Analysis of healthy lifestyle among girl-children in the notheren Nigeria.

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Abstract

Studies have revealed that there are numerous springing forth in the northern part of Nigeria, which inflicts the girl-children. This cross-sectional study was conducted to analyze healthy lifestyles among girl-children in the northern part of Nigeria. A total of 347 participants (parents of 347 girl-children) participated in this study, and the primary data was gathered from the period of 2nd July to 8th July 2021 in Minna, Niger State. The majority of participants were in the categories of 15-18 years constituting 62.54%, 55.33% of the participants were underweight which may be as a consequence of short of balanced diet, short of access to food, poor feeding in infant, 35.45% of the participants were average weight and 9.22% were overweight. From the analysis, it was revealed that there is a connection between parents education and physical activities of girl-children (p=0.001<0.05). Also, there is a connection between parent's education and the eating habit of girl-children (p=0.027<0.05) in Minna, Nigeria. Literate parents have proper knowledge and observance of recommendations on balanced diet, healthy eating habits and physical activity, while illiterate parents are not exposed to health education programs. Finally, the study found that a greater number of girl-children do not cultivate the healthy living because of parent influence and the education level of children. Hence, it is recommended that the public and private stakeholders should engineer, educate, and enforce health training programmes for all parents in the northern part of Nigeria, especially Minna, Niger State which is the study area. Health education subjects should be included in the education curriculum from the primary to the secondary level.

Introduction

The behaviours of individuals are being determined by their health lifestyles and general well-being. In fact, significant health behaviour such as eating balanced diet, frequent exercise, and other form of physical activities are related to positive well-being. While smoking, eating unbalanced meal, eating at odd times, poor intake of food and drinks among all, often result to negative well-being and it may cause obesity, diabetes, stunted growth, hypertension, poor reasoning and other form of vulnerabilities in 2018.

Aldeen and Ibrahim, Manwa noted that the behaviours of individuals toward health promotion are a positive means to living and a means of increasing self-actualization and well-being. There is evidence that the adoption of four major health behaviours such as the avoidance of smoking, moderate drinking of alcohol, engaging in physical activities and daily consumption of at least five portions of vegetables and fruits may extend one's life. On the opposite, Higgins and Dale posit that it is erroneous to presume that the daily intake of five portions of vegetables and fruits

is a determinant of balanced diet. They concluded in their study that there is not enough substantiation to agree to the supposition of a positive relationship between healthy eating of fruits and vegetables with human well-being and suggested more studies to verify the link between good health and the intake of fruits and vegetables. Nonetheless, the studies of Awosan and Hicks in 2013 confirmed that fewer people partake in regular physical activity and partake in healthy food intake. In fact, AsekunOlarinmoye noted that alcohol usage, tobacco intake, physical inactivity and poor food intake were among the foremost causes of death reported globally. The statistics of the World Health Organisation indicated that at least 4.9 million die annually as a consequence of tobacco intake, 1.9 million die annually as a consequence of physical inactivity. 2.7 million Death annually as a consequence of low fruit and vegetable intake. Globally, the trend of contagious and non-contagious diseases has become a major issue in the health sector. In the developing countries, there was prediction in the year 2020 that out of every 10 deaths, 7 deaths will

emanate as a consequence of either communicable or non-communicable diseases [1].

Additionally, it was revealed in an international publication that unending diseases are beginning to inflict the younger generation instead of being restricted to adulthood (U.S. Health in International Perspective in 2013). Particularly, the trends of obesity and stunted growth will be rising and it will be a major factor of chronic diseases and death. According to Al-Rethaiaa, unhealthy lifestyle involves poor food intake, substance intake and short of physical activities; they are among the chief causes of stunted growth and obesity. One major approach to combat health related diseases among all ages including girl-children is the promotion of healthy lifestyle.

Walker et al. in 1987 defined lifestyle as the way and manner of living, whether healthy or unhealthy. Lifestyle is rooted on individuals or parental choice factors which are influenced by socioeconomic factors. Further stated that a healthy lifestyle induces human wellness, self-actualization, and fulfilment of an individual. A healthy lifestyle is essential for improving health conditions. Al-Hazzaa in 2011, conducted their study in the Western and Arab regions, and found that young people are not partake in food intake that consist of balanced diet. They were consuming more fats, and not participating in some forms of physical activity. Also, smoking is most prevalent among the participants particularly from aged 15 years or older, and most practiced by males. It is found that during the growth process there is a need for intake of balanced diet and engaging in physical activities. It is a period whereby children adapt to a variety of circumstances. In this period, children are more likely to partake in risky health behaviors such as stress, physical inactivity, and poor dietary habits that can negatively affect their well-being [2].

The Studies were carried out in Saudi Arabia and found that poor health lifestyles such as poor eating habits and short of physical activities are predominant among the adults. Nevertheless, they found that exercise contributes significantly to the physical, psychological, and academic progress of students. This was further expanded by Al-Drees in 2016. In Nigeria, many studies have examined healthy lifestyles and behaviour. Nonetheless, while these studies have provided useful data about individual's health issues, they may not be conducted on girl-children especially in the northern part of Nigeria [3].

Despite the gaps, there is ample evidence to show that girl-children in the northern part of Nigeria are exposed to unhealthy lifestyle that could affect their health and wellbeing. Therefore, inasmuch as the girl-children are vulnerable and exposed to unhealthy living, there is a need to provide a plausible research to educate the girl-children and parents on the implications of healthy living. Assessing the lifestyles of girl-children is paramount for achieving fashioned interventions of health promotion in the northern Nigeria which is targeted at improving the quality of living. This study examines girl-children lifestyle behaviours such as food intake, fruits and vegetable intake, exposure to physical activities, and drug uses. This study is purposed to reveal the determining factors and the current state of promoting healthy lifestyles among girl-children in the northern part of Nigeria, particularly in Minna, Niger state [4].

Assuming that girl-children and their parents are educated and knowledgeable about achieving a healthy lifestyle, it was hypothesized in this study that educated parents of girl-children would display a higher level of observance to healthy lifestyles than the uneducated parents of girl-children. The findings that emanate from this study are expected to tailor actions and efforts toward realizing robust healthy living for the citizenry especially the northern dwellers [5].

Materials and Methods

This is a cross-sectional study that was conducted to analyze healthy lifestyles among girl-children in Minna, Nigeria. According to Adeniran, the error allowance calculation was used to determine the sample size. The error term was chosen based on the researcher's discretion. The chosen error allowance of 0.05 and Z score was employed to establish the sample size of 384 based on the equation below. The formulae for achieving sample size $n = Z^2/(4E)^2$. Based on the sample size of 384, questionnaire distribution was targeted to parents or guardians of 384 girl-children. It is assumed that one parent or guardian represent individual girl-child. In the situation whereby there are more than one girl-child in a household, one girl-child will be chosen. Primary data were collected through a convenience sampling technique. A total of 384 girl-children participated in this study but responses obtained from 347 participants were valid.

Results

Statistical Package for Social Sciences (SPSS) version 21 (SPSS Inc. Chicago, IL, USA) was employed for data analysis. Primary data was employed to achieve descriptive statistics which comprises demographic variables and healthy lifestyle which were reported with frequencies and percentages. Chi-square test was used to establish the significant difference between girl-children that have educated parents and those that have illiterate parents based on the health education factor adoption during parenting of girl-children.

From Table 1, findings reveal the demographic characteristics of the participants. A total of 347 girl-children fully completed the surveys and their responses were considered valid for data analysis and reporting. The majority of the participants were between the ages of 15-18 years, constituting 62.54%. The girl-child is a biological female offspring from birth to 18 years. This period covers the pre-nursery, nursery (0-5 years), primary (6-12 years)

and secondary (12-18 years). During this period, the child is fully under the control and care of her parents or guardians or older siblings. Based on this definition, it can be inferred that the major participants will be in secondary school, and they will be able to give reliable information.

Table 1: Demographic characteristics of participants.

Variable	Total (N=347)	
	N	%
Age		
Below 5 years	10	2.88
5-9 years	37	10.66
10-14 years	83	23.92
15-18 years	217	62.54
BMI status (kg/m²)		
Underweight (Below 18.5)	192	55.33
Average weight (18.5–24.9)	123	35.45
Overweight (25.0–29.9)	32	9.22
Obese (30 and above	0	0
Health literacy of parents		
Literate	101	29.11
Illiterate	246	70.89
Yes	101	29.11
No	246	70.89
Family structure		
Nuclear family	86	24.78
Extended family	261	75.22
Health problem		
Yes	77	12.32
No	548	87.68
Health Promoting Lifestyle Profile (HPLP)	Mean ± SD	
Physical activity	12.15 ± 3.42	
Nutrition /eating habits	19.14 ± 4.74	

Note: Source: Authors' Fieldwork (2020).

Furthermore, the National Institute of Health Managing Overweight and Obesity in Adults in 2013, defined Body Mass Index (BMI) as a person's weight in kilograms divided by the square of height in meters. It is important to note that the average BMI should fall between 18.5 kg/m² to 24.9kg/m², if the BMI falls within the range of 25.0 to 29.9, the body is said to be overweight if it is 30 kg/m² and above, the body is said to be obese and if it is below 18.5, the body is said to be underweight. Regarding the BMI of the girl-children, it was revealed that 55.33% of the participants were underweight which may be as a consequence of short of balanced diet, short of access to food, poor feeding in infant, 35.45% of the participants were average weight, and 9.22% were overweight. The issue of underweight is majorly as a consequence of malnutrition as emphasized by UNICEF in 2019 which says that 5 in 10 children suffer from the effects of being malnourished and poor diets.

In addition, regarding the literacy of parents/ guardians on health education, this study revealed that majority of

the parents representing 70.89% are not exposed to health education. The short of exposure to health education may be the chief reason for the record of underweight. While the remaining educated parents representing 26.11% are exposed to health education and will be able to deliver quality health dynamics to their girl-children. Almost all of the participants representing 75.22% belong to an extended family structure consisting of father, two or more wives, children, grandparents and other relatives, while only 24.78% are from nuclear family structure which consists of father, mother and the children. Regarding the health-promoting lifestyle, the mean score was also depicted nutrition or eating habits accounted for the highest mean of 19.14 ± 4.74 followed by physical activity behaviour which accounted for 12.15 ± 3.42. The factors associated with the healthy lifestyle of girl-children in Minna, Nigeria were shown in Table 2. The socio-demographic factors such as age, parent's education and family structure of girl-children were analysed. The model reveals there is a connection between parents' education and physical activities of girl-children ($p=0.001<0.05$). Also, there is a connection between parent's education and the eating habit of girl-children ($p=0.027<0.05$) in Minna, Nigeria. This implies that the parent's level of education can influence the girl-children healthy lifestyle. For instance, educated parents have proper knowledge and observance of recommendations on balanced diet, healthy eating habits and physical activity.

Table 2: Association of a healthy lifestyle and demographic factors of girl-children.

Variable	Physical activity	Nutrition or eating habit
	p-value	p-value
Age	0.063	0.340
Parent's education	0.001	0.027
Family structure	0.425	0.162

Note: p-value significant at p<0.05.

Bhuttan in 2013 noted that malnutrition contributes majorly to child mortality hence; there is a strong rationale for improving nutrition. Globally, there were suggestions on scaling up interventions of effective nutrition by 20% most especially in the low- and middle-income countries which has high record of malnutrition Among these interventions is educating the parents on nutrition as knowledge of effective nutrition would reduce malnutrition. The studies of Fafchamps and Shilpi in 2014 found a nexus between the education of adults and the health condition of the future generation.

Discussion

The WHO indicated that at least 4.9 million people die annually as a consequence of tobacco intake, 1.9 million people die annually as a consequence of physical inactivity, 2.7 million people die annually as a consequence of low fruit and vegetable intake. Additionally, the U.S. Health in International Perspective revealed that unending diseases are beginning to inflict the younger generation instead

of being restricted to adulthood. Particularly, the trends of obesity and stunted growth will be rising and will be a major factor of chronic diseases and deaths which can either be communicable or non-communicable. In fact, in year 2020, there was prediction in the developing countries that out of every 10 deaths, 7 deaths will emanate as a consequence of either communicable or non-communicable diseases. It was on these premises that this present study was carried out [6].

This is a cross-sectional study which was conducted to analyze healthy lifestyles among girl-children in the northern part of Nigeria. A total of 347 participants, participated in this study, and primary data was gathered from the period of 2nd July to 8th July 2021 in Minna, Niger State. The study found that majority of participants were in the categories of 15-18 years constituting 62.54%, 55.33% of the participants were underweight which may be as a consequence of short of balanced diet, short of access to food, poor feeding in infant, 35.45% of the participants were average weight and 9.22% were overweight. From the analysis, it was revealed that there is a connection between parents education and physical activities of girl-children (p=0.001<0.05). Also, there is a connection between parent's education and the eating habit of girl-children (p=0.027<0.05) in Minna, Nigeria. Literate parents have proper knowledge and observance of recommendations on balanced diet, healthy eating habits and physical activity, while illiterate parents are not exposed to health education programs [7-10].

Conclusion

Finally, the study found that a greater number of girl-children do not cultivate the healthy living because of parent influence and the education level of children. Hence, it is recommended that the public and private stakeholders should engineer, educate, and enforce health training programmes for all parents in the northern part of Nigeria, especially Minna, Niger State which is the study area. Health education subjects should be included in the education curriculum from the primary to the secondary level.

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