Impact of Obesity And Occupational Stress on Daily Life Style of Female Nurses

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Abstract: *Overweight and obesity constitute major risk factors for a number of chronic diseases, including diabetes, cardiovascular diseases and cancer, and various other physical, psychological, and social morbidities as well as depression, discrimination and weight-related bias. Excessive fat accumulation in the body tends to increase the risk of high blood pressure, high cholesterol, asthma, arthritis, and brings about a general poor health status. Aim: Was to study the impact of obesity and occupational stress on daily life style of female nurses. Design: This study utilized a descriptive- analytical research design. Settings: The study was carried out in two hospitals, Institute of Psychiatry and Eldemerdash hospital. Sample: Convenient sample of 100 female nurses. Tools: Three tools were being utilized to collect data include: I- Socio-demographic data sheet: It covers socio-demographic characteristics of the study sample. II- Obesity questionnaire. III- Effect of work pressure on performance level scale. Results: Eating while watching TV has highly significant correlation with work shift and type of diet. Age also has highly significant correlation with years of experience and with exercise. Conclusion: The results of the study revealed that obesity and occupational stress affect the daily life style patterns of nurses. Recommendations: Nurses must be monitored through annual medical check-ups with regards to BMI and related co-morbidities.*
Key words: *Daily life styles, Obesity, Occupational Stress.*

I. Introduction

Obesity is a public health problem in both developed and developing countries, and constitutes an important risk factor for the emergence of chronic non-communicable diseases. The World Health Organization (WHO) estimated that, in 2014, the number of overweight people totaled more than 1.9 billion adults, of whom 600 million suffered from obesity, corresponding to 13% of the world's adult population(**World Health Organization, 2016[1]**). Obesity is defined as having a BMI (Body Mass Index) greater than 30 – a number calculated based on the height and weight of an individual which can vary between males and females. This epidemic is not a new concern for healthcare and has increasing effects on the entire healthcare system(**Kushner, R., 2012[2]**).

Obesity has a variety of impacts on the body. The increased pressure from the accumulation of fatty tissue causes pressure on internal organs leading to conditions such as: high blood pressure, type 2 diabetes, esophagitis, chronic obstructive Pulmonary disease, sleep apnea, varicose veins, hernias, Venous insufficiency and poor circulation leaves patient more susceptible to infection, skin breakdown and dehiscence of surgical wounds(**Klein, S., Burke, L., Bray, G., Blair, S., Allison, D. 2004[3]**).

Nurses have a vital role in health promotion and in educating the public on the maintenance of a healthy lifestyle. Despite the wealth of evidence supporting the positive impact of exercises and proper nutrition on health, the practicing nurses in many countries have been found to be overweight or obese. A study done in Australia, New Zealand and UK found nurses and midwives to have a higher prevalence of overweight and obesity compared to the general population(**Bogossian F., E., et al., (2012[4]**).

Health care employment was significantly associated with increased prevalence of obesity(**Luckhaupt et al., 2014[5]**). Nurses are the largest health care occupation group, and the prevalence of overweight/obesity among U.S. nurses ranges from 30% to 55% depending on geographical area, race and ethnicity, and work settings(**Han et al., 2011[6]; Miller et al., 2008[7]; Tucker et al., 2010[8]; Zapka et al., 2009[9]**). Nursing jobs involve shift work and long work hours and are often reported as highly stressful from physically and psychologically demanding patient care(**McVicar, 2003[10]; Sveinsdottir and Gunnarsdottir, 2008**[11]). Also, work-related musculoskeletal injuries and pain are common among nurses due to patient handling(**Lee et al., 2013[12]**). Such factors may be associated with reduced leisure-time physical activity, which, in turn, contributes

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to overweight/ obesity among nurses**(Atkinson et al., 2008[13]; Keller, 2009[14]; Lallukka et al., 2008[15]; Zhao et al., 2012[16]).**

Stress is defined as an unpleasant experience that has negative effect on emotional and physical condition of a person**(Jennings, 2000[17]).** Stress thought to be responsible for physical illnesses, family problems, and alcohol and substance abuse among many workers. In addition it causes absenteeism from work, accidents at work and low productivity. Cost of stress is estimated to be millions of dollars every year for employer organizations**(Blaug, Kenyon and Lekhi 2007[18]).**

Job stress is rising when expectation of job become too much for employees to handle. At this situation employees feel stressed out. It also can cause serious mental, physical and emotional conditions**(Beheshtifar and Nazarian, 2013[19]; Cousins and Donnell, 2011[20]).**The level of stress is different for different types of jobs. Some professions tend to have higher level of stress. Jobs with high levels of stress are such as: teaching, social work, nursing, police officers, fire fighting, pilots, surgeons, and enlisted military personnel. The specialties and work settings for nurses vary greatly. Nurses required providing both medical and emotional support to patients and their families and hiding their negative emotions, that's a big responsibility and causes big amount of stress**(Sahraian, Davidi, Bazrafshan and Javadpour, 2013[21]).**

Among the most populous countries in the world, the U.S. came on top with the highest rate of obesity among children and youth, namely 13 percent; while Egypt topped the list of obesity among adults, namely 35 percent. According to a study of Ali Mokdad, Director of Middle Eastern Initiatives and Professor of Global Health at the Institute for Health Metrics and Evaluation (IHME) at the University of Washington, "obesity poses a dangerous threat to public health in Egypt. One out of every three Egyptians suffers from obesity, which is the highest rate in the world. Doubtless to say that this will result in dangerous health risks, including diabetes, heart diseases and various kinds of cancer**(Al-Masry Al-Youm, 2017[22]).**

Nursing profession comes along with difficulties and many responsibilities. It is a very complex and challenging job that requires flexibility and vigilance. However despite having big responsibilities, nurse's authority to control their working role is very small. This can lead to many disorders like: emotional distress, anger, depression, anxiety and physical health disorders .In addition nurses should deal with physical demands, technological advances, staffing shortages and management issues that cause more stress for them, and unfavorably affect their physical productivity. This eventually negatively affects the level of care provided to the patients**(Thomas, 2009[23]).**

Significance of the study:

In Egypt, a survey by the World Health Organization (WHO) covering 2011-12 found that, 62.2% of Egyptian adults were overweight, and 31.3% of them were classed as obese."This is more than a health issue" said Dr Randa Abou el Naga of the WHO in Egypt, who cites a lack of physical activity as the main driver of obesity.

One in four nurses in the UK was found to be obese, according to a recently published study. This has implications not only for the general health and well-being of nurses themselves but also for their role as health advocates in a world where obesity has become a pandemic. Nurses are exposed to high levels of occupational stress, so it is possible that they may be at increased risk of excessive weight gain. Occupational stress may have an effect on eating behaviors, appetite, and adiposity. It stimulates the release of cortisol which increases food intake, preference for fat and sweet foods, and promotes fat storage, especially as visceral fat**(Dallman, Pecoraro, and la Fleur, 200[24]).**

Aim of the study:
Was to study the impact of obesity and occupational stress on daily life style of female nurses through:
1- Explore the effect of obesity on nurses health.
2- Identify the effect of occupational stress on nurses.
3- Identify the current lifestyle behaviors and barriers to living a healthy lifestyle among nurses.

Research questions:
1- What are the effects of obesity and occupational stress on nurses?
2- How to help the nurses to live a healthy life style?

II. Subjects & methods
2.1. Design: This study utilized a descriptive- analytical research design.
2.2. Setting: The study was carried out in two hospitals, Institute of Psychiatry and Eldemerdash hospital.
2.3. Sample: Convenient sample of 100 female nurses :
2.4. Inclusion criteria: female registered nurses, working minimum of 36 hours per week in day and night shifts.

 2.5. Exclusion criteria*: this study will exclude male nurses. Pregnant females and females who have delivered a baby within the previous 6 months.

2.6. Data Collection tools: Three tools were being utilized to collect data include:

I- Socio-demographic data sheet: This tool was developed by the researchers.

Part one: it covers socio-demographic characteristics such as age, BMI**(Weight (kg)/Height(m)²**, educational level, years of experience, job title, Work shift and marital status.

Part two: it covers daily life style patterns of nurses, Exercise, sleeping hours, hours of watching TV, eating while watching TV, stress reduction activities, type of diet and daily meals pattern.

II- Obesity questionnaire: This tool was developed by the researchers after reviewing the recent related literature. It includes   twenty four question about obesity effects on physical health and social life of nurses.

Scoring system: items were scored one= Yes, and zero= No.

I- Effect of work stress on performance level scale: This tool was adopted from(Sahar Anwar Hussein, 2013) Journal of Baghdad faculty of economic sciences, vol:36**.** It involves 27 items related to work stress levels resulting from the nature of work and work load scored on 5-point likert scales**.**

Scoring system: Questions were scored as the following: Zero= completely agree, 1= agree, 2= agree to some extent, 3= disagree, 4= completely disagree.

III- Validity

The validity of the tools were tested by offered to 5 academic expertise of nursing education from the Faculty of Nursing to determine relevance, clarity, completeness and comprehensiveness of the tools, experts responses were either agree or disagree for the face validity. Then their opinions are reviewed and final tools were prepared and used.

II- Reliability

 The reliability of the tools was measured through ten percent of the sample using the established questionnaire and retested after one week on the same sample and the results were the same in each time.

III- Ethical considerations**:**

The researchers explained the objective and aim of the study to the study sample who agreed to participate in the study. Study sample were informed that they are allowed to choose to participate or not in the research and that they have the right to withdraw from the research at any time. Data collection was for research only and it burned after data analysis.

IV- Pilot Study

A pilot study was carried out on 10% of sample size, involving 10 nurses to evaluate the efficiency, reliability, clarity and applicability of the tools. Subjects included in pilot study not excluded from the total sample as no modification of study tools were done.

V- Field work

    After obtaining official permission to carry out the study. The researchers were explained the purpose of the study to nurses. The oral consent was obtained from the participants. The data collection of the study was covered a period of four months from beginning of January 2018 to the end of April 2018 in the previously mentioned settings, and the researchers were available in the study settings three days/week from 9.00 a.m. to 2.00 p.m.

    Data were gathered through interview and self administered questionnaire to nurses. Height and weight were taken when the self-administered questionnaire was returned using the weighing scale and the height measurement. BMI was calculated using the equation Weight (kg) /Height(m)².

VI- Administrative Design

The present study was carried out after taking an official permission from the administrators of the study settings at Institute of Psychiatry and Eldemerdash hospital by presenting an official letter taken from the Faculty of Nursing, Helwan University, after the aim of the study was explained clearly.

VII- Statistical analysis:

All statistical analyses were performed using SPSS for windows version 20.0. Data were tested for normality of distribution prior to any calculations. Continuous data were normally distribute and were expressed in mean ±standard deviation (SD). Categorical data were expressed in number and percentage. Statistical significance was set at $p \leq 0.05$.

III. Results

Table (1): Socio demographic characteristics of the study sample(n=100):

Items	No	%
Age:		
20-30	32	32
31-40	40	40
41-50	13	13
51-60	15	15
Mean± SD 2.11±1.02		
BMI (Weight (kg)/Height(m)²		
Normal weight= 18.5-25	16	16
Mild Obesity=25-30	30	30
Moderate obesity 30-35	39	39
Over weight 35- more than 40	15	15
Mean± SD=2.53±.936		
Educational Level		
Diploma	17	17
Associate degree	57	57
Bachelor degree	26	26
Job Title		
Nurse	78	78
Head nurse	20	20
Supervisor	2	2
Marital Status		
Single	18	18
Married	69	69
Divorced	6	6
Widow	7	7
Mean± SD=2.02±.724		
Years of experience		
1-10years	41	41
11-20years	35	35
21-30	9	9
31-40	15	15
Mean± SD=1.98±1.05		
Work Shift		
Day shift	70	70
Night Shift	30	30

Table(1) shows that, the majority (40%) of the study sample were between 31-40 years, (32%) were between age 20-30 years. In relation to Body mass index(BMI), (39%) of the study sample were moderate obesity while, (15%) of them were over weight. This table also revealed that (57%) of them were had associate degree and (26%)were had bachelor degree. The highest percentage of the study sample (78%) were nurses, while, (20%) of them were head nurses. As regards to marital status, (69%) of them were married, while (18%) of them were single. In relation to years of experience, (41%) of them were had 1-10 years of experience, (35%) of them were had 11-20 years and (15%) of them were had more than 30 years of experience. Also, (70%) of the study sample worked day shift.

Figure (1): Body Mass Index(BMI) 0f the study group(n=100).
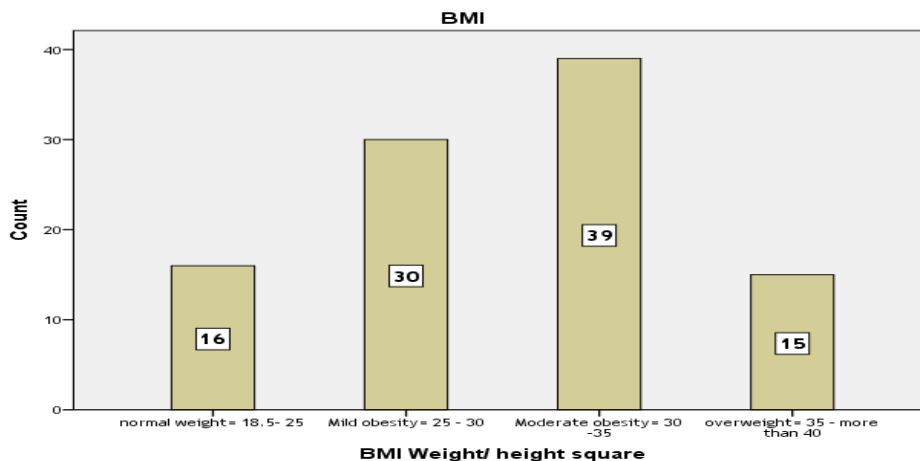
Table (2): Daily life style patterns of the study sample(n=100)

Items	No	%
Exercise:		
No Exercise	78	78
1-2 times/week	22	22
Sleeping hours/day		
Less than 6 hours	24	24
6-8 hours	69	69
More than 8 hours	7	7
Hours of watching TV		
1-2 hours	56	56
3-4 hours	34	34
4-5 hours	10	10
Eating while watching TV		
Yes	67	67
No	33	33
Stress reduction Activities		
Expressing feelings to others	46	46
Playing games	17	17
Doing physical tasks	25	25
Eating something	12	12
Type of diet		
Spicy food	37	37
Carbohydrates	45	45
Fatty Food	18	18
Daily meals pattern		
3 meals / day	63	63
Less than 3 meals/day	18	18
More than 3 meals / day	19	19

Table(2) revealed that, (78%) of the study sample didn't practice any exercises, (69%) of them were sleep from 6-8 hours while, (24%) of them were sleep less than 6 hours. In relation to hours of watching TV, (56%) of them were watching TV from1-2 hours, and (34%) of them were watching TV from 3-4 hours. (67%) of them were eating while watching TV. In relation to stress reduction activities, (46%) of them were expressing feelings to others,(25%) were doing physical tasks and (17%) of them were playing games. As regards to type of diet, (45%) of them were eating carbohydrates diet, while (37%) of them were eating spicy food, also (63%) of the study sample were eating 3 meals/day and (19%) of them were eating more than 3 meals/ day.

Table (3): Frequency and percentage distribution of the study sample regarding obesity questionnaire (n=100).

Items	No	%	t	p
1-Is your physical health impacted negatively by your obesity?				
Yes	54	54	10.78	.000*
No	46	46		
2-Do You see yourself as an obese person?				
Yes	64	64	13.26	.000*
No	36	36		
3-Do you believe your eating habits are the cause of your obesity condition?				
Yes	57	57	11.45	.000*
No	43	43		
4-Do You contribute to your own obesity?				
Yes	58	58	11.69	.000*
No	42	42		
5-Do you believe others contribute to your own obesity?				
Yes	48	48	9.560	.000*
No	52	52		
6-Do you see yourself as a normal eater?				
Yes	51	51	10.15	.000*
No	49	49		
7-Have you lost and regained pounds?				
Yes	45	45	9.000	.000*
No	55	55		
8-Have your social life been limited because of obesity?				
Yes	53	53	10.56	.000*
No	47	47		
9-Have your romantic relationships been limited because of obesity?				
Yes	66	66	13.86	.000*
No	34	34		
10-Have you experienced shame or other uncomfortable feelings around obesity?				

Yes No	58 42	58 42	11.69	.000*
11-Do you believe exercise will help you lose pounds? Yes No	 55 45	 55 45	11.00	.000*
12-Do you believe that you can lose pounds? Yes No	 46 54	 46 54	9.18	.000*
13-Do You consider yourself to be a depressed person? Yes No	 52 48	 52 48	10.35	.000*
14-Do you believe obesity present with you from childhood? Yes No	 46 54	 46 54	9.18	.000*
15-Do you believe your obesity has triggered depression? Yes No	 60 40	 60 40	12.18	.000*
16-Do you believe your depression has contribute to your obesity? Yes No	 52 48	 52 48	10.35	.000*
17-Have you ever been told by family/ significant other that you were obese? Yes No	 51 49	 51 49	10.15	.000*
18-Have you ever been told by a physician that you were obese? Yes No	 57 43	 57 43	11.45	.000*
19-Do you feel comfortable working out in a GYM? Yes No	 49 51	 49 51	5.49	.000*
20-Are you more likely to maintain a long term exercise regimen when a group holds you accountable for attendance? Yes No	 48 52	 48 52	9.56	.000*
21-Do you believe that supportive counseling can assist in sustaining your obesity healing regimen? Yes No	 56 44	 56 44	11.22	.000*
22-Do you believe supportive counseling is most effective when participants share the same or similar culture /age/gender? Yes No	 54 46	 54 46	10.78	.000*
23-Do family members suggest that you not lose too many pounds? Yes No	 51 49	 51 49	10.15	.000*
24-Do you believe that BMI should be cross the board for everyone? Yes No	 52 48	 52 48	10.35	.000*

*Significant at p≤0.05

It is apparent from table(3) that, more than half of the study sample felt that their physical health impacted negatively by their obesity. (64%) of them were sew themselves as an obese person. (57%) of them believed that their eating habits were the cause of their obesity condition and about the same percentage believed that they contribute to their own obesity. More than half of the study sample were sew their social life have been limited because of obesity and (66%) of them were sew that their romantic relationships have been limited because of obesity. In relation to if they experienced shame or other uncomfortable feelings around obesity, (58%) of them responded by yes, while, (55%) of them believed that exercise will help in losing pounds. More than half of them considered themselves a depressed person and (60%) of them believed that their obesity has triggered depression and more than half of them also believed that their depression has contribute to their obesity. As regards to feeling comfortable working out in a GYM, (51%) of them answered by no. More than half of the study sample (54%) believed that supportive counseling is most effective when participants share the same or similar culture /age/gender and about the same percentage(52%) believed that BMI should be cross the board for everyone .

Table (4) Frequency and percentage distribution of the study sample regarding the effect of work stress on their performance   level (n=100).

Items	Completely agree		Agree		Agree to some extent		Disagree		Completely disagree	
	No	%	No	%	No	%	No	%	No	%
*Work stress levels resulting from the nature of work:										
1- The time allotted for completing the assigned tasks is insufficient.	29	29	28	28	32	32	11	11	-	-
2-My work requires a high degree of concentration and attention.	18	18	39	39	29	29	13	13	1	1
3-The intellectual and practical capabilities and abilities are not properly exploited.	15	15	47	47	27	27	10	10	1	1
4-I feel that my work is not sufficiently appreciated by the administration.	17	17	35	35	30	30	16	16	2	2
*Work stress levels resulting from role conflict: 5- My work affects family obligations. 6-Work under conflicting policies and guidelines. 7-Sometimes asking me to do some work in a way that I think is incorrect.	20 9	20 9	24 37	24 37	33 33	33 33	19 16	19 16	4 5	4 5
8-I receive inconsistent orders from my bosses at work.	11	11	34	34	29	29	22	22	4	4
	14	14	37	37	23	23	19	19	7	7
*Work stress levels resulting from role ambiguity: 9- I know my business responsibilities specifically. 10-I am not sure of the limits of powers in my current job.	19	19	26	26	27	27	18	18	10	10
11-Sometimes I don't know what are required to do in my work	11	11	32	32	38	38	15	15	4	4
12-The work to be done is very clear.	11	11	26	26	33	33	24	24	6	6
	12	12	26	26	25	25	25	25	12	12
*Work stress levels resulting from work load: 13- The amount of work I do is more than necessary. 14- The Assigned work time does not allow me to do every thing that is expected of me.	15	15	30	30	28	28	18	18	9	9
15-My work responsibilities are variable and unstable.	18	18	31	31	35	35	13	13	3	3
16-Sacrific with my comfort time in order to achieve my practical requirements annoys me.	25	25	29	29	28	28	11	11	7	7
17-The amount of work on my shoulders exceeds my abilities.	17	17	30	30	32	32	15	15	6	6
*Functional performance levels resulting from motivation: 18-I was appreciated by my supervisors when I achieve a high level of performance.	13	13	31	31	25	25	21	21	10	10
19-The distribution of labor among workers is fair.	18	18	25	25	29	29	21	21	7	7
20- My hospital staff are subject to rigorous performance evaluation standards.	15	15	27	27	25	25	19	19	14	14
21-The Hospital in which I work is encouraged by appropriate incentives.	21	21	24	24	30	30	21	21	4	4
22-Moral stimulation encourages me to perform better.	16	16	35	35	24	24	17	17	8	8
	20	20	28	28	33	33	11	11	8	8
*Functional performance levels induced by capacity: 23-My ability to accomplish is good because I work with all my potentials.	10	10	30	30	36	36	19	19	5	5
24-My level of scientific qualification corresponds to the duties assigned to me.	11	11	28	28	36	36	20	20	5	5
25- The job offers to me opportunities for career progress that matches with my abilities.	18	18	22	22	25	25	30	30	5	5
26-The hospital is concerned with developing the capabilities of the workers.	13	13	32	32	33	33	18	18	4	4
27-The type of work that I occupy is compatible with my own abilities.	11	11	26	26	35	35	23	23	5	5

Table(4) illustrates that, in relation to Work stress levels resulting from the nature of work, (32%) of the study sample agreed to some extent that the time allotted for completing the assigned tasks to them is insufficient, (39%)

of them agreed that their work requires a high degree of concentration and attention. (47%) of them agreed that The intellectual and practical capabilities and abilities of them are not properly exploited and (35%) of them felt that their work is not sufficiently appreciated by the administration. As regards to work stress levels resulting from role conflict, (33%) of the study sample agreed to some extent that their work affects their family obligations and the same percentage agreed to some extent that they work under conflicting policies and guidelines. (37%) of them agreed that they receive inconsistent orders from their bosses at work. In relation to work stress levels resulting from role ambiguity, (38%) of the study sample agreed to some extent that they are not sure of the limits of powers in their current job and (33%) of them agreed also to some extent that sometimes they don't know what they are required to do in their work.

As regards to work stress levels resulting from work load, (30%) of the study sample agreed that the amount of work they do is more than necessary and Sacrifice with their comfort time in order to achieve their practical requirements annoys them. (31%) of them agreed that the Assigned work time does not allow them to do every thing that is expected from them and the amount of work on their shoulders exceeds their abilities. In relation to functional performance levels resulting from motivation, (30%) of the study sample agreed to some extent that their hospital staff are subject to rigorous performance evaluation standards. And (35%) of them agreed to some extent that the hospital in which they work is encouraged by appropriate incentives. In relation to functional performance levels induced by capacity, (36%) of the study sample agreed to some extent that their ability to accomplish is good because they work with all their potentials and their level of scientific qualification corresponds to the duties assigned to them. (33%) agreed to some extent that the hospital is concerned with developing the capabilities of the workers and (35%) of them agreed also to some extent that the type of work that they occupy is compatible with their own abilities.

Table (5): Correlation between BMI, work shift, hours of watching TV, Eating while watching TV and Type of diet:

Correlations	BMI	Work shift	Hours of watching TV	Eating while watching TV	Type of diet
BMI	1.00	.073 .473	-.026- .798	.194 .054	.031 .760
Work shift	.073 .473	1.00	.026 .797	.181 .072	.082 .416
Hours watching TV	.289 .160	.026 .797	1.00	-.037- .711	.151 .133
Eating while watching TV	.179 .393	.598** .002	-.037- .711	1.00	.229* .022
Type of diet	.031 .760	.082 .416	.151 .133	.229* .022	1.00

*Significant at p≤0.05(2- tailed).

Table(5) revealed that, eating while watching TV has highly significant correlation with work shift and type of diet at (p≤0.05)= .002& .022 respectively.

Table (6): Correlation between BMI, Type of diet, Age, Job title, Years of experience and Exercise.

Correlations	BMI	Type of diet	Age	Job title	Years of experience	Exercise
BMI	1.00	.031 .760	.181 .072	.075 .461	.123 .221	-.095- .348
Type of diet	.031 .760	1.00	-.021- .902	-.190- .058	.008 .935	-.162- .107
Age	.181 .072	-.021- .902	1.00	.112 .269	.919** .000	.203* .042
Job title	.075 .461	-.190- .058	.112 .269	1.00	.151 .133	.190 .058
Years of experience	.031 .760	.082 .416	.151 .133	.151 .133	1.00	.240* .016
Exercise	-.095- .348	-.162- .107	.203* .042	.190 .058	.240* .016	1.00

**Significant at p≤0.01(2- tailed).
*Significant at p≤0.05(2- tailed).

Table(6) shows that, age has highly significant correlation with years of experience (p≤0.01)=.000 and with exercise(p≤0.05)=.042. years of experience also has highly significant correlation with exercise at (p≤0.05)=.016.

IV. Discussion

Nurses are a critically important resource for patients trying to understand and implement healthy behaviors. Because they interact with the community along all levels of the healthcare continuum, nurses can significantly influence patients trying to lose weight and maintain weight loss. One of nursing's primary responsibilities is to provide both formal and informal patient education. Nurses who clearly articulate both a rationale for healthy behaviors and a practical approach to implementing them are more likely to have greater success as patient educators. Role modeling healthy diet and lifestyle may positively impact patients. With respect to the professional nursing role, one may wonder if the obese nurse is an effective patient educator to the health risks of obesity. It may not be reasonable to expect healthcare consumers to be confident in a plan to reduce weight when the professional presenting that plan does not appear to model it**(Miller et al, 2008[7]).**

The current study revealed that , the majority of the study sample were between 31-40 years, about one third were between age 20-30 years. In relation to Body mass index (BMI), more than one third of the study sample were moderate obesity while fifteen percent of them were over weight. This was congruent with **American Psychological Association (2015[25])**, who found that approximately 58% of their sample of nurses were either in the overweight, obese, or morbidly obese. And 41% had a normal or underweight BMI. The study also showed that 57% of the study sample were had associate degree and 26% were had bachelor degree. 78% of the study sample were nurses, while, 20% of them were head nurses. As regards to marital status, 69% of them were married, while 18% of them were single. In relation to years of experience, 41% of them were had 1-10 years of experience, 35% of them were had 11-20 years and 15% of them were had more than 30 years of experience. The current study revealed that, 70% of the study sample worked day shift while thirty percent of them worked night shift. This contradict with **Marqueze et al., (2012[26])** who found that working the night shift leads to a greater increase in body mass index (BMI) compared to working during the day.

Sherwood& Eldredge, (2017[27]) reported that, Even with the increase in the use of irregular shift schedules night shift work remains an oddity in a society where most workers primarily work day shifts. Although workers who are required to engage in night shift work are in the minority compared to the overall workforce, research has shown that those required participating in night shift work experience greater disruptions to their social, family, and domestic lives when compared to day shift workers. **Hamer, (2012[28])** stated that, physical activity may be a protective buffer against psychological stress. Shift-work and long work hours are both stressors and associated with increased risk for obesity. In the current study 78% of the study sample did not do any exercise and 55% of them believed that exercise will help to lose pounds. More than half of them believed that BMI should be cross the board for everyone.

Monakali, Goon, Seekoe and Owolabi (2018[29]) mentioned that**,** female nurses who were aged above 30 years had a higher prevalence of abdominal obesity compared to those who were 30 years old and below. This is not contrary to several other studies and our study. The higher prevalence found among the older nurses might be associated with the accompanying longer duration of practice as well as higher level of experience. Thus they engage more in consultations with lesser participation in more strenuous activities while the younger nurses are usually involved in such.

According to **(Miller et al, 2008[7]),** Ninety-two percent of respondents were female. Ages ranged from 22 to 85 years (M= 50.2, SD = 11.88, median = 51.0), with more than 50% between the ages of 45 and 64 years. Approximately 30% reported an associate's degree as the highest academic degree earned, 42% a baccalaureate degree, 25% a master's degree, and 2% a doctorate. In terms of current practice role, approximately 72% of respondents described themselves as a registered nurse, 15% as an advanced practice nurse, and 5% as a nursing professor or instructor. The mean number of years in present role was 9.9; the mean number of years in nursing was 25.

Coomarasamy et al (2014[30]), Stated that more than half of the respondents in their study claimed that they sleep between 6 to 8 hours per night. According to the National Institute of Neurological Disorders and Stroke (no date) 7 to 8 hours of sleeping hours at night is adequate for adults. However, 44 % of the respondents stated that they sleep less than 6 hours at night**.** In the present study, about quarter of the study sample sleep less than 6 hours while 69% of them sleep from 6-8 hours per day. For health professionals and nurses, stress and eating often combine in unhealthy ways. Anyone who has worked or trained in a hospital knows all too well the cycle of workplace stress leading some individuals to overeat and gain excess weight, which in turn leads to physical and mental stress due to the weight gain itself. Others react to stress by eating less and losing weight, which can similarly have negative consequences **Almajwal, (2016[31]).**

According to the results of the current study,(78%) of the study sample didn't do any exercises, 69% of them were sleep from 6-8 hours while 24% of them were sleep less than 6 hours. In relation to hours of watching TV, more than half of them were watching TV from1-2 hours, and about one third of them were watching TV from 3-4 hours. 67% of them were eating while watching TV. In relation to stress reduction activities, 46% of them were expressing feelings to others, 25% were doing physical tasks. As regards to type of

diet, about half of them were eating carbohydrates diet, while 37% of them were eating spicy food, 63% of the study sample were eating 3 meals/day and 19% of them were eating more than 3 meals / day.

Zabin, (2016[32]), mentioned that difficulties in managing workload, lack of involvement in decision making, poor communication, lack of support, lack of preparation for the role, and conflicts with staff have all been reported as sources of stress for stress for nurses. In addition, those with higher levels of education also experienced more stress. Younger nurses, or those who identify as widowed, separated, or divorced tend to experience higher levels of occupational stress as well and those with low levels of job satisfaction have more occupational stress.

In our study, the majority of the study sample believed that the amount of work they do is more than necessary and the assigned work time does not allow them to do every thing that is expected from them. About one third of them agreed that work responsibilities are variable and unstable. And sacrifice with their comfort time in order to achieve their practical requirements annoys them. More than one third of them agreed that the amount of work on their shoulders exceeds their abilities.

V. Conclusion

The results of the study revealed that obesity and occupational stress affect the daily life style patterns of nurses, the present study also showed that type of diet, work shift , age, eating while watching TV, years of experience and exercise correlate to each other.

VI. Recommendations

1-There is an urgent need for workplace health policies that will promote physical activity and healthy lifestyle behavior, as well as maintenance of healthy weight particularly females and those in the older age groups.
2-The findings of this study can help provide a foundation for further research on nurse stress and its implications for health outcomes.
  3-Nurses must be monitored through annual medical check-ups with regards to BMI and related co-morbidities**.**

Acknowledgement

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