

## **WEST AFRICAN JOURNAL OF MEDICINE**

ORIGINALITY AND EXCELLENCE IN MEDICINE AND SURGERY





## OFFICIAL PUBLICATION OF

THE WEST AFRICAN COLLEGE OF PHYSICIANS *AND* WEST AFRICAN COLLEGE OF SURGEONS





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## WEST AFRICAN JOURNAL OF MEDICINE



## **ORIGINAL ARTICLE**

## The Relationship between Adolescents' Family Background, Perceived Self-Concept and Health Seeking Behaviour in an Urban City of South-Western Nigeria

La Relation entre le Milieu Familial des Adolescents, le Concept de Soi Perçu et le Comportement de Recherche de la Santé dans une Ville Urbaine du Sud-Ouest du Nigeria

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#### **ABSTRACT**

**BACKGROUND AND OBJECTIVES:** The understanding of adolescents about themselves affects their choices and actions when their health is concerned. This study assessed the relationship between family background, perceived self-concept and health seeking behaviour of adolescents.

METHODS: This was a prospective cross-sectional study involving three secondary schools in Ekiti State, South-western Nigeria. A total of 352 students were recruited through multistage random sampling technique. The Personal Self-Concept Questionnaire (PSC) was used to assess the adolescents' personal self-concept while the health seeking behaviour was adapted from the Botsha Bophelo Adolescent Health Study (BBAHS) adapted questionnaire. The family background was sought from the respondents. Demographic variables were described as means and standard deviations. Categorical variables were reported as frequency distribution and proportions with the Pearson correlation test used to assess the relationship of relevant variables with self-concept.

**RESULTS:** There was negative correlation between the adolescents' family social class and their autonomy self-concept (r = -0.117; p < 0.029). Out of the 42% who had any form of ill-health, 29.6% had sought for medical attention, 8.5% were sexually exposed, 4% and 4.8% were screened for HIV and the use of contraception respectively. Having been hospitalized in the past six months related with their general self-concept (r = -0.124; p < 0.02) and sense of fulfillment (r = -0.118; p < 0.027). Use of cannabis negatively correlated with general self-concept (r = -0.132; p < 0.013) and honesty self-concept (r = -0.127; p < 0.017). Sexual exposure correlated negatively with emotional self-concept (r = -0.116; p < 0.03).

**CONCLUSION:** From this study, the socioeconomic class of the family of the adolescents affected their individuality. In addition, adolescents with high self-concept will not easily seek for appropriate medical attention. **WAJM 2022**; 39(11): 1156–1164.

**Keywords:** Adolescents, Personal self-concept, family background, Health seeking behavior.

## RÉSUMÉ

**CONTEXTE ET OBJECTIFS:** La compréhension que les adolescents ont d'eux-mêmes affecte leurs choix et leurs actions lorsqu'il s'agit de leur santé. Cette étude vise à évaluer la relation entre le milieu familial, la perception de soi et le comportement des adolescents en matière de santé.

MÉTHODES: Il s'agit d'une étude prospective transversale portant sur trois écoles secondaires de l'État d'Ekiti, au sud-ouest du Nigeria. Un total de 352 étudiants a été recruté par une technique d'échantillonnage aléatoire à plusieurs degrés dans les écoles sélectionnées. Le Personal Self-Concept Questionnaire (PSC) a été utilisé pour évaluer le concept de soi des adolescents, tandis que le comportement en matière de santé a été adapté à partir du questionnaire adapté de la Botsha Bophelo Adolescent Health Study (BBAHS). Le contexte familial a été demandé aux répondants. Les variables démographiques ont été décrites sous forme de moyennes et d'écarts types. Les variables catégorielles ont été rapportées sous forme de distribution de fréquence et de proportions. Le test de corrélation de Pearson a été utilisé pour évaluer la relation entre les variables pertinentes et le concept de soi.

**RÉSULTATS:** Il existe une corrélation négative entre la classe sociale familiale des adolescents et leur concept d'autonomie (r = -0.117; p<0.029). Sur les 42% qui présentaient une forme quelconque de mauvaise santé, 29,6% avaient consulté un médecin, 8,5% étaient sexuellement exposés, 4% et 4,8% étaient respectivement dépistés pour le VIH et l'utilisation de la contraception. Le fait d'avoir été hospitalisé au cours des six derniers mois était lié à l'image générale de soi (r = -0,124; p<0,02) et au sentiment d'accomplissement (r = -0,118; p<0,027). La consommation de cannabis est corrélée négativement avec le concept général de soi (r = -0,132; p<0,013) et le concept d'honnêteté (r = -0,127; p<0,017). L'exposition sexuelle est corrélée négativement avec le concept de soi émotionnel (r = -0,116; p<0,03).

CONCLUSION: D'après cette étude, la classe socio-économique de la famille des adolescents a affecté leur individualité. De plus, les adolescents ayant un concept de soi élevé ne chercheront pas facilement à obtenir des soins médicaux appropriés. WAJM 2022; 39(11): 1156–1164

**Mots clés:** Adolescents, concept personnel de soi, contexte familial, comportement de recherche de santé.

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#### INTRODUCTION

The adolescence period is a very important phase in the human growth.<sup>1,2</sup> In this age range, one striking occurrence is the rapid growth and changes that confront adolescents as they traverse from childhood to adulthood. Adolescents who are rapidly changing in outlook are also growing in their cognitive capacity. Most times, this is the period the foundation for adulthood is laid.<sup>2,3</sup> Their perceived external appearance has been noted to be of prime importance to them.<sup>2,4</sup> Often times, these rapid changes in their physical appearance makes them to be engrossed in their identity and self-image.<sup>5,6</sup> There are many factors that contribute to how the outward appearance of adolescents in general are perceived.5 From the influence of their family environment, the disease conditions exposed to and the changing developmental changes which each stage of the adolescence period exerts on the person, many either perceive themselves as abnormal or otherwise. 7,8 For example, a differential increase weight compared to others have been reported to exert a negative influence on self-image perception of some adolescents. 6,9 Many who have increased weight tends to see themselves as abnormal while those who are also lean may also be desirous of adding more weight.9 All these have an impact on the outcome of their perception of self. In addition, the changes that adolescents go through as they grow unto adulthood have an impact on the way they envision themselves into a wellorganized and consistent picture. 10

It has been reported that adolescents' family background has an influence on their educational aspiration and achievement as they mature into adults. 11,12 In addition to this, the educational and vocational status of a parent has also been noted to have an influence on the body mass index (BMI) of adolescents. 13 The family environment has a direct impact on the development of self-efficacy of the adolescent. 14 Selfefficacy which is the belief of an individual in their ability to behave and act in a particular way has been found to be a dominant predictor of intention in the adolescent.15

The self-concept is a product of an individual's self-esteem and self-worth.6 The adolescent's self-concept determines the way they see themself and consequently what they have ability to do and achieve. The level of interpersonal communication has been noted to have a correlation to the adolescent's selfconcept.16 Most of the time, self-concept is built as individuals observe the way other people react to them.17 When an adolescent has poor self-concept, it goes a long way to determine the success in education and or skill acquisition that they engage in.<sup>18</sup> High self-concept has been noted to have a positive impact on job opportunities and gives them the leadership quality and acceptance among their peers. 10 Most time, what people turn out to be in their adulthood are results of what they have imbibed in adolescence. Thus a negative perception of one's self image and self-concept generates a negative adult approach to one's personal care, relationship with others and approach to life challenges

This negative perception of an individual's self-image and concept becomes of great importance when the health seeking behaviour is also affected. Health seeking behaviours are the steps taken by people in order to resolve their health issues when they fall ill. 19 Young people have been reported to seek for help from informal sources rather than from formal medical personnel and hospitals.20 Adolescents and young people have their own medical challenges with which they are encumbered. When they do not seek for help from the right sources, severe forms of presentation and complications in adulthood is the outcome. Adolescents are known to be generally healthy; their exposure to rapid developmental changes, makes it imperative that they are well guided on the use of health services made available to them.<sup>21</sup> Health seeking behaviour are personal actions to promote optimum wellness, recovery and rehabilitation.<sup>22</sup> They can occur with or without a health challenge and cover the spectrum from potential to actual medical problem. Therefore, contained within this concept is the aspect of health promotion that is aimed at preventing disease and includes behaviour such as lifestyle changes.<sup>22</sup> When an adolescent has a poor health seeking behaviour, it tends to make a disease condition get worse before medical attention is sought. Many of these conditions could have been nipped in the bud if they were presented early. However, the patients with these ailments seek for medical attention when complications have emerged. These late presentations are common among adolescents because of their poor attitude towards seeking medical attention.<sup>23</sup> For instance, adolescents often engage in sexual experimentation which makes them susceptible to sexually transmitted infection.<sup>23</sup> When they do not present early because of poor health seeking behaviour, the conditions get worse with attendant complications.

This study therefore assessed the relationship between the family background of adolescents, their perceived personal self-concept and their health seeking behaviour. The essence is to provide information for parents and care givers of adolescents on the importance of building positive relationship with their wards. In addition, adolescents' care givers will know the need to guide them on proper health care seeking behaviors.

### Methodology

This was a prospective crosssectional survey of adolescents in 3 public secondary schools selected through multistage sampling technique in Ado-Ekiti Local Government Area (LGA) of Ekiti State, South-western Nigeria. This was done by dividing the secondary schools in Ado Ekiti LGA into three different groups. A school was randomly selected from each of the groups. In the selected schools, using simple random sampling technique, the required number of participants were chosen. In this Local Government, area there were 23,516 students enrolled in the public schools by 2021.24 The statistical formula of Fisher<sup>25</sup> for calculating minimum sample size was used where minimum sample size  $n=(Z^2Pq/d^2)$ . p is the estimate of health seeking behavior among adolescents which was 26.7%.20 The minimum sample size for this study was estimated to be 301 respondents. A non-response rate of 20% was added making the adjusted sample size of approximately 361 participants which was the total number of questionnaires that was given out. A total of 352 questionnaires were retrieved from the students which gave 97.5% response rate. A pilot study using the questionnaire was carried out on 50 participants to validate and assess the internal consistency of the items and indicated a Cronbach's alpha value of 0.70. The participants in the pilot study were recruited from another secondary school in a different ward in Ado-Ekiti LGA and were not included in the study.

## **Study Population**

The students in the secondary schools selected in the LGA.

## **Inclusion Criteria**

Students whose parent gave consent and those above eighteen who gave their consent and were within the age range 10 years to 19 years were included in the study. Any student that was acutely ill was excluded from the study.

## **Study Instrument**

The instrument was developed from existing literature on personal selfconcept The questionnaire consisted of three segments: the first segment included the socio-demographic information about the respondents. The second section assessed the patients' personal self-concept using the Structure of the Personal Self-Concept (PSC) Questionnaire by Goni et al. in Spain.<sup>26</sup> The PSC is a validated tool used to assess the four dimensions of self-concept and consists of 18-item statements used to measure perceptions about self-concept. These 18-item statements were sub categorized into Self-fulfillment [SF] (6 items), Honesty [HON] (3 items), Autonomy [AU] (4 items), and Emotional self-concept [ESC] (5 items).26 SF measured how each person saw themselves in relation to achieving the objectives they had set for themselves, feeling fulfilled, meeting their targets, rising to challenges and their general achievements. HON depicted how each person saw themselves in the sense of being honest, upright and trustworthy in their behavior. It included aspects such

as being a valuable, honorable and consistent person who tried not to harm others; a man or woman of their word. AU was about how each person saw themselves as an individual equal to, but different from others. This included aspects such as: the perception of oneself as someone who was independent and different from others; the feeling of not being dominated by others; being able to function without depending on others. ESC showed how each person saw themselves in the emotional dimension, in relation to the more impulsive and reactive aspects of their personality. The ESC also included the perception of emotional balance, sensitivity, recognition and control of one's emotions.

The third section had questions assessing health care seeking behavior using the Botsha Bophelo Adolescent Health Study (BBAHS) adapted questionnaire. <sup>23</sup> The BBAHS was a validated questionnaire used in a study done among adolescents living in Soweto, South Africa. The definition for health seeking behavior was accessing medical services and/or being hospitalized in the 6 months prior to the survey. <sup>23</sup>

#### Procedure for the Study

Three wards were randomly selected from the 13 wards in the LGA. Out of each ward, one public secondary school was randomly selected for the study. The survey was conducted using self-administered questionnaires. This involved enquiry on the personal data of the respondent, his or her parents' data and the participants' PSC. The PSC was assessed by analyzing the participants' responses on a 5-point Likert scale ranging from "strongly disagree" to "strongly agree". Reverse coding was utilized where necessary. The responses with "strongly agree"- (SA) and "agree" – (A) were pooled together to form one positive response of agreement. The same technique was applied for "strongly disagree"- (SD) and "disagree" (D) to form one negative response of disagreement.

Participants were weighed in kilograms to the nearest kg. Height was measured using a stadiometer as

respondents stood barefoot with minimal/ essential dressing and the results were recorded to the nearest 0.5 cm. BMI was estimated as the ratio of weight in kilograms to the square of height in meters {weight (kg)/height (m²)}.

## **Ethical Consideration**

Informed consent from the parent or caregiver of respondents who were less than 18 years of age and informed consent from students who were 18 years and above were obtained before the questionnaires were administered. Refusal to participate did not in any way hinder individuals from benefitting from accessing health care. Ethical approval was obtained from the Ekiti State University Teaching Hospital Ethics and Research Committee with Protocol number EKSUTH/A67/2021/05/14. A letter of permission from the Ekiti State Ministry of Education was obtained to gain access to the schools selected. The questionnaires were self-administered.

### **Statistical Analysis**

The information obtained from the questionnaire was cleaned, analyzed and displayed on tables and charts using IBM SPSS version 25 (IBM Corporation, Armonk, NY, USA). The general characteristics of the respondents was analyzed using descriptive statistics. Demographic variables, which were normally distributed, were described as means and standard deviations. Categorical variables were reported as frequency distribution and proportions with the Pearson correlation test used to assess the relationship of relevant variables with self-concept.

## RESULTS

Table 1 shows the sociodemographic characteristics of the adolescents. Their mean age was 14.3±1.9 years. More than half (52%) were less than 15 years old. The adolescents were predominantly females (53.4%) and from monogamous families (78.4%). A total of 60.8% of the adolescents were from families in high socioeconomic class. More than 50% of those studied were underweight.

Table 2a shows the personal selfconcept of the adolescents. Majority of the respondents considered themselves as trustworthy (90.1%), persons of their word (87.8%), emotionally strong (83%), very uptight, strong (78.7%) and sensitive (71%). Over forty percent (46.9%) approved that they would not change very much if they could start their lives over again. More than one-third agreed that they found it hard to snap out of it when feeling down (38.9%), did not see their promises as sacred (37.5%), found it difficult to take decisions on their own (37.3%) and depended too much on other people's opinion in taking a decision (34.4%).

Statements listed in Table 2b were categorized into four constructs of fulfilment self-concept, emotional self-concept, honesty and autonomy self-concepts. Honesty self-concept had the highest mean score of 3.88±0.65 standard deviations. Emotional self-concept had a mean score of 3.220.47 standard deviations. Fulfilment self-concept had a mean score of 3.200.54 standard deviations. Autonomy self-concept had the lowest mean score of 3.050.86 standard deviations.

Majority (80.4%) of the adolescents had ever used drugs while the use of cannabis was prevalent in over three percent of the respondents (3.1%). Forty-two percent (42%) of them had felt a form of ill health in the past 6 months. Only 4% had ever tested for HIV. In the past six months 29.3% had sought for medical attention while 19.6% had been hospitalized. While 8.5% had experienced sexual intercourse before, only 4.8% had ever utilized contraceptive/condom in the past. This is shown in Table 3.

When asked about their choice of health care access in the past 6 months, a good number of the respondents cited the use of pharmacy shops (27.6%) followed by chemist stores (22.2%), hospitals (22.2%) and medical clinics (17.3%). School clinics (7.4%), doctor's offices, Churches/ Faith homes (6.3%) were not so favored. Traditional practitioners (2.3%) and family planning/ abortion clinic (1.1%) were the least preferred health care providers. This is depicted in Table 4.

The medical conditions that were experienced/treated more regularly among the adolescents were headache/

Table 1: Socio-demographic Characteristics of Adolescents (N=352)

Variables I	Frequency (n)	Percentage (%)
Age (years)		
10-14	183	52.0
15-17	155	44.0
18-19	14	4.0
Gender		
Male	164	46.6
Female	188	53.4
Repetition of Class		
Yes	45	12.8
No	307	87.2
Family Type		- · · · ·
Monogamous	276	78.4
Polygamous	76	21.6
Fathers' education	, 0	21.0
University Graduates	150	42.6
HND/NCE	50	14.2
Secondary school	108	30.7
Primary school	31	8.8
No formal education	13	3.7
Mothers' Education	13	5.1
	126	35.8
University graduates HND/NCE	62	33.8 17.6
Secondary school	127	36.1
Primary school	23	6.5
No formal education	14	4.0
Fathers' Occupation	,	
Senior public servants, professional, managers &		70.0
similar grades	204	58.0
Intermediate grade public servant and senior	25	0.0
school teachers	35	9.9
Junior school teachers, drivers, artisan & similar		15.6
grades	55	15.6
Petty traders, laborers, messengers & similar gra		10.8
Unemployed	20	5.7
Mothers' Occupation		
Senior public servants, professional, managers &		~~·
similar grades	194	55.1
Intermediate grade public servant and senior	•	400
school teachers	38	10.8
Junior school teachers, drivers, artisan & similar		
grades	52	14.8
Petty traders, laborers, messengers & similar gra		14.8
Unemployed	16	4.5
Social Class		
Low	48	13.6
Middle	90	25.6
High	214	60.8
Body Mass Index (Kg/m²)		
Underweight (<18.5)	194	55.1
Normal weight (18.5–24.9)	150	42.6
Overweight (25–29.9)	8	2.3

Table 2a: Personal Self-Concept of Adolescents

Statements	Strongly Disagree (D) (SD) %	Disagree %	Total Disagree (SD+D) %	(U) %	Agree (A) % (A) %	Strongly Agree	Total Agree (SA +A) %
I am satisfied with what I am achieving in my life.	6.5	14.2	20.7	4.0	44.6	30.7	75.3
If I'm feeling down, I find it hard to snap out of it.	11.6	42.3	53.9	7.1	28.1	10.8	38.9
So far, I have achieved every important goal I have							
set for myself	5.1	26.4	31.5	6.3	39.5	22.7	62.2
I am a trustworthy person.	2.0	2.0	4.0	6.0	46.6	43.5	90.1
In order to do anything, I first need other people's							
approval.	9.1	21.0	30.1	6.3	43.2	20.5	63.7
I consider myself to be a very uptight and highly							
strong person.	3.4	7.4	10.8	10.5	53.4	25.3	78.7
I have yet to achieve anything I consider to be							
important in my life.	9.7	20.2	29.9	5.1	39.2	25.9	65.1
I am a person of my word.	0.9	6.8	7.7	4.5	46.6	41.2	87.8
I find it hard to embark on anything without other							
people's support.	13.4	32.4	45.8	8.8	32.1	13.4	45.5
I am more sensitive than the majority of people.	3.4	14.8	18.2	10.8	38.9	32.1	71.0
I have always overcome any difficulties I have							
encountered in my life.	2.8	16.2	19.0	7.1	46.9	27.0	73.9
When taking a decision, I depend too much on othe	r						
people's opinions.	21.6	34.7	56.3	9.4	25.6	8.8	34.4
If I could start my life over again, I would not chang	ge						
very much	15.6	29.5	45.1	8.0	33.0	13.9	46.9
I find it difficult to take decisions on my own.	19.6	36.1	55.7	7.1	27.6	9.7	37.3
I am an emotionally strong person.	4.0	7.1	11.1	6.0	45.2	37.8	83.0
I feel proud of how I am managing my life.	8.0	17.9	25.9	8.2	39.2	26.7	65.9
I suffer too much when something goes wrong.	12.5	24.1	36.6	8.0	41.8	13.6	55.4
My promises are sacred	11.9	25.6	37.5	14.2	30.1	18.2	48.3

**Adolescents by Category** 

Self-Concept	Mean	STD. Dev.		
Self-fulfillment	3.20	0.54		
Emotional	3.22	0.47		
Honesty	3.88	0.65		
Autonomy	3.05	0.86		

pain (38.1%), feverish condition (24.7%) and injury (19.3%). Concerns about sexually transmitted infections (2%), abortion (2%), depression/ suicidal thoughts (1.7%), HIV (1.4%) and condom breakage (1.4%) were rare reasons for medical treatment. This is shown in Table 5.

As depicted in Figure 1, topmost among the social and health services needed by the adolescents or by those around them were general health (30.4%), improved services (15.9%) and counselling (14.2%). Other services highlighted were gynecological services (10.5%), reproductive health (7.1%) and addictions counselling (5.7%). The least

Table 2b: Personal Self-Concept of Table 3: Health Seeking Behaviour of Adolescents

	Frequency (n)	Percentage (%)
Ever used drugs/medication		
No	69	19.6
Yes	283	80.4
Ever smoked cannabis		
No	341	96.9
Yes	11	3.1
Ill health in the past 6 months		
No	204	58.0
Yes	148	42.0
Ever tested for HIV		
No	338	96.0
Yes	14	4.0
Medical attention in the past 6 months		
No	249	70.7
Yes	103	29.3
Hospitalized in the past 6 months		
No	283	81.4
Yes	69	19.6
Had sexual intercourse before		
No	322	91.5
Yes	30	8.5
Used contraceptive/condom before		
No	335	95.2
Yes	17	4.8

Table 4: Adolescents' Choice of Health Care Access

I	requency (n)	Percentage (%)
Medical clinic	61	17.3
Doctor's office	24	6.8
Hospital	78	22.2
School based clir	nic 26	7.4
Family planning/		
abortion clinic	4	1.1
Chemist store	78	22.2
Pharmacy	97	27.6
Traditional		
practitioner	8	2.3
Church/faith bas	ed	
health care home	s 22	6.3
Others	16	4.5

mentioned were abortion (4.5%) and tuberculosis services (4%).

As shown in Figure 2, the main reasons behind the hospitalization of all (100%) the respondents within the past six months were injury and feverish condition. Other reasons pointed out were surgery (28.9%), tuberculosis hospitalization (26.1%), rape/sexual harassment (13%), pregnancy/obstetrics and aids-related illness, respectively (8.7%).

Table 6 shows the relationship between family background, health seeking behavior and self-concept parameters of the adolescents using the Pearson correlation test. It is observed that adolescents' social class correlated negatively with their autonomy selfconcept (r = -0.117; p < 0.029). Use of cannabis negatively correlated with general self-concept (r = -0.132; p < 0.013) and honesty self-concept (r = -0.127; p < 0.017). Having been hospitalized in the past six months negatively correlated with their general self-concept (r = -0.124; p<0.02) and sense of fulfillment (r=-0.118; p < 0.027). Sexual exposure correlated negatively with emotional selfconcept (r = -0.116; p < 0.03). The use of contraceptive however had a weak positive correlation with their concept of honesty (r = 0.115; p < 0.03). Other health seeking behaviour including BMI of adolescents were comparable but did not correlate significantly with adolescents' self-concept (r = -0.1; p > 0.05).

**Table 5: Medical Conditions Present/Treated in the past six months** 

	Frequency (n)	Percentage (%)
Feverish medical condition	87	24.7
Sickle cell crises	11	3.1
Concerned about HIV	5	1.4
Concerned about STI	7	2
Injury	68	19.3
Dental	17	4.8
Birth control	15	4.3
Depression/ suicidal thoughts	6	1.7
Condom breakage	5	1.4
Suspected pregnancy (That necessitated PT)	12	3.4
Rash	16	4.5
Headache/ pain	134	38.1
Allergies/ asthma	23	6.5
Abdominal pain and discomfort	10	2.8
Abortion	7	2
Concerned about tuberculosis	16	4.5
Medical fitness/ medical certificate	25	7.1
Other medical conditions	29	8.2

HIV, Human immunodeficiency Virus; STI, Sexually transmitted infection; PT, Pregnancy Test

Table 6: Relationship between Family Background, Health Seeking behaviour and Perceived Self Concept

		General Self-Concept	Self- Fulfilment	Autonomy	Honesty	Emotional
		Scil-College	Tunnikni			
Social class	r	0.067	0.015	-0.117*	0.046	0.066
	p	0.208	0.778	0.029	0.385	0.22
Ever used Drugs	r	0.056	0.051	0.008	0.076	0.024
	p	0.297	0.34	0.884	0.153	0.657
Ever Smoked Cannabis	r	132*	-0.088	-0.1	127*	-0.014
	p	0.013	0.101	0.061	0.017	0.787
Ill Health in past 6 months	r	0.018	0.083	-0.019	0.093	-0.099
•	p	0.742	0.12	0.722	0.08	0.064
Tested for HIV	r	-0.013	-0.008	-0.002	-0.046	-0.009
	p	0.804	0.878	0.963	0.392	0.873
Medical Attention in past 6 months	r	-0.064	-0.011	-0.044	-0.051	-0.069
	p	0.229	0.839	0.413	0.342	0.196
Hospitalized in past 6 months	r	124*	118*	-0.083	-0.095	-0.024
	p	0.02	0.027	0.12	0.076	0.657
Had sexual intercourse before	r	-0.047	0.045	-0.022	0.029	116*
	p	0.38	0.404	0.676	0.591	0.03
Used Contraceptive/Condom before	r	0.024	0.073	-0.07	.115*	-0.065
•	p	0.652	0.173	0.189	0.031	0.221
BMI (Kg/m <sup>2</sup> )	r	-0.1	-0.094	-0.016	0.004	-0.038
· · · · · · · · · · · · · · · · · · ·	p	0.06	0.077	0.761	0.945	0.479

r, Pearson correlation coefficient; p, p-value; \*, Correlation is significant at the 0.05 level.

#### DISCUSSION

Majority of the respondents had never repeated a class and most of their families were in the high socioeconomic class. Most fathers of the adolescents studied were university graduates while a large percentage of mothers were either secondary school certificate holders or university graduates. This may have accounted for the high level of positive responses of the SF self-concept among the adolescents studied. The high level

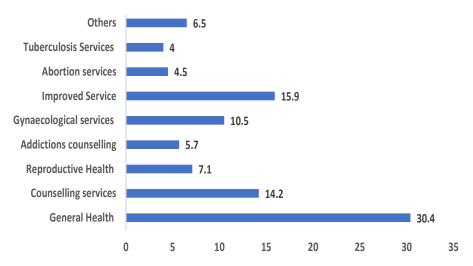


Fig. 1: Social and Health Services needed by Adolescents but unavailable.

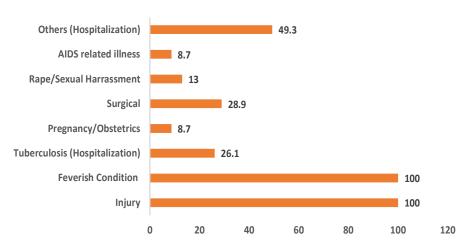


Fig. 2: Reasons for Hospitalization in the past six months

of educational attainment of most of the parents might have been an added advantage in helping their weak adolescents to access extra coaching after normal school hours. In addition, Studies have shown that students from a high socioeconomic class have higher academic achievement.<sup>27,28</sup> The fact that most parents of respondents studied were in the managerial level may be responsible for the high perceived selfconcept of majority of the respondents. In this study, majority of the respondents considered themselves as trustworthy, persons of their word, emotionally strong, very upright, having ability to overcome difficulties encountered in life, strong and sensitive. These are some of the qualities that distinguishes a leader in a community.<sup>29,30</sup> Being emotionally strong, sensitive, able to overcome

difficulties encountered in life and very uptight are leadership qualities that exemplify people that turn around their communities.<sup>29</sup> To buttress this point, it was reported that leaders with more collaborative techniques achieve and performed better than those with autocratic tendencies.<sup>29</sup> It is therefore noteworthy that the majority of respondents with honesty self-concept had the highest mean when the general self-concept was further subcategorized into the four domains of honesty, emotional, autonomy and self-fulfillment. Honesty self-concept which measures how the adolescents see themselves in the sense of being honest, upright, valuable and trustworthy is more related with collaborative tendencies than being autocratic. In collaborative leadership, Harvard's business review noted that creation of value rather than counting value is one major sign of a leader.<sup>31</sup> This value creation is one essential factor in honesty self-concept.

The prevalence of contraceptive usage in this study was 4.8%. This was lower than what was found among the adolescents in the South-western region, South-eastern region and among the general populace of adolescents in Nigeria.<sup>32–34</sup> This may be an indication for increased education and counseling on contraceptive usage among the adolescents. In this study, forty-two percent of the respondents reported any form of ill health six months prior to the study with about a third having sought for medical attention, yet over 80% took one medication or the other about the same time frame. This high rate of adolescents that sought for medical attention among those with medical ailments could be related to the enlightened state of the parents of the respondents. This however did not influence the choice of the place respondents sought for medical attention. The most popular place where medical attention was sought was the pharmacy followed by the chemist store. This finding was lower than what was reported in some other studies. 19,23,35 This difference could be attributed to the weak regulation of the pharmacy and chemist outlets in Nigeria.36 Less than 10% of the respondents were sexually exposed, less than half of the number had either been tested for HIV or used contraceptive methods in the past. Less than 5% of the respondents studied (3.1%) reported having been exposed to use of drugs (cannabis). This low level of reporting of sexual exposure and substance abuse is similar to what was reported among the Lebanese and Chinese adolescents.35 This is however lower than what was observed in developed countries.<sup>37</sup> The difference may be attributable to the cultural tendencies where issues concerning sex and substance use are considered a taboo.38,39 Moreover, some of the adolescents do not see the health risks associated with sexual exposure and substance abuse. This perceived attitude is reflected in the low rate of those who are concerned with sexual reproductive ill health despite reports of high rate of

sexual exposure among adolescents. 23,25 Headaches, feverish medical condition and injury were the three highest medical ill health reported by the respondents. The highest reason for admission in the hospital was also feverish medical condition and injuries.40 In a study in Lagos, Nigeria, acute health problems were reported as the highest perceived health needs of adolescents.21 This may not be unconnected with the fact that the area of study is located in a malaria endemic zone. It is thus not surprising that the topmost health needs of the adolescents studied was general health above reproductive health. Perhaps the reason why reproductive health was the second health needs of the adolescents is the changes in their sexuality experience as they transit from childhood to adulthood.41

It was observed that adolescents' social class correlated negatively with their autonomy self-concept (r = -0.117; p < 0.029). This implies that adolescents' concept of autonomy reduced with an increase in social class or vice versa. The individuality of the adolescents studied was affected negatively by the increase in social class of the family. This may be because of the dependence of the adolescents on the parents for survival at the stage their development. In a similar manner, the use of cannabis negatively correlated with general self-concept (r =-0.132; p<0.013) and honesty selfconcept (r = -0.127; p < 0.017). This may be related to both the secondary schools and societal view of seeing cannabis ingestion as a taboo. In addition, the use of substance may attract punishment from the school authority thus affecting both the general self-concept and honesty self-concept of the adolescents. The feeling of doing things that will facilitate good health decreases with the sense of self-fulfilment and general selfconcept. This may be because of the perceived self confidence that goes with high self-concept. The reason sexual exposure correlated negatively with emotional self-concept could be the link between low self-esteem and risky adolescent behaviours. 32,33 Other health seeking behaviour including Body Mass Index of adolescents were comparable but did not correlate significantly with adolescents' general self-concept.

#### **CONCLUSION**

The higher the socioeconomic class of a family the lower the adolescent will perceive his or her individuality which may affect his ability to cope with challenges of life in adulthood. Parents in high socioeconomic class need to be educated on the need to deliberately make room for their adolescents to express themselves. Headaches, feverish medical condition and injury were the three highest medical conditions of adolescents studied while the more common reasons for admission in the hospital were feverish medical condition and injuries. Policy makers in health sector need to be aware of this in planning for health care of adolescents. Adolescents with high self-concept will not easily seek for appropriate medical attention thus the need for their care givers to pay attention to the health care of these group of individuals irrespective of their selfassessment.

### **Duality of Interest**

The authors declare that there was no conflict of interest.

## **Financial Support**

There was no financial support or grant from any private or governmental organization or agency.

## REFERENCES

- Compas BE, Davis GE, Forsythe CJ. Characteristics of life events during adolescence. American Journal of Community Psychology. 1985; 13: 677– 91.
- Spano S. Stages of Adolescent Development [Internet]. http://citeseerx.ist.psu.edu/viewdoc/versions; jsessionid= BA2B87785FBC916CEE 4916FFE41 B13ED?doi=10.1.1.625.9586; 2007 [cited 2001 Oct 1]. 1 p. Available from: https://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1. 1.625.9586. Accessed 20th March, 2020.
- Crone EA, Dahl RE. Understanding adolescence as a period of social– affective engagement and goal flexibility. *Nature Reviews Neuroscience*. 2012; 13: 636–650.
- McLean KC, Breen AV, Fournier MA. Constructing the self in early, middle, and late adolescent boys: Narrative identity, individuation, and well-being. *Journal of Research on Adolescence*. 2010; 20: 166–187.

- Simmons RG, Rosenberg F, Rosenberg M. Disturbance in the self-image at adolescence. *American Sociological Review*. 1973; 38: 553–568.
- Guinn B, Semper T, Jorgensen L, Skaggs S. Body image perception in female Mexican-American adolescents. *Journal of School Health*. 1997; 67:112–115
- Kirkcaldy BD, Shephard RJ, Siefen RG. The relationship between physical activity and self-image and problem behaviour among adolescents. Social Psychiatry and Psychiatric Epidemiology. 2002; 37: 544–550.
- 8. Sawyer SM, Rosier, MJ, Phelan PD, Bowes G. The self-image of adolescents with cystic fibrosis *PubMed J Adolesc Health*. 1995; **16:** 204–208.
- Cecon RS, Franceschini S do CC, Peluzio M do CG, Hermsdorff HHM, Priore SE. Overweight and body image perception in adolescents with triage of eating disorders [Internet]. Vol. 2017, The Scientific World Journal. Hindawi; 2017 [cited 2021 Feb 24]. p. e8257329. Available from: https://www.hindawi. com/journals/tswj/2017/8257329/
- Bharathi T, Pettugani S. A study on the self-concept of adolescents. *Inter*national Journal of Science and Research. 2016; 5: 512–516.
- Marjoribanks K. Family background, adolescents' educational aspirations, and Australian young adults' educational attainment. *International Education Journal*. 2005; 6: 104–112.
- 12. Abd-El-Fattah SM. Effects of family background and parental involvement on egyptian adolescents' academic achievement and school disengagement: A Structural Equation Modelling Analysis. Social Psychology of Education. 2006; 9: 139–157.
- 13. Tschumper A, Nägele DC, Alsaker FD. Gender, type of education, family background and overweight in adolescents. *International Journal of Pediatric Obesity*. 2009; **1:** 153–160.
- Mishra S, Shanwal VK. Role of family environment in developing self efficacy of adolescents. *Integrated Journal of Social Sciences*. 2014; 1: 28–30.
- 15. Hamilton K, Warner LM, Schwarzer R. The role of self-efficacy and friend support on adolescent vigorous physical activity. *Health Education and Behaviour.* 2017; **44:** 175–181.
- 16. Azizi Y, Jamaludin R. The relationship between self-concept and communication skills towards academic achievement among secondary school students. *IJPS*. 2009; **1:** 24–32.

- Cripps K, Zyromski B. Adolescents' psychological well-being and perceived parental involvement: implications for parental involvement in middle schools. RMLE Online. 2009; 33: 1–13. Accessed 28th November, 2021.
- Ferkany M. The educational importance of self esteem. *Journal of Philosophy of Education*. 2008; 42: 119–132.
- Seidu AA. Healthcare seeking behaviour among adolescents in basic schools in Yamoransa [Internet]. [Yamoransa, South Africa]: University of Cape Coast; 2015. Available from: https:// www.researchgate.net/publication/ 338917058\_Healthcare\_Seeking\_ Behaviour\_Among\_Adolescents\_in\_ Basic Schools in Yamoransa.
- Wilson CJ, Deane FP, Ciarrochi JV, Rickwood D. Measuring help seeking intentions: Properties of the general help seeking questionnaire. *Canadian Journal of Counselling*. 2005; 39: 15–28
- 21. Salisu-Olatunji SO, Odeyemi KA. Health needs and health seeking behaviours of adolescents attending a vacation coaching centre in Lagos. Nigerian *Journal of Clinical Medicine* [Internet]. 2011 [cited 2021 Mar 11];4(2). Available from: https://www.ajol.info/index.php/njcm/article/view/71604
- Cornally N, McCarthy G. Help-seeking behaviour: A concept analysis. International Journal of Nursing Practice. 2011; 17: 280-288.
- Kennedy O, Janan D, Fatima L, Stefanie H, Busisiwe N, Lucy C, et al. Health-seeking behaviours by gender among adolescents in Soweto, South Africa. Glob Health Action [Internet]. 2015 [cited 2021 Mar 29];8(10). Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4315777/
- 24. Ekiti State Government. Teacher's data Ekiti State [Internet]. Ekiti State; 2021 p. 5. Available from: https://www.ekitistate.gov.ng/wp-content/uploads/2021/07/STUDENTS-AND-TRS-CHART.pdf

- Kasiulevicius V, Sapoka V, Filipaviciute R. sample size calculation in epidemiological studies. *Gerontologija*. 2006; 7: 225–231.
- Goñi, E, Madariaga, JM., Axpe, I, Goñi,
   A. Structure of the personal selfconcept (PSC) questionnaire.pdf. *IJCHP*. 2011; 11: 509–522.
- Abdu-Raheem BO. Parents' Socioeconomic status as predictor of secondary school students' academic performance in Ekiti state, Nigeria. *Journal of Education and Practice*. 2015;
   6: 123–128.
- 28. Suleman Q, Hussain I, Khan FU, Zaibun-Nisa. Effects of parental socioeconomic status on the academic achievement of secondary school students in Karak district, Pakistan. International Journal of Human Resource Studies. 2012: 2.
- Folta SC, Seguin RA, Ackerman J, Nelson ME. A qualitative study of leadership characteristics among women who catalyze positive community change. BMC Public Health. 2012; 12: 383.
- Spears LC. Character and servant leadership: Ten characteristics of effective, caring leaders. *The Journal of Virtues & Leadership*. 2010; 1: 25–30.
- Nayar V. Three differences between managers and leaders. Harvard Business Review [Internet]. 2013 Aug 2 [cited 2022]; Available from: https://hbr.org/ 2013/08/tests-of-a-leadership-transiti
- 32. Ahinkorah BO. Predictors of modern contraceptive use among adolescent girls and young women in sub-Saharan Africa: a mixed effects multilevel analysis of data from 29 demographic and health surveys. *Contraception and Reproductive Medicine*. 2020; **5:** 32.
- 33. Egede JO, Onoh RC, Umeora OUJ, Iyoke CA, Dimejesi IBO, Lawani LO. Contraceptive prevalence and preference in a cohort of south-east Nigerian women. *Patient Preference and Adherence*. 2015; **9:** 707.
- 34. Crawford EE, Atchison CJ, Ajayi YP, Doyle AM. Modern contraceptive use

- among unmarried girls aged 15–19 years in South Western Nigeria: results from a cross-sectional baseline survey for the Adolescent 360 (A360) impact evaluation. *Reproductive Health*. 2021; **18:** 6
- 35. El Kahi HA, Abi Rizk GY, Hlais SA, Adib SM. Health-care-seeking behaviour among university students in Lebanon. *East Mediterr Health J.* 2012; **18:** 598–606.
- Oseni YO. Evaluation of pharmacy practice regulations in Nigeria: The pharmaceutical inspectors' perspective. *Trop J Pharm Res.* 2021; 18: 1353–1360
- 37. Baldwin JD, Baldwin JI. Sexual Behavior. In: Encyclopedia of Applied Psychology [Internet]. ScienceDirect; 2004 [cited 2022 Feb 5]. Available from: https://www.sciencedirect.com/topics/medicine-and-dentistry/adolescent-sexual-behavior.
- 38. Eshete A, Shewasinad S. Adolescentparent communication on sexual and reproductive health issues in Ethiopia: A systematic review and meta-analysis. *Ethiop J Health Sci.* 2020; **30:** 817–828.
- 39. Bungener SL, Post L, Berends I, Steensma TD, de Vries ALC, Popma A. Talking about sexuality with youth: A taboo in psychiatry? *The Journal of Sexual Medicine*. 2022; **19:** 421–429.
- 40. Crump JA, Newton PN, Baird SJ, Lubell Y. Febrile illness in adolescents and adults. In: Holmes KK, Bertozzi S, Bloom BR, Jha P, editors. Major infectious diseases [Internet]. 3rd ed. Washington (DC): The International Bank for Reconstruction and Development / The World Bank; 2017 [cited 2022 Jul 18]. Available from: http://www.ncbi.nlm.nih.gov/books/ NBK525177/
- 41. Agbesanwa T, Fatunla. O, Awoleke J, Aina F, Babatola A, Fadare J, et al. Perception of health needs among adolescents attending the out-patients' clinics of a tertiary hospital in South-West Nigeria. *The Nigerian Stethoscope*. 2021; **3:** 31–39.