Assessing Knowledge of the Effects of Obesity/Overweight in staff of a Non-Governmental Organization in AkwaIbom State Nigeria

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Abstract

Prolonged sitting and sedentary behavior comprises a major part of the modern lifestyle: at work, leisure (watching television, Internet) and commuting/traveling, and this has been implicated in the prevalence of overweight and obesity. The study sought to assess the degree of knowledge of a population of non-governmental staff in AkwaIbom state Nigeria on the health effects of overweight and obesity. A questionnaire was administered through direct interview to fifty (n-50) staff in FHI360 AkwaIbom state office, Nigeria who gave verbal consent (Non-Health Personnel (n=23), Laboratory Personnel (n=8), Doctor (n=15), and Pharmacist (n=4).82% of respondents have an appreciable knowledge of the health effects of overweight/obesity, 95.5% the causes, while 74.5% are aware that BMI (body Mass Index) can be used as a monitoring tool for overweight/obesity, however, only a total 42.8% of respondents knew their BMI. There is therefore an urgent need to create an avenue in form of health fare for the study population to determine their BMI and improve their lifestyle/health seeking behavior to avoid the adverse health effects of overweight/obesity.

Background

The epidemiological transition of Chronic non-communicable diseases in sub-Saharan Africa seems to have overtaken the infectious diseases that have been in the fore front, such as HIV/AIDS and tuberculosis (Reddy and Yusuf (1998), Omran(2001).), WHO defined Overweight and obesity, as body mass index ≥ 25 kg/m2 and ≥30 kg/m2, respectively, and are associated with several diseases including cardiovascular disease, diabetes and several types of cancer (Lim et. al, 2010). 1.4 billion Adults aged 20 years and above were overweight or obese in 2008, of whom approximately 200 million men and 300 million women were estimated to be obese (WHO, 2010). Projections by 2030, fore sees an estimate of 2.16 billion overweight and 1.12 billion obese individuals globally (Kelly et al, 2008), two or more billion people worldwide are currently overweight or obese derived from results of trend analysis (Popkin et al 2012). The global disease burden attributable to high body-mass index increased from 52 million in 1990 to 94 million disability-adjusted life-years in 2010 tuberculosis (Reddy and Yusuf (1998), Omran(2001).).According to the 2010 WHO survey data on Nigeria the prevalence of overweight was 26% and 37% in men and women respectively, while the prevalence of obesity was 3% and 8.1% in men and women respectively (Ono et al 2005:2012). Data from the WHO Global InfoBase on individuals aged 30 years and above (Akarolo-Anthonyet al, (2014), shows that the prevalence of overweight and obesity together increased by 23% in men and 18% in women, while the prevalence of obesity alone increased by 47% in men and 39% in women, between 2002 and 2010, in Nigeria (Ono et al 2005:2012). Prolonged sitting and sedentary behavior comprises a major part of the modern lifestyle: at work, leisure (watching television, Internet) and commuting/traveling, (Shiyovichet al 2013). Studies have shown that adults spend about half of their time at work and even more sitting (Shiyovichet al 2013). Similarly, a significant part of the leisure (Shiyovichet al 2013) time is spent doing sedentary activities usually in front of a screen (TV or a computer).Recent evidence from several research papers showed deleterious relationships of sedentary behavior with cardiovascular risk factors (e.g., obesity, type 2 diabetes mellitus and waist circumference(Shiyovichet al 2013)). Furthermore, consistent independent associations (Shiyovichet al 2013) have been observed between sitting time/sedentary

behaviors and elevated all-cause and cardiovascular disease mortality risk(Shiyovichet al 2013).

Rationale of the study

In FHI360 AkwaIbom state, prolonged sitting (internet) and sedentary behavior, commuting/traveling comprises a major part of the work schedule and little or no study has been done to assess the knowledge of staff on the risk factors of overweight/obesity though they may be aware as they are mostly health personnel but it cannot be taken for granted that they monitor their BMI, it is on this premise that this study is being conducted.

Objective

- T o Assess the degree of Knowledge of the Effects of Obesity/overweight in staff of a Non-Governmental Organization in AkwaIbom State Nigeria
- T o assess the degree of Knowledge of BMI(Body Mass Index)as a monitoring tool for Obesity/overweight in same population
- T o recommend based on the outcome of the study on possible ways to entrench health talks/healthy work habits in the same population.

Methods

This study was qualitative, and descriptive. A questionnaire was administered through direct interview to fifty (n-50) staff in FHI360 AkwaIbom state office, Nigeria who gave verbal consent (Non- Health Personnel (n=23), Laboratory Personnel (n=8), Doctor (n=15), and Pharmacist (n=4). The questionnaire sought to assess the degree of knowledge of Health effects and causes of overweight/obesity, Knowledge of Body Mass Index(BMI) as a monitoring tool for overweight /obesity and assessing knowledge of own BMI as a health seeking behavior and in the same vein assess lifestyle by nocturnal eating syndrome(eating in the middle of the night), Snack and Carbonated drinks consumption; degree of physical activity by watching a lot of Television after work and amount of physical exercise conducted daily. Qualitative categorical data was analyzed manually and described the data per study question and respondent group by job category.

Results

Table 1: Distribution by Job category of Respondents

Job Category	Male	Female	n	%
Non Health Personnel	12	11	23	46
Laboratory Personnel	5	3	8	16
Doctor	15	0	15	30
Pharmacist	3	1	4	8
Total	**35**	**15**	**50**	**100**

Key: n=frequency %=Percentage
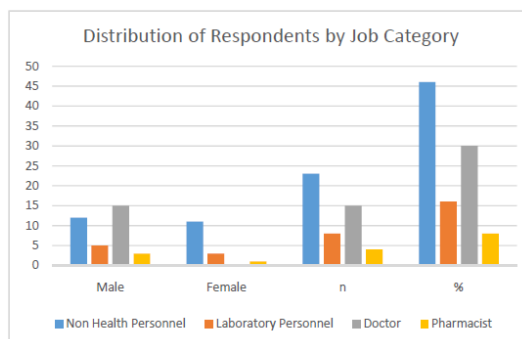
Table 2: Distribution of Respondents by their Knowledge of Overweight/Obesity

	Non-Health Personnel		Laboratory Personnel		Doctor		Pharmacist	
	Yes n(%)	No n(%)	Yes n(%)	No n(%)	Yes n(%)	No n(%)	Yes n(%)	No n(%)
Knowledge of Health effects of Obesity	18(78)	5(22)	4(50)	4(50)	15(100)	0(0)	4(100)	0(0)
Knowledge of Cause(s) of Overweight/Obesity	22(95)	1(5)	8(100)	0(0)	13(87)	2(13)	4(100)	0(0)
Knowledge of BMI as a monitoring tool for Overweight/Obesity	14(61)	9(39)	6(75)	2(25)	13(87)	2(13)	3(75)	1(25)
Knowledge of own BMI	7(30)	16(70)	3(37)	5(63)	11(79)	4(21)	1(25)	3(75)

Key: n=frequency BMI=Body Mass Index %=Percentage

Table 3: Distribution of Respondents by Predisposing Factors to Overweight/Obesity

	Non-Health Personnel		Laboratory Personnel		Doctor		Pharmacist	
	Yes n(%)	No n(%)	Yes n(%)	No n(%)	Yes n(%)	No n(%)	Yes n(%)	No n(%)
Daily Consumption of carbonated drinks	10(44)	13(56)	6(75)	2(25)	12(80)	3(20)	2(50)	2(50)
Snack Consumption throughout the day	6(26)	17(74)	0(0)	8(100)	5(33)	10(67)	1(25)	3(75)
Eat in the middle of the night	6(26)	17(74)	0(0)	8(100)	4(21)	11(79)	0(0)	4(100)
Watch a lot of Television after work	16(70)	7(30)	1(12)	7(88)	6(40)	9(60)	2(50)	2(50)
Physical Exercise at least once a day	12(52)	11(48)	5(63)	3(37)	12(80)	3(20)	2(50)	2(50)

Key: n=frequency %=Percentage

Discussion

The respondents in this study comprised of N=50: Non-Health Personnel (46%), Laboratory Personnel (16%), Doctor (30%), and Pharmacist (8%). (Table 1)

Based on Table 2, 82% of respondents have an appreciable knowledge of the health effects of overweight/obesity, 95.5% the causes, while 74.5% are aware that BMI (body Mass Index) can be used as a monitoring tool for overweight/obesity, however, only a total 42.8% of respondents knew their BMI(Doctors making up 79% of this total percentage) . Which indicates poor health seeking behavior and lack of consciousness to the adverse health effects of overweight/obesity amongst staff or the overwhelming workload: though majority of respondents are non-health personnel. Further studies should seek to determine the BMI of same population to identify those needing lifestyle change to avoid the harmful effects of overweight/obesity.

Table 3, focused on the distribution of Respondents by Predisposing Factors to Overweight/Obesity. It was observed that 62.2% of respondents consume sugar sweetened/carbonated soft drinks daily, evidence from the Framingham study indicates that consumption of soft drinks has been linked with metabolic syndrome and cardiovascular risk, (Dhingra et al 2007); similarly, consumption of sugar sweetened beverages in the USA

contributes to positive energy balance and reducing consumption has beneficial effects on body weight, (Ebbeling 2014), and in the same vein, Soft drink consumption is significantly linked to overweight, obesity, and diabetes worldwide (Basu et al (201 3), including in low- and middle-income countries.(Sanjay et al, 2013)

21% of respondents consume snacks throughout the day, and according to French et al (1994 and 2000),higher baseline consumption of fast food was associated with increased weight gain after 15 years, significantly increased insulin resistance in all ethnic/gender groups and some cross-sectional studies have shown similar associations between fast food intake and increased body weight.

11.8% of respondents eat in the middle of the night, One behavioral study found that the food intake of night-eaters to be greater than that of non-night-eaters. (Allison et al (2005) &Boston et al (2008)), this will of course predispose this particular population to weight gain and eventually obesity. 43% of respondents watch a lot of television after work, while 61.2% carry out physical exercise at least once a day ranging from jogging, brisk walk and stair climbing; Both high levels of physical activity and low levels of leisure time sitting may be required to substantially reduce the risk of obesity, (Joshua et al 2014). Evidence also supports the contribution of both excess energy intake and decreased energy expenditure in the obesity epidemic. (Kant et al (2006), Prentice and Jebb(1995), Dietz and Gortmaker, (1985)).

Conclusion

The population under study have an appreciable knowledge of the effects, causes and the use of BMI as a monitoring tool of overweight/obesity however, half of the population has no knowledge of their BMI hence the need to create an avenue in form of health fare so that staff can determine their BMI and improve their lifestyle/health seeking behaviour to avoid the adverse health effects of overweight/obesity.

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