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PREVALENCE OF OVERWEIGHT AND OBESITY AMONG HEALTH CARE WORKERS AT GENERAL HOSPITAL, G.M. ABAD, FAISALABAD

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ABSTRACT

Background: Currently Pakistani healthcare sector is suffering from the prevalence of overweight and obesity. Due to lack of information and knowledge about the prevalence of overweight and obesity available in Pakistan it is difficult to compare figures about it. **Objective:** To provide the much needed statistical information of prevalence of overweight and obesity for better comparative analysis in Pakistan. To highlight the overweight and obesity's prevalence among Healthcare workers in General Hospital, G.M. Abad, Faisalabad. **Study Design:** Cross-sectional study. **Period:** Four month (Feb- May 2018) **Setting:** General Hospital Ghulam Mohammad Abad, Faisalabad. **Methodology:** Cross sectional and quantitative method of research was used in this study. A self-administered questionnaire was prepared to analyze the data. Total No. of 150 Sample size was comprised. In which 75 doctors, 65 nurses and 10 technicians at General Hospital, G.M. Abad Faisalabad participated. **Results:** There was found noticeably high prevalence of overweight and obesity in this research. The prevalence of overweight was 58.0% (N=87) and 22.0% (N=33) in General Hospital, G.M. Abad Faisalabad with mean BMI of 29.55kg/m^2. **Conclusion:** There was higher level of overweight and obesity found in females as compared to males.

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INTRODUCTION

Overweight and obesity have been recognized as unusual fat accumulation or overdose that can damage health. Overweight and obesity is measured by Body mass Index (BMI). It is defined that "the weight of a person in kilograms divided by the square of height in meters (kg/m^2)". According to WHO an adult is overweight when his BMI is 25 or greater than 25 and to determine an obese person his BMI 30 or greater than 30.The BMI is used most frequently to measure the overweight and obesity in males and females both and all age groups. Nevertheless, BMI is to be considered an initial guide as it is not corresponded in different people. There should be consideration of age in children to determine overweight and obesity.[1]

Prevalence of overweight and obesity is increasing worldwide.[2] About 2/3 of adult population of United States is overweight and obese and US is at top of the list of all countries (BMI ≥ 25).[3] There were 60% of Australian adults were overweight and obese.[4] Likewise, there were 60% Canadian adults were overweight and obese, while 26.3% children have age between 2-17 years in Canada were overweight.[5] Correspondingly, there were 10-27% males and 10-38% females reported to overweight and obese in European countries.[6]

Obesity was a problem for developed countries previously, but now there is up rise of overweight and obesity in developing countries. There is increase of overweight and obesity in China as well which is found 27.3%.[7] Likewise, prevalence of overweight and obesity is also found high percentage which is 26.3%.[8]

At present, Pakistan is experiencing an initial obesity epidemic. The burden of obesity in adults and children has increased with key risk factors containing harmful diet, unhealthy lifestyle an inactiveness of physical activities. The instant precautionary and controller measures required to control the condition may contain a physical activity environment and a healthy diet, cognitive monitoring and childhood obesity testing to the method to preventive precautions while as adolescent girls and children at high risk.[9]

Previous research has shown that rates and correlations may differ between health workers and the overall population. It has been perceived that arterial blood pressure inclines to rise with body weight and age, and that excessive weight loss rates increase with increasing levels of education. There is an increasing proportion of overweight and obesity in the sector of health. There is association of marital status and women with overweight and obesity.[10]

There is significance contribution of occupational factors and inactive physical activity with obesity between healthcare workers. There should be programmed activities between healthcare workers to promote physical activities to avoid overweight and obesity between them.[11] Number of influencing factors in health care workers, especially night shifters, may increase the risk of developing metabolic syndrome like overweight and obesity.[12]

Prevention of overweight and obesity and consequences of it are affected by workplace and health professionals critically. Health care workers can become role models for their patients to control their overweight and obesity by controlling their diet and increasing their physical activity which could prevent them from overweight and obesity.[13]

Poor diet, sedentary lifestyle, improved socio-economic status and poor diet are major contributing factors in the rise of overweight and obesity.[14] Marital status, stress, alcohol intake, parity and increasing age are also the other major contributing factors to overweight and obesity.[15]

SIGNIFICANCE OF THE STUDY:

Currently Pakistani healthcare sector is suffering from the prevalence of overweight and obesity. Due to lack of information and knowledge about the prevalence of overweight and obesity available in Pakistan it is difficult to compare figures about it. This research study has highlighted the statistical information about the prevalence of overweight and obesity in healthcare workers in General Hospital, G.M. Abad, Faisalabad. There is also identification of contributing factors of overweight and obesity amongst the healthcare workers in this research work.

OBJECTIVES

1. To discover the prevalence of overweight and obesity in healthcare workers at General Hospital, G.M. Abad, Faisalabad.
3. To discover obesity as a problem between Healthcare workers.
4. To discover the risk factors associated with overweight and obesity.

REVIEW OF LITERATURE

Identified the problems related with obesity in healthcare workers and made a comparison of non-medical staff and medical staff in a public hospital of South Africa. There were found 73% of healthcare workers overweight/obese and majority of those healthcare workers neither made a try to lose their weight. They found that there was more overweight and obesity in female

healthcare workers and increased age healthcare workers as compare to men and children. There were found non-communicable diseases were allied with obesity between one-third healthcare workers.[16]

The study found an overweight and obesity rate of 29.7% and 41.0% correspondingly in one study. He found that risk factors like eating between meals, inactivity in exercise, high level of education were associated with obesity rates. There was found more prevalence of overweight/obesity in participants than general population in South Africa.[17]

A cross-sectional research to evaluate the prevalence of overweight and obesity between healthcare workers in Kenya and also evaluated the risk factors associated with obesity. There was 58.8% overweight and obesity found in their research. There was determined that a major risk factor associated with overweight and obesity was increased age and marital status, sex and physically inactivity were also major factors associated with overweight and obesity. It was found that prevalence of overweight and obesity amongst healthcare workers was more than other population of country[13].

Compared the obesity rates amongst non-healthcare workers and healthcare workers in United Kingdom. High prevalence of overweight and obesity was found in unregistered healthcare workers and nurses. They found the mental health and osteoporosis' increased risk were the reasons of overweight and obesity. Recommendations for further research to help to preserve healthy weight were made.[18]

The study pointed out that misclassification of body weight of healthcare workers is a major risk factor associated with obesity. They demonstrated that this group's health should be given importance and focus whose health South African people depend on and who will be the driver of healthy life for all. They stressed that accurately classifying the body weight of a health worker would encourage people to act in an effort to combat their own obesity and that of others.[19] Identified that rate of injuries increased in nurses and patients due to overweight and obesity in America.[20]

METHODOLOGY

A cross-sectional descriptive study was a quantitative research design used for this study. This is mainly due to a descriptive study used in a classical way to establish the level or extent of some health problems in the community. This study was quantitative and cross-sectional; A self-administered questionnaire was used as a tool to analyze the prevalence of overweight and obesity among health staff at the General Hospital, G.M. Abad, Faisalabad. Two hundred (200) of the total health staff at the General Hospital, G.M. Abad, Faisalabad, with a distribution of eighty (100) doctors, two hundred (80) nurses and seventeen (20) other health workers. The current sample consists of 65 nurses and 75 doctors and 10 technicians at General Hospital, G.M. Abad, Faisalabad.

Structured questions, along with consent forms, were distributed by the researcher to participants in hospitals, nursing homes, offices, etc. Participants were asked to complete that questionnaire after written consent. The data of the current study is analyzed with the help of statistical software known as the SPSS (Statistical Package for Social Science). 21. Descriptive statistics mean that the distribution of frequencies Numbers and standard deviations are used to describe trends in data.

RESULTS

Data from each section is analyzed separately and the total for each variable is then expressed as a percentage of the sample size. Spreadsheets are calculated to test the meaning of the association.

Table 1: Demographic characteristics of the respondents

Gender	Frequency		Percentage
Male	70		46.67%
Female	80		53.33%
Total	**150**		**100.0%**
Designation	**Frequency**		**Percentage**
	Male	Female	
Nurse	0	65	43.33%
Physician	60	15	50.0%
Technicians	10	0	6.67%
Total	**70**	**80**	**100.0%**
	150		
Marital Status	**Frequency**		**Percentage**
Single	48		32.00%
Married	97		64.67%
Widow	5		3.33%
Total	**150**		**100.0%**

Designation	Education						Total
	Dip-loma	BSN	MSN	PhD	MBBS	FCPS /Consultant Surgeon/Physician	
Physician	0	0	0	0	52	23	**75**
Nurse	45	19	1	0	0	0	**65**
Technician	10	0	0	0	0	0	**10**
Total	**40**	**19**	**1**	**0**	**58**	**32**	**150**

Designation	Shift			Total
	Morning	Evening	Night	
Physician	39	19	17	75
Nurse	34	17	14	65
Technician	6	2	2	10
Total	**79**	**38**	**33**	**150**

Age	Frequency	Percentage
20-24 years	6	4.0%
25-29 years	51	34.0%
30-34 years	37	24.7%
35-39 years	18	12.0%
40-44 years	10	6.7%
45-49 years	9	6.0%
50-54 years	13	8.7%
60 and above	6	4.0%
Total	**150**	**100.0%**
Experience	**Frequency**	**Percentage (%)**
Less than 5 years	59	39.3%
5-10 years	43	28.7%
More than 10 yeas	48	32.0%
Total	**150**	**100.0%**

Table 2: Prevalence of Overweight and Obesity and Contributing Factors in Overweight/Obesity

Prevalence of Overweight and Obesity	Yes	No
Obesity in Family	45 (30.0%)	105 (70.0%)
Obesity disturbs	122 (81.3%)	28 (18.7%)
Obesity is a risk factor of Heart Disease	150 (100.0%)	0
Obesity is a risk factor of Diabetes	150 (100.0%)	0
Obesity is a problem for healthcare workers	88 (58.7%)	62 (41.3%)
Healthcare workers take care to prevent obesity	78 (52.0%)	72 (48.0%)
Exercise prevent/reduce obesity	144 (96.0%)	6 (4.0%)
Culture values have an impact on obesity	36 (24.0%)	114 (76.0%)
Being obese is a sign of healthy living	24 (16.0%)	126 (84.0%)
Smoking Cigarette	23 (15.3%)	127 (84.7%)
Take snacks/beverages in between meal	81 (54.0%)	69 (46.0%)
Awareness to fight with overweight/obesity	117 (78.0%)	33 (22.0%)
Should do more to fight Overweight/Obesity	108 (72.0%)	42 (28.0%)
Contributing Factors in Overweight/Obesity		

Meals taken in a day	2 times	3 times	4 times	More than 4 times
	58(38.7%)	76(50.7%)	16(10.7%)	0 (0%)
Common constituents in meals	**Rice**	**Pulse**	**Meat**	**Milk & Products**
	66(44.0%)	21(14.0%)	24(16.0%)	39(26.0%)

	Yes	No
Take Exercise	76 (50.7%)	74 (49.3%)
Have helper for House work	95 (63.3%)	55 (36.7%)
Sleep during daytime	51 (34.0%)	99 (66.0%)
Watch Television	88 (58.7%)	62 (41.3%)
Use contraceptive	21 (14.0%)	129 (86.0%)
Go to general checkup	22 (14.7%)	128 (85.3%)
Economic and societal consequence cause obesity	117 (78.0%)	33 (22.0%)
Have proper sleep at night	64 (42.7%)	86 (57.3%)
Obesity prevails more in healthcare workers than general public	135 (90.0%)	15 (10.0%)

DISCUSSION

High prevalence of overweight and obesity in General Hospital, G.M. Abad Faisalabad was found in this study. Overweight percentage was 58.0% and percentage of obesity was 22.0% found in healthcare workers.

There is increased prevalence of overweight and obesity in the age group between 25-29 years. This finding is in consonance with earlier studies made that obesity growth with age. These figures are particularly annoying that with increase in

weight the death rate also increased by 1-2% for every 0.5kg weight in the age group of 30-62 years.[21] Findings from previous studies showed that increase in age also increases the risk of increase in obesity and this factor also should be in consideration of policy makers who make intervention programmers to prevent prevalence overweight and obesity.

This is a fact that overweight and obesity prevalence is increasing globally not only developed countries but in developing countries also and the major contributing factors associated with this are also the similar in developed and developing countries. Higher level of education increases the risk of obesity than lower education especially in females.[21]

It is also found that in a previous study that a married woman who is having a caring husband and wealth and happiness is overweight and obese.[22] There is found correlation in this study between eating pattern and obesity, healthcare workers who take snacks or beverages between meals were having high risk factor of overweight and obesity. Other major worried results indicated that majority of healthcare workers (49.3%) do not exercise at all and 26.7% of the respondents do not exercise regularly and despite those findings the majority of the healthcare workers (96%) believe in exercise to reduce the risks of overweight and obesity. It was significantly found that healthcare workers who do not bother to take exercise were higher risk to become overweight and obese.

Obesity is a complex condition with having influences environmentally, culturally, socially, behaviorally, genetically and biologically. There could be contribution to excessive caloric intake and inadequately amounts of physical activities of individual behaviors. There is attribution of current high prevalence of obesity with eating habits, limited opportunities of physical activity.

Another reason of gaining weight is use of certain medical conditions and taking medicines like steroids and anti-depression medicines. Inadequacy in sleep, post-natal and prenatal effects is also suggested evidently. Numerous contributing factors from these affect almost every person once in life to some extent, but those people who have limited resources of physical activity and unhealthy eating habits face more risks and challenges.

CONCLUSION

Considerably excessed overweight and obesity was found in this research among healthcare workers. The prevalence of overweight and obesity were 58.0% (N=87) and 22.0% (N=33) respectively, with a mean BMI of 29.55kg/m^2. The risk factors found to be associated with overweight and obesity in this study ere: female gender, advancing age, level of education, lack of or inadequate exercise and eating between meals. There should be consideration of these factors to make policies regarding preventing obesity. There was awareness made about BMI in this study to healthcare workers and counseling and motivation regarding behavioral change was made in obese and overweight healthcare workers.

REFERENCES

1. http://www.who.int/en/news-room/fact-sheets/detail/obesity-and-overweight,accessedon27-4-2018, Friday, 6:10pm

2. Simfukwe, P., Van Wyk, B., & Swart, C. (2017). Perceptions, attitudes and challenges about obesity and adopting a healthy lifestyle among health workers in Pietermaritzburg, KwaZulu-Natal province. African journal of primary health care & family medicine, 9(1), 1-9

3. Ogden, C. L., Carroll, M. D., Fryar, C. D., &Flegal, K. M. (2015). Prevalence of obesity among adults and youth: United States, 2011-2014 (pp. 1-8). Washington, DC: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.

4. Cameron, A. J., Welborn, T. A., Zimmet, P. Z., Dunstan, D. W., Owen, N., Salmon, J., ... & Shaw, J. E. (2003). Overweight and obesity in Australia: the 1999-2000 Australian diabetes, obesity and lifestyle study (AusDiab). Medical journal of Australia, 178(9), 427-432.

5. James, R., Salton, R. I., Byrnes, J. M., &Scuffham, P. A. (2017). Cost-utility analysis for bariatric surgery compared with usual care for the treatment of obesity in Australia. Surgery for Obesity and Related Diseases, 13(12), 2012-2020.

6. Lien, N., Henriksen, H. B., Nymoen, L. L., Wind, M., &Klepp, K. I. (2010).Availability of data assessing the prevalence and trends of overweight and obesity among European adolescents. Public health nutrition, 13(10A), 1680-1687.

7. Fu, Q., & George, L. K. (2015). Socioeconomic determinants of childhood overweight and obesity in China: the long arm of institutional power. Sociology of health & illness, 37(6), 805-822.

8. Rashidy Pour, A., Malek, M., Eskandarian, R., &Ghorbani, R. (2009).Obesity in the Iranian population. Obesity reviews, 10(1), 2-6.

9. Tanzil, S., &Jamali, T. (2016).Obesity, an emerging epidemic in Pakistan-a review of evidence. J Ayub Med Coll Abbottabad, 28(3), 597.

10. Dankyau, M., Shu'aibu, J. A., Oyebanji, A. E., &Mamven, O. V. (2016).Prevalence and correlates of obesity and overweight in healthcare workers at a tertiary hospital. Journal of Medicine in the Tropics, 18(2), 55.

11. Nam, S., & Lee, S. J. (2016). Occupational factors associated with obesity and leisure-time physical activity among nurses: A cross sectional study. International journal of nursing studies, 57, 60-69.

12. Hasan, A Uzma, N., Swamy, T. L. N., Shoba, A., & Kumar, B. S. (2012).Correlation of clinical profiles with obstructive sleep apnea and metabolic syndrome. Sleep and breathing, 16(1111-116.)

13. Ondicho, Z. M., Omondi, D. O., &Onyango, A. C. (2016). Prevalence and socio-demographic factors associated with overweight and obesity among healthcare workers in Kisumu East Sub-County, Kenya. American Journal of Medicine and Medical Sciences, 6(3), 66-72.

14. Omondi, D. O., Othuon, L. O. A., &Mbagaya, G. M. (2007). Physical activity patterns, dietary intake and health status among university of Nairobi lecturers in Kenya. South African Journal for research in sport, physical education and recreation, 29(2), 87-98.

15. Paxton, E. W., Inacio, M. C., Singh, J. A., Love, R., Bini, S. A., &Namba, R. S. (2015). Are there modifiable risk factors for hospital readmission after total hip arthroplasty in a US healthcare system?. Clinical Orthopaedics and Related Research®, 473(11), 3446-3455.

16. Skaal, L.,& Pengpid, S. (2011). Obesity and health problems among South African healthcare workers: do healthcare workers take care of themselves?. South African Family Practice, 53(6), 563-567.

17. Onyebukwa, C. V. (2011). The prevalence of obesity and overweight among healthcare workers in Mafikeng Provincial Hospital (Doctoral dissertation, Stellenbosch: Stellenbosch University).

18. Kyle, R. G., Wills, J., Mahoney, C., Hoyle, L., Kelly, M., & Atherton, I. M. (2017). Obesity prevalence among healthcare professionals in England: a cross-sectional study using the Health Survey for England. BMJ open, 7(12), e018498.

19. Phetla, M. C., &Skaal, L. (2017). Perceptions of healthcare professionals regarding their own body weight in selected public hospitals in Mpumalanga Province, South Africa. SAMJ: South African Medical Journal, 107(4), 338-341.

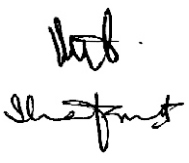
20. Humphreys, S. L. (2007). Obesity in patients and nurses increases the nurse's riskof injury lifting patients. Bariatric Nursing and Surgical Patient Care, 2(1), 3-6.

21. Ali, A. T., &Crowther, N. J. (2010). Factors predisposing to

obesity: a review of the literature. South African Family Practice, 52(3), 193-197.

22. Puoane, T., Steyn, K., Bradshaw, D., Laubscher, R., Fourie, J., Lambert, V., &Mbananga, N. (2002). Obesity in South Africa: the South African demographic and health survey. Obesity, 10(10), 1038-1048.

AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author-s Full Name	Contribution to the paper	Author=s Signature
1	Musarat Banoi	Conduct study, data collecting, Write article.	
2	Shafqat Inayat	Review lit review. Guide 2 write up of methodology and supervise overall in the research proces	