

Weight Management Practices among Female Undergraduates: a case study of Nnamdi Azikiwe University, Awka.

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Abstract

This paper is a case report of the weight management practices of female undergraduates in Nnamdi Azikiwe University, Awka. Four objectives with corresponding four research questions guided the study. Population consisted of 10,500 female undergraduates registered for 2012/2013 academic session. Multi-stage sampling procedure was used to select a sample of 330 female undergraduates for the study. A 22-item questionnaire served as instrument for data collection. Percentages were used to analyze data. The results of the study showed that a good number of the students (76%) engage in healthy weight management practices while a few of them (32%) engaged in unhealthy weight management practices. The reasons for their weight management practices included among others to be attractive, to have a slim physique. Following from the findings of the study, it was recommended among others that parents should inculcate good eating habits in their children, especially the females.

Key Words: Weight, Management, Healthy, Females, Practices, Undergraduates

Introduction

Weight management is a wide spread global practice among adolescents and young adults, particularly females. It is not only restricted to overweight people. It extends to include normal and underweight people who may wish to gain weight for cultural, social or psychological reasons. According to Olaoye and Oyetunde (2011), weight management is not about weight loss only, it covers all aspects of attaining and maintaining optimum weight

(ideal body weight) for a healthy lifestyle. In this 21st century, weight management has become an issue of concern as the desire to achieve a slim physique is in vogue. This has led to a number of weight management practices among females, especially young females. Consequently, dissatisfaction with body weight and the use of healthy and unhealthy weight reduction practices have been reported among adolescent females (Grigg and Bowman, 2011).

Weight is defined by Kent (2006) as the force of attraction exerted on an object by the gravitational pull on the earth. This force of attraction exerted by an entity depends on its heaviness. In this study, weight refers to how heavy somebody is. This determines the plans and methods (management) to be used to achieve a desired weight. Management in relation to weight is termed weight management and is achieved through regular practice of weight control measures as a lifestyle. Practice according to Twichell (2013) refers to anything you do regularly that nurtures you. Therefore, in this study, weight management practices refers to measures individuals undertake regularly in relation to how heavy they are, which helps to nurture them to their desired body weight.

Weight is usually a product of energy intake and expenditure. Weight management as opined by Samuel (2006) involves the establishment of equilibrium between energy intake and expenditure. Imbalance of energy budgets, results in either overweight or underweight. Over-weight may result when energy intake continuously exceeds its expenditure, depending on the individuals' basal metabolic rate (BMR). Under weight is used to describe a human who is considered to be under or below a healthy weight. A healthy weight is the weight your body naturally settles into when you consistently eat a nutritious diet, are physically active and balance the calories you eat with the physical activity you do. A BMI of less than

18.5 is usually referred to as underweight (National Heart, Lung and Blood Institute, NHLBI, 2007) and can increase the risk of clinical conditions such as anemia and low body mass; it can also lead to distortion of body image amongst teenagers and young adults (Ministry of Health, 2010).

Dianne, Joan, Alison, Jennifer, and Joseph (2002) in their study recorded that 37.9 per cent of females are reported to engage in unhealthy weight management practices. Wharton, Adams and Hampl (2008) observed that 50 per cent of female students are trying to lose weight while 12 percent of them had inaccurate body weight perception. Hakim, Muniandy and Danish (2012) stated that prevalence of underweight is higher than overweight or obesity among university students. Huda and Ruzita (2011) in their study found out that 27% of university students are underweight and that 12 per cent of them are overweight or obsess. According to these researchers, 20.9 per cent of female students are underweight while 16.7 per cent of male students are underweight. Similarly, Ansari, Clausen, Mabhala and Stock (2010) observed that females have more desire to be thin or have a leaner body and therefore tends to have more negative attitudes towards their body and that this desire to have lean body might also contribute to the prevalence of high underweight among university students. Adedayo and Ojofeitimi (2013) observed that 57.1 percent of females are obese.

Literature and observation show that weight management is a gross problem among female university students unlike their male counterparts. Thus, these young women seek measures to control their weight. Nichter, Riten, Vicjovic and Aickin (1995) stated that weight management measures are classified as either healthy and or accepted such as diet prescribed by specialists and certain types of fitness exercises or unhealthy and risky such as the use of diet pills, laxatives and vomiting. Most girls panic when they realize that they have put on an extra weight and either go on starvation or reduce their food intake, diet or practice exercises, use laxatives or vomiting or use diet pills. The reasons behind such healthy and unhealthy weight management practices according to Felts, Parrillo, Chenier, Dunn (1996) are issues of appearance. According to Patton, Johnson-sabine, Wood, Mann and Wakeling (1990), because society equates thinness to beauty and attractiveness in women, it is not surprising that women tend to be preoccupied with losing weight and achieving a slim physique at young ages. More so, misconception of body weight is common to female college students (Marchi, & Cohen, 1990). These may be the case with female undergraduates in Nnamdi Azikiwe Univeristy Awka as the location of their school in an urban area may influence the female students' consciousness of their appearance. Thus, some may be happy with their weight and appearance as they

assumed to be okay while others may not. In these cases, they sought means to control their weight either by dieting, use of exercise, starvation, cutting down caloric intake, avoiding eating at nights or use of diet pills, appetite suppressants, and laxatives. Some of these measures are healthy while some are unhealthy and have serious implications for health and healthy living.

Objectives of the Study

The purpose of the study was to find out the weight management practices among female undergraduates in Nnamdi Azikiwe University, Awka. Specifically, the study sought to find out the:

1. healthy weight management practices of the female undergraduates.
2. unhealthy weight management practices of female.
3. reasons behind the undergraduates' weight management practice.
4. whether the undergraduates' weight management practices are based on age.

Research Questions

The following questions were posed to guide the study.

1. What are the healthy weight management practices of the female undergraduates?
2. What are the unhealthy weight management practices of the female undergraduates?
3. What are the reasons behind the undergraduates' weight management practices?

4. What are the undergraduates' weight management practices according to age?

Methodology

Research Design: The descriptive research design, utilizing the cross-sectional survey was used in this study.

Area of Study: The study was conducted in Nnamdi Azikiwe University, Awka. The campus is situated in an urban area of the State's capital along the express road.

Population for the Study: The population for the study consisted of 10,500 female undergraduates in eleven faculties of Nnamdi Azikiwe University, Awka for 2012/2013 academic session. Records from the Students' Affairs Department, Nnamdi Azikiwe University, Awka, 2012, shows that the number of female undergraduates according to faculties are as follows: faculty of Arts, 1268, Education, 1347, Engineering, 327, Environmental Sciences, 872, Law, 795, Social Sciences, 1421, Basic Medical Sciences, 784, Health Sciences and Technology, 918, Medicine, 729, Natural Sciences, 1004 and Management Sciences, 1035. These female undergraduates are on a programme of study ranging from one year to six years of study and are mainly under 30 years of age.

Sample and Sampling Techniques: The sample size for the study consisted of 330 female undergraduates selected from fifteen departments from the selected five faculties out of ten faculties in Nnamdi Azikiwe

University, Awka using multi-stage sampling procedure. In the first stage, five faculties-Natural Sciences, Social Sciences, Arts, Education, Management Sciences were selected out of eleven faculties in Nnamdi Azikiwe University Awka using purposive sampling technique. The reason for the choice of these faculties is that they have more of female students unlike faculties like engineering. In the second stage, three departments were selected from each of the selected faculties using simple random technique. This gave a total of fifteen (15) departments selected for the study. The third stage involved purposive selection of eleven (11) female students each from second and third years. This gave a total of twenty-two (22) female undergraduates selected for the study. Therefore, from the selected fifteen (15) departments, a total of three hundred and thirty (330) female undergraduates were selected and used for the study. The reason for purposive selection of second and third year's female undergraduates is that the first year female undergraduates were assumed to be relatively naive about weight management while the final year female undergraduates were assumed to be busy with their project work and degree examinations.

Instrument for Data Collection: A two-sectioned questionnaire with rating scale of yes or no, served as the instrument for data collection. Section A contained two items on the socio-demographic data of the respondents

while section B consisted of twenty-two items on weight management practices against which respondents ticked the options that best applied to them. Face validity of the instrument was established by the judgment of three experts in research. The reliability of the instrument was determined by test-retest on twenty (20) female undergraduates in Nsukka campus of the University of Nigeria, to test the stability of the instrument. Pearson product moment correlation coefficient using the raw score method was used to compute their scores and test the reliability of the instrument. A correlation coefficient of 0.828 were

obtained. This was considered high enough to be used for the study.

Data Collection and analysis Technique: Data for this study were collected by the researchers with the help of two assistants. Three hundred and thirty (330) copies of the instrument were administered on the respondents and collected on the same day. A 100 per cent return rate was achieved. However, only 310 copies were found usable for analysis. Data were analyzed using percentages.

Results: The following findings were made:

Healthy Weight Management Practices of Female Undergraduates

Table 1: Responses on healthy weight management of the female undergraduates (n=310)

S/N	Healthy weight management practices	Responses			
		Yes		No	
		f	%	f	%
1.	Exercise	300	96.8	10	3.2
2.	Cutting-down energy giving food e.g fufu, yam,	280	90.3	30	9.7
3.	Not eating at nights	200	64.5	110	35.5
4.	Avoiding snacks in-between meals	250	80.6	60	19.4
5.	Avoiding fatty foods eg fried foods	150	48.4	160	52
6.	Eating a lot of fruits and vegetables	162	52.3	148	48
7.	Drinking at least 8-10 glasses of water daily	147	47.4	163	53

Table 1 shows that majority (96.8% and 90.3%) of the respondents use regular exercise and cutting down on in-take of energy giving foods as weight management practice. In the Table also, 64.5% do not eat at nights, 80.6% avoided snacks in-between meals, 48.4% avoided fatty foods, 52.3% ate a lot of fruits and vegetables and 47.4% drank at least 8-10 glasses of water daily in order to manage their weight.

Unhealthy weight management practices

Table 2: Responses on unhealthy weight management practices of the female undergraduates (n=310)

Unhealthy weight management practices	Responses			
	Yes		No	
	f	%	f	%
Use of laxatives	34	11	276	89.0
Starvation	200	64.5	110	35.5
Use of diet pills	150	48.8	160	51.6
Dieting (following a specified meal plan)	218	70.3	92	30
Vomiting to empty stomach after over eating	3	1.0	307	90
Use of appetite suppressants	11	3.5	299	96.5
Use of tummy belt	35	11.3	275	89

Table 2 shows that majority (70.3%) of the respondents use starvation while and 64.5% follow a diet plan in managing their weight. The Table also shows that most of the students (96.5%, 89.0% and 89%) do not use

appetite suppressants, laxatives, and tummy belts respectively in the course of managing their weight.

Reasons for weight management

Table 3: Responses on reasons for weight management practices of the female undergraduates (n=310)

Reasons for weight management	Responses			
	Yes		No	
	f	%	f	%
To have slim physique	290	93.5	20	6.5
To have flat tummy	307	99.0	3	0.9
To gain a little weight	120	38.7	190	61.3
To lose weight	284	91.6	26	8.4
To be attractive	250	80.6	60	19.4
To look elegant	215	69.4	95	31
To be healthy	310	100	0	0
To be smart	305	98.4	5	1.6

Table 3 shows that all (100%) of the students agreed that they manage their weight in order to be healthy and also to have flat tummy (99.0%). Table 3 also shows that a good number of them 80.6% and 69.4% control their weight in order to be attractive and

look elegant respectively. It is also noteworthy that 38.7% of the respondents want to gain a little weight.

Age and weight management

Table 4: Responses on the female undergraduates' weight management practices based on age (n=310)

S/N	Weight Management Practices											
	Ages											
	16-20yrs (95)		21-25yrs (179)		26yrs& above (36)							
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
	f	%	f	%	f	%	f	%	f	%	f	%
1. Exercises	95	100	0	0	179	100	0	0	36	100	0	0
2. Cutting down energy foods	86	91	9	9.5	162	91	17	9.5	32	88.9	41	1.1
3. Not eating at nights	34	35.8	51	53.7	144	80.4	51	28.5	22	61.1	14	38.9
4. Avoid snacks in-between meals	79	83.2	16	16.8	143	79.9	36	20.1	28	77.8	8	22.
5. Avoid fatty foods foods	18	18.9	77	81.0	104	58.1	75	41.9	28	77.8	8	22.2
6. Eating a lot of vegetables	32	33.7	63	66.3	96	53.6	83	46.4	22	61.1	14	38.9
7. Drink 8-10 glasses of water daily	37	39.0	58	61.1	92	51.4	87	48.6	18	50	18	5.0
8. Use of laxatives	0	0	95	100	24	13.4	155	86.6	4	11.1	32	88.9
9. Starvation	47	49.5	48	50.5	134	74.9	45	21.1	19	52.8	17	47.2
10. Use of diet pills	24	25.3	71	74.7	100	55.9	79	44.1	26	72.2	10	27.8
11. Dieting	54	56.8	41	43.2	146	81.6	33	18.4	18	50	18	50
12. Vomiting to empty stomach	1	1.1	94	98.9	2	1.1	177	98.9	0	0	36	100
13. Use of appetite suppressants	2	2.1	93	97.9	8	4.5	171	95.5	1	2.8	35	97.2
14. Use of tummy belts	12	12.6	83	87.4	19	10.6	160	89.4	4	11.1	34	94.4

Table 4 shows that irrespective of the students' age, all (100%) of them engage in exercise. A good number (80.4% and 81.6%) of students aged 21-25 do not eat at nights and practiced dieting respectively, while a few number of students (12.6%) that practice use of tummy belts are within ages 16-20 years.

Discussion of findings

The discussion on healthy weight management practices of female undergraduates in Nnamdi Azikiwe University, Awka, is based on the data presentation in Table 1. Female undergraduates in Nnamdi Azikiwe University Awka had healthy weight management practices (69.0%). This result is satisfactory. They had highest score in exercise (100%). The explanation for this finding may likely be due to the location of the institution

in an urban area because students in institutions in urban areas tend to be enlightened on various exercise facilities and fitness programmes, thus, emerging fitness and exercise centers in recent times may contribute to it. The female students also practice cutting down on energy giving food eg: yam, rice, cassava, bread (90.3%) as a way to control their weight. These combination of exercise and cutting down on energy giving foods weight management practices of the students, supports Samuel (2006) view that the principle of weight management should be to strike a balance between caloric intake and expenditure. The implication of this finding to health and healthy living is that it helps the individual to have a healthy weight that is suitable for the individuals' height, age and gender. Also, it helps people to be healthy and fit enough to

carry out their academic and other social activities, live a more productive life and maintain optimal well-being.

The discussion on unhealthy weight management practices of female undergraduates in Nnamdi Azikiwe University, Awka, is based on the data presentation in Table 2. A good number of the female undergraduates (48.8%) use diet pills while very few 11.3% use tummy belts. Also the table revealed that 3.5% of them use appetite suppressants while 1.3% use laxatives and 1.0% use vomiting to empty stomach after overeating. This result agrees with Nicter, Riten, Vickovic and Aichen (1995) observation that when most young girls realize that they have put on an extra weight, they either go on starvation or diet, use laxatives or vomiting which may not be enjoyable at all. This finding has implications for the health and healthy living because these weight management practices are unhealthy. Unhealthy weight management practices such as starvation in form of anorexia nervosa, use of diet pills, use of laxatives to induce vomiting, and use of appetite suppressants have serious implications for health and healthy living as these unhealthy weight control practices can predispose their users to some respiratory and digestive problems such as ulcer, and even fertility problems especially in females

The discussion on the reasons for the students' weight management is based on the data presentation in Table 3. Most of students manage their

weight to be healthy, have flat tummy, be smart and have a slim physique. This result is anticipated and therefore not surprising because Patton, Johnson-Sabine, Wood, Mann and Wakeling (1990) and French, Perry, Leon and Fullkerson's (1995) had earlier found out in their study that societal equation of thinness to beauty and females' consciousness of their weight forms part of the reasons why females sought to control their weight. This may be why Felts, Parrillo, Chenier and Dunn (1996) opined that issues of appearance have become a matter of necessity and form part of the reasons why people try to control their weight. Therefore, this study encourages the weight watchers to make a shift from trying to achieve a slimmer physique to maintaining a healthy weight that is suitable for their age, gender and height.

Table 4 shows that irrespective of the students' age, all (100%) of them engage in exercise. A good number (80.4% and 81.6%) of students aged 21-25 do not eat at nights and practiced dieting unlike those between ages 16-20 and 26 above, while a few number of students (12.6%) that practices use of tummy belts are within ages 16-20 years. This finding agrees with Huladia's (2012) opinion that age has influence in the methods females adopt in controlling their body weight. This has implication for the students' health and healthy living because as young females seek to control their weight, they may become underweight and malnourished, and underweight people are prone to some

disease, which includes digestive disease, respiratory diseases, tuberculosis and infertility especially in females (Bray, 1992).

Conclusion

Based on the findings of the study and discussions, the following conclusions were drawn: a good (76%) number of the female undergraduates in Nnamdi Azikiwe University, Awka use healthy weight management practices; few (32%) of them adopted unhealthy weight management practices; and their reasons for weight management are based on social judgment of appearance and the students' consciousness of their appearance. These findings may be due to the location of the university in an urban area that exposes the undergraduates to eating of junk foods, and a number of programmes that tends to raise the students' consciousness toward their body image and weigh related issues.

Recommendations

Based on the findings of the study, the following recommendations were made.

1. There is need to include weight control programmes in the secondary school curriculum to expose adolescents to weight and weight related issues at younger age.
2. Parents should ensure that they inculcate healthy eating habits in the life of their children, especially females to equip them with the right eating habits early in life.

3. Seminars should be organized for undergraduates, especially the females to educate them on the dangers inherent in adopting unhealthy weight management practices.

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