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The Paradox of Obesity in Graduate level Advance Practice Nurses and Nurse Educators

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Commentary

Obesity has become a national epidemic, which currently consumes a large segment of the United States' population; according to the CDC more than 72 million adults are obese [1]. "In 2009, about, 4 million more adults were obese than in 2007 [2]. In every state, more than 15% of adults are obese and in nine states, over 30% of adults are obese" [1]. Obesity is defined as having excess of adipose tissue (Body fat). Body fat can be calculated by using a height to weight ratio a value known as Body Mass Index (BMI). Obesity can lead to numerous co-morbid conditions.

Obesity reduction is a health initiative that should be a priority to health care providers and society [1]. Obesity is now categorized as a disease. Though this classification has been delineated by the CDC many providers do not manage Obesity as a disease [2]. Obesity and cardiovascular conditions significantly impact the quality of life of society. In Healthy People 2020, the Department of Health and Human Services [DHHS] lists both cardiovascular disease and obesity as health initiatives in the population [3] (DHHS). Obesity can contribute to many co-morbid conditions including orthopedic problems, emotional conditions attributed to social stigma, and endocrine abnormalities. Obesity further explained by the body's stress response of the Hypothalamic- Pituitary-Adrenal Axis (HPA) these conditions appear as early as in childhood and can lead to resultant symptoms of insulin resistance, dyslipidemia, sleep apnea, osteoarthritis and some cancers [4,5].

The CDC reports obese individuals have $1,429 higher health care costs than those of normal weight. Obesity is contributing to the lowering life expectancy of this generation [2]. Obese and overweight individuals can, not only be found in the general population but, additionally in our health institutions and academic settings.

The general trend of the population related to Obesity can also be seen in the nursing profession. According to a study by The University of Maryland, 55% of nurses are obese [6]. Nurses are an example of this and comprise a large portion of the staff in health care facilities, colleges and universities. Nurse educators, advanced practice nurses and nurses at the bedside have an extraordinary purpose and role. The care they provide to the public as well as educating future nurses to provide care upon completion of their studies could be perceived as a daunting feat. Such an auspicious task brings a great deal of responsibility.

Nurses must incorporate the self-care theory taught to patients into their own lives. Too often nurses exert a tremendous deal of energy and passion into caring for patients, students and their families. Nurses must make their own health and welfare a priority as well [7].

Negative Behavior Patterns

Some common negative behavior patterns that nurses have developed include skipping meals, unhealthy snacking, and increased sugar intake. Nurses more often are emotional eaters and practice externally induced eating (eating in the presence of food) [8]. Time constraints forced on care providers and educators cause meals to be less attainable without meal planning. Meetings with colleagues, students, classes, class preparation, and grading are responsibilities of an educator that can make breaking for lunch seem like a difficult task. The consistent need to monitor patients, administer medications and provide patient education with often-larger nurse to patient ratios can also be a challenge, which results in unhealthy snacking and skipping a meal. Stress has proven to not directly correlate with Obesity in nurses though "shift work" did have a negative impact. The eating was driven by negative emotions by shift workers [8] Healthy food options are not always readily assessable on campuses. Rather than preparing food prior to arriving to work, nurses often succumb to vending machines, which generally offer chips, chocolate bars, and sodas. Most of the vending items offer infinite calories, which aid in additional poundage. In addition, a lack of exercise is another negative behavior pattern, which may be found in the nursing population. Not exercising could also be a result from time constraints.

Contributing Psychosocial factors

An estimated 26% of American adults (18 years and older), or approximately one in four adults, has a diagnosable mental disorder [9]. In addition, the Substance Abuse and Mental Health Services Administration [10]. Reported that as many as 83% of persons with serious mental illness are overweight or obese. Persons with histories of lifetime depression experienced an increase in fat mass (+7.4%) and body fat percentage (+4.3%), resulting in increased mean weight (+3.3%), waist circumference (+2.9%), and body mass index (BMI) (+3.5%) [11]. Ethnic variations were noted in the general populace, with the prevalence of obesity in African-Americans at 51% and Hispanics at 21%, both higher than their Caucasian counterparts [12].

Obesity and overweight statuses are of concern for mental health care and primary care providers' with dual diagnosed clients; several sources Avena, Rada and Hoebel to name one has cited increased consumption and cravings of sugar as another possible etiology for obesity [11]. These and other psychosocial factors, which contribute to obesity and depression in adults, include job stressors, shift variations, excessive work hours and high standards for productivity often seen in the work schedules of nurses at all levels. The aforementioned conditions as well as salaries driven by productivity are more prevalent in today's healthcare arena and may also contribute to psychosocial factors.

Findings of several studies of nurses, one in the United States (US) show an association between job stress as a factor that increased the prevalence of overweight (OW) and obesity (OB) to 55% [13]. Nurses with lower activity levels (OR=0.83, 95% CI=0.73-0.95) or sedentary jobs (OR=1.14, 95% CI=1.02-1.28) were most affected. Also, nurses with extended work schedules, twelve hour shifts had significant disease of obesity or overweight (OR=1.22, 95% CI=1.08-1.39) [13]. Yet another US study conducted by Miller and others mailed throughout the six regions of the country to a total of 4986 with 760 respondents; nurse practitioners or nurse educators noted 30% had an overweight BMI, 18.7% an obese BMI, and 5.2% a morbidly obese BMI. However many, 53% lacked the initiative to make lifestyle changes to intervene in their own OW/OB disease processes. As many as 76% of the practitioners do not address the issue upon client encounter with those who meet the diagnostic criteria for overweight or obese states, although 93% recognize overweight and obesity as a disease that requires some intervention [7].

Graduate level nurses may be more vulnerable to salary driven stressors. Advanced practice nurses (APRNs) may incur bonuses, pay increases or pay decreases based on the number of patients seen and treated versus merit, which could contribute to an increase in stress. Nurse educators attain reappointment and promotions contingent upon production of publications, service and demonstration of excellence in their concentration area. The aforementioned survey conducted by Miller and others revealed 54% of APRNs described themselves as overweight or obese however 40% responded that they were unable to lose weight though they tried diet and exercise.

What can be done?

Intervention begins with acceptance of Obesity as a problem. Then behavior modification is essential to weight loss and achieving healthier lifestyles. Healthy food selection, not skipping meals, decreased sugar intake and increasing water consumption could result in pounds shed and improved overall health for nurses. Incorporating fruits and vegetables in one's diet can aid digestion, increase energy and help with weight loss. Increasing the amount of physical activity 4-5 times weekly for at least 45 min is essential to lowering BMI. Both low intensity and high intensity activities can be instrumental in weight loss [14]. Avoiding soft drinks and sugar filled juices can tremendously decrease caloric intake and contribute to weight reduction. Institutions could revisit and re-negotiate vendor contracts to offer healthier options in lieu of or in addition to some of the more popular items. Employees can advocate for healthier options in cafeterias and surrounding restaurants. Often fast food franchises are more convenient to pick up a meal on the go. Planning meals may offer a more health conscious alternative to fast food. However as previously stated too often the altruist nature of nurses leads them to take care of others and nurses exert a tremendous deal of energy and passion into caring for patients, students and their families. Nurses must make their own health and welfare a priority as well. And nursing faculty must teach and role model self-efficacious behavior to their students, clients and others.

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