	354	520

Table 14: Relation Between Occupational Lifestyle Diseases and Duration of Work

Occupational Lifestyle Diseases			
Duration of Work in Years	No	Yes	Total
5 to 10	49	94	143
10 to 15	89	104	193
>15	82	102	184
Total	220	300	520

Table 15: Knowledge of Ergonomics

Knowledge of Ergonomics		
Yes	114	22%
No	406	78%
Total	520	100%



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