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Attitude Towards Fast Food Consumption Among Students in a Private Nigerian University by Gender, Academic Level, and Marital Status

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ABSTRACT

Introduction: There are strong positive relations between fast food consumption and worse health conditions such as obesity, diabetes mellitus, and hypertension. In the present study, attitudes of students in a private Nigerian university by gender, academic level, marital status towards fast food consumption were investigated.

Method: A total of 322 Nigerian university students were involved in the study. Participants were 145 men and 177 women who were 18-26 years of age. An online survey (questionnaire) was created and shared only with participants to get their demographic features and attitudes towards fast food consumption.

Results: The percentage of participants having fast food consumption daily is 67%. Men prefer to eat fast food every day, but women prefer it a few times a week or about once a week. The most reasons for fast food consumption were 'convenience' (26%), 'variety of options' (32%), and 'limited time/no access to cooking' (19%). Men reported 'convenience' and 'taste' as a reason for their fast food consumption preference, but women reported 'variety of options', 'convenience', and 'limited time/no access to cooking'. Singles prefer to eat fast food every day, but the married participants prefer it a few times a week or about once a week.

Conclusion: There is an increase in the incidence of fast food consumption in Nigerian university students. It can be predicted that this trend will cause a high prevalence of obesity, hypertension, and diabetes mellitus in adulthood period and gestational diabetes mellitus in their children. Therefore, students, especially men and single ones, should be educated on the negative effects of fast-food consumption.

Key words: Fast food, Fast food consumption, Obesity, Diabetes mellitus

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INTRODUCTION

Fast food is food such as hamburgers, sausages, and pizza that can be served ready to eat fast. Fast food and junk food are often used synonyms. The junk food includes high energy with high sugar, fat, and salt content, but low nutrient with low protein, fiber, vitamin, and mineral content. Fast food can be defined as the food prepared before or prepared rapidly and obtained from self-service venues without waiting for more time [1]. The number of women working is going up because of changes in the family structure and urbanization in all countries in last years. The studying time of university students has increased due to their increased projects and assignments. Therefore, the amount of fast food industries and the number of fast food restaurants is increasing in recent years [2]. Consequently, the prevalence of obesity and diabetes mellitus in adolescents and adults [1] and the increased risk of gestational diabetes in their children is increasing worldwide [3-5]. There are a lot of studies reported the strong positive relations between the availability of fast food and the quantity of fast food consumption and, also, between fast food consumption and worse health conditions [6-8].

The feeding from fast food restaurants among university students has increased fivefold over the past three decades [9]. Besides, the rate of obesity, which is one of the most serious public health problems in especially children and adolescents, is increasing worldwide significantly [10]. The reasons for increased fast food consumption are availability, affordable costs, menu choices, flavor, and taste [11]. About 30% of children and more than 50% of university students have fast food consumption daily [6,9]. Moreover, more than 33% of adults and 17% of children and teenagers are obese in the USA [12]. Increased food consumption and considerable changes in food habits are the most important factors of obesity [13] and the poor diet among young people at recent years [14]. In the present study, attitudes of students in a private Nigerian university concerning their gender, academic level, marital status towards fast food consumption were investigated.

METHODS

Participants

To get their demographic features and attitudes towards fast food consumption, an online survey (questionnaire) was created and shared only with participants, all students of the Nile University of Nigeria. To keep the confidentiality and privacy of the survey, a secured internet link for the survey was produced and shared only with all students of Nile university to fill out. A total of 322 university students participated in this survey (177 women, mean age=18.213, SD=5.274; 145 men, mean age=17.341, SD=5.279) voluntarily. All subjects completed the study voluntarily. The numbers of students concerning their academic levels were 156 from 100 level (the first year of education), 72 from 200 level (the second year of education), 59 from level 300 (the third year of education) and 35 from 400 level (the fourth year of education). The age of the participants was not different statistically by gender.

Inclusion criteria

Willingness to participate. Only university students could participate. Only undergraduate students studying were included in the study.

Exclusion criteria

The study excluded participants that were not willing to be involved. Subjects with psychiatric or neurological problems that might change their fast food consumption were not involved.

Procedure

The experimental protocol was by following international ethical standards. The study was performed per under the Helsinki Declaration (1975, revised in 1996-2013) [15]. It was a descriptive cross-sectional study. The aims and objectives of the study were explicitly explained to the participants before the commencement of the study. All participants voluntarily gave written informed consent to participate in the study.

Statistical analyses

Measured values are given as a mean +/- standard deviation (SD). Statistical analysis was performed using SPSS for Windows version 18. The 'crosstabs' descriptive statistics (chi-square test) to get gender, marital status, and academic level related differences were used. A p-value of less than 0.05 was considered statistically significant.

RESULTS

Table 1 shows sociodemographic features of the participants.

Of all participants, 217 (67%) consume it every day, 56 (17%) a few times a week, 39 12%) about once a week, 5 a few times a month, 3 once a month, and 2 less than once a week. There is a statistically significant gender difference in terms of the frequency of fast food consumption (chi-square=69.741, p=0.00), men prefer to eat fast food every day, but women prefer it a few times a week or about once a week (Table 2).

Of all participants, 83 (%6%) reported the 'convenience' as a reason for fast food preference, 24 (7.5%) 'taste', 9 (3%) 'price', 102 (32%) 'variety of options', 16 (5%) 'location', 19 (6%) 'as treat', 8 (2.5%) 'limited cooking skills', 61 (19%) 'limited time/no access to cooking'. There is a statistically significant gender difference in terms of the causes of fast food consumption (chi-square=106.788, p=0.00), men report 'convenience' and 'taste' as a reason for their fast food consumption preference, but women report 'variety of options', 'convenience' and 'limited time/no access to cooking' (Table 3).

There was no statistically significant academic level difference in terms of the frequency of fast food consumption (Table 4).

Table 1: Sociodemographic features of the participants.

Gender			**Male: 145 (45%)**	**Female: 177 (55%)**
Age (years)	≤ 18: 72 (22%)	19-21: 137 (43%)	22-24: 96 (30%)	≥ 25: 17 (5%)
Marital Status			Single=288 (89%)	Married=34 (11%)
Level	100: 54 (17%)	200: 186 (58%)	300: 55 (17%)	400: 27 (8%)

Table 2: The frequency of fast food consumption by gender.

How often you consume fast food	Men (N=145)	Women (N=177)	Total (N=322)
Every day	132 (61%)	85 (39%)	217 (67%)
A few times a week	11 (20%)	45 (80%)	56 (17%)
About once a week	2 (5%)	37 (95%)	39 (12%)
A few times a month	0	5 (100%)	5 (2%)
Once a month	0	3 (100%)	3 (1%)
Less than once a month	0	2 (100%)	2 (1%)

Table 3: Reasons for fast food consumption by gender.

Reasons for fast food consumption	Men (N=145)	Women (N=177)	Total (N=322)
Convenience	61 (73.5%)	22 (26.5%)	83 (26%)
Taste	17 (71%)	7 (29%)	24 (7.5%)
Price	2 (22%)	7 (78%)	9 (3%)
Variety of options	8 (8%)	94 (92%)	102 (32%)
Location	5 (31%)	11 (69%)	16 (5%)
As treat	11 (58%)	8 (42%)	19 (6%)
Limited cooking skills	8 (100%)	0	8 (2.5%)
Limited time/no access to cooking	33 (54%)	28 (46%)	61 (19%)

Table 4: The frequency of fast food consumption by academic level.

How often you consume fast food	Academic level			
	100 (N=156)	200 (N=72)	300 (N=59)	400 (N=35)
Everyday	115 (53%)	47 (22%)	36 (16%)	19 (9%)
A few times a week	22 (39%)	13 (23%)	9 (16%)	12 (22%)
About once a week	19 (49%)	10 (26%)	8 (20%)	2 (5%)
A few times a month	0	2 (40%)	3 (60%)	0
Once a month	0	0	3 (100%)	0
Less than once a month	0	0	0	2 (100%)

Table 5: The frequency of fast food consumption by gender.

How often you consume fast food	Single (N=288)	Married (N=34)
Everyday	217 (100%)	0
A few times a week	39 (70%)	17 (30%)
About once a week	31 (17%)	8 (83%)
A few times a month	0	5 (100%)
Once a month	1 (33%)	2 (67%)
Less than once a month	0	2 (100%)

There is a statistically significant the marital status difference in terms of the frequency of fast food consumption (chi-square=120.481, p=0.00), single participants prefer to eat fast food every day, but the married participants prefer it a few times a week or about once a week (Table 5).

DISCUSSION

The prevalence of obesity and hypertension has increased rapidly among Chinese children [16]. Obesity prevalence is 20% in children in China by 2010 [17]. Hypertension prevalence is 20.2% in Chinese boys and 16.3% in girls; elevated BP was also common among obese children [18]. They suggested that the shifts in Chinese children's food intake might have contributed to the increase in obesity and hypertension. A recent study reported that the prevalence of overweight ranged from 20.3%-35.1%, while the prevalence of obesity ranged from 8.1%-22.2% in Nigeria, and the prevalence of overweight and obese individuals in Nigeria is of epidemic proportions [19]. It has been reported that

Table 6: Questionnaire.

Section A			
Age			
18 and below	19-21	22-24	25 and above
Gender			
Female	Male		
Marital Status			
Single	Married	Divorced	
Academic Level			
1st	2nd	3rd	4th
Section B			
Do you consume fast food?			
Yes	No		
How many times do you consume fast food on average?			
Everyday	A few times a week	About once a week	Once in a month
What is the main reason for choosing to eat at a fast food restaurant/shop?			
Convenience	Taste	Price	Location
As treat	Variety of option	Limited skills of cooking/time	

there is an increase in the incidence of diabetes mellitus in Nigeria [20]. They suggested that urban-dwelling, physical inactivity, advanced age, and unhealthy diet including fast food are important risk factors for diabetes mellitus among Nigerians.

In the present study, the percentage of participants having fast food consumption daily is 67% and this rate is very high and not acceptable for public health. Also, male university students prefer to eat fast food every day, but female ones prefer it a few times a week or about once a week. These results were consistent with the results of a recent study [21]. In a Kuwait university, Most of students (81.4%) consumed fast food more than twice per week and more male students (54.8%) than women (38.7%) were overweight or obese; however, there were no differences in the fast-food frequency per body mass index or sex. They have the risk of important health problems such as obesity, hypertension, diabetes mellitus [1], and their children have the risk of gestational diabetes [3-5]. It has been reported that fast food consumption was related to abdominal obesity as Waist-Hip Ratio. The prevalence of fast food consumption and obesity/overweight in Iranian student is high. Fast food consumption was associated with abdominal obesity-based Waist-Hip Ratio [22]. Therefore, there is a need to pay closer attention to combating these health disorders. A fast food consumption cutting down policy can be highly recommended to university managements.

The most reasons for fast food consumption were 'convenience' (26%), 'variety of options' (32%), and 'limited time/no access to cooking' (19%). Men reported 'convenience' and 'taste' as a reason for their fast food consumption preference, but women reported 'variety of options', 'convenience', and 'limited time/no access to cooking'. Similarly, Kuwait university students reported that 'taste' was the most reported motivator to consume fast food (46.7%) and women were significantly more likely to value taste as compared to men (49.8% vs. 38.9%) [21]. Also, there was the marital status difference in terms of the frequency of fast food consumption, single participants prefer to eat fast food every day, but the married participants prefer it a few times a week or about once a week.

Limitation

This study had several limitations. First, data were collected from students at a private Nigerian university, but not from the state universities, where students may have different attitudes/behaviors concerning fast-food consumption. Second, factors that may be associated with fast-food intake were not addressed and could have provided us with a better understanding of students' fast-food intake, including perceived body image, triggers for consumption (e.g., stress), dietary knowledge, and parental fast-food intake.

CONCLUSION

It can be stated that there is an increase in the incidence of fast food consumption in Nigerian university students. It can be predicted that this

trend will cause a high prevalence of obesity, hypertension, and diabetes mellitus in adulthood period and gestational diabetes mellitus in their children. Therefore, students, especially men and single students, should be educated on the negative effects of frequent fast-food consumption.

PERCEPTION OF PRIVATE UNIVERSITY STUDENT ON FAST FOOD CONSUMPTION

This research is to determine the habits, preference, and reasons why students prefers fast food. To this end we kindly request that you complete the following questionnaire. Your response is of utmost importance to us.

REFERENCES

1. Pereira MA, Kartashov AI, Ebbeling CB, et al. Fast food habits, weight gain, and insulin resistance (the CARDIA study): 15-year prospective analysis. Lancet 2005; 365:36-42.
2. Dunn KI, Mohr P, Wilson CJ, et al. Determinants of fast food consumption. An application of the theory of planned behaviour. Appetite 2011; 57:349-357.
3. Donazar-Ezcurra M, Lopez-Del Burgo C, Martinez-Gonzalez MA, et al. Soft drink consumption and gestational diabetes risk in the SUN project. Clin Nutr 2018; 37:638-645.
4. Dominguez LJ, Martínez-González MA, Basterra-Gortari FJ, et al. Fast food consumption and gestational diabetes incidence in the SUN project. PLoS One 2014; 9:e106627.
5. Lamyian M, Hosseinpour-Niazi S, Mirmiran P, et al. Pre-pregnancy fast food consumption is associated with gestational diabetes mellitus among Tehranian women. Nutrients 2017; 9:216.
6. Al-Otaibi HH, Basuny AM. Fast food consumption associated with obesity/overweight risk among university female student in Saudi Arabia. Pak J Nutr 2015; 14:511-516.
7. Andreyeva T, Kelly IR, Harris JL. Exposure to food advertising on television: Associations with children's fast food and soft drink consumption and obesity. Econ Hum Biol 2011; 9:221-233.
8. Dunn RA, Sharkey JR, Horel S. The effect of fast food availability on fast food consumption and obesity among rural residents: An analysis by race/ethnicity. Econ Hum Biol 2012; 10:1-13.
9. Nixon H, Doud L. Do fast food restaurants cluster around high schools? A geospatial analysis of proximity of fast food restaurants to high schools and the connection to childhood obesity rates. J Agric Food Syst Community Dev 2016; 2:181-194.
10. Williams J, Scarborough P, Matthews A, et al. A systematic review of the influence of the retail food environment around schools on obesity-related outcomes. Obes Rev 2014; 15:359-374.
11. Shah T, Purohit G, Nair SP, et al. Assessment of obesity, overweight and its association with the fast food consumption in medical students. J Clin Diagn Res 2014; 8:5-7.
12. Dumanovsky T, Huang CY, Nonas CA, et al. Changes in energy content of lunchtime purchases from fast food restaurants after introduction of calorie labelling: cross sectional customer surveys. BMJ 2011; 343:4464.
13. Block JP, Scribner RA, DeSalvo KB. Fast food, race/ethnicity, and income. Am J Prev Med 2004; 27:211-217.
14. Andreyeva T, Kelly IR, Harris JL. Exposure to food advertising on television: Associations with children's fast food and soft drink consumption and obesity. Econ Hum Biol 2011; 9:221-233.
15. https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/
16. Wang Y, Wang L, Qu W. New national data show alarming increase in obesity and noncommunicable chronic diseases in China. Eur J Clin Nutr 2017; 71:149-150.
17. Zhao Y, Wang L, Xue H, et al. Fast food consumption and its associations with obesity and hypertension among children: Results from the baseline data of the childhood obesity study in china mega-cities. BMC Public Health 2017; 17:933.
18. Dong H, Yan Y, Liu J, et al. Alarming trends in ideal cardiovascular health among children and adolescents in Beijing, China, 2004 to 2014. Int J Cardiol 2017; 231:264-270.
19. Chukwuonye II, Chuku A, John C, et al. Prevalence of overweight and obesity in adult Nigerians: A systematic review. Diabetes Metab Syndr Obes. 2013; 6:43-47.
20. Uloko AE, Musa BM, Ramalan MA, et al. Prevalence and risk factors for diabetes mellitus in Nigeria: A systematic review and meta-analysis. Diabetes Ther 2018; 9:1307-1316.
21. Shaban L, Alkazemi D. Trends in fast-food consumption among Kuwaiti youth. Int J Prev Med 2019; 10:44.
22. Mohammadbeigi A, Asgarian A, Moshir E, et al. Fast food consumption and overweight/obesity prevalence in students and its association with general and abdominal obesity. J Prev Med Hyg 2018; 59:236-240.