Original Article

Synopsis of Clients Seen at the Adolescent and Social Paediatrics Unit of a Tertiary Health Facility in South-East Nigeria: A Three-year Review

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Abstract

Background: The adolescent period is a unique and crucial period of growth and development, in which the child transits from childhood to adulthood. It is characterised by several changes, both physiological and psychological, in preparation for adulthood. Thus, their health needs and health challenges differ from that of other children. Hence, the need to pay special attention to them and provide health and social support tailored toward their needs. **Aim:** This study aimed to determine the pattern of cases that presented to the Adolescent and Social Pediatrics Unit (ASP) of the Alex Ekwueme Federal University Teaching Hospital, Abakaliki (AEFUTHA) over a three-year period. **Materials and Methods:** This was a retrospective study done to determine the pattern of cases seen at the Adolescent and Social Paediatrics Unit of the Alex Ekwueme Federal University Teaching Hospital, Abakaliki, between 2017 and 2019. Case files of all patients seen within the study period were retrieved, and all were included in the study. Relevant information such as age, gender, social class, diagnosis for both adolescent and nonadolescent age groups, treatment modalities, clinical subspecialties involved in management, and the outcome were retrieved. Data were entered and analysed using SPSS version 25, and results were presented as ratios, means, and proportions, whereas comparisons were made with the Chi-square test or Fisher's exact were applicable. $P < 0.005$ was considered statistically significant. **Results:** A total of 220 clients were seen over the given period. The adolescents were 148 (67.3%), whereas nonadolescents were 72 (32.7%). Among the adolescents, common diagnoses include sexual assault (24.3%), acne (8.1%), Pelvic Inflammatory Disease (PID)/sexually transmitted infection (STI) (8.1%), HIV (8.1%), somatisation disorder (6.8%), suicide attempts (5.4%), oppositional deviant disorders (4.1%), and conduct disorder (2.7%). In nonadolescents, common diagnoses include sepsis (30.6%), Severe Acute Malnutrition (SAM) (30.6%), and malaria (11.1%). There was a significant difference between the adolescents and nonadolescents with respect to diagnosis ($P < 0.001$), treatment modalities ($P < 0.001$), type of care received ($P < 0.001$), and outcome ($P = 0.002$). **Conclusion:** The study has portrayed that the common medical conditions seen among adolescents include sexual assault, acne, HIV, PID/STI, and somatisation. This will be useful in developing health-care services and program geared toward adolescent health.

Keywords: Acne, adolescence, adolescent health, sexual assault, social paediatrics

Introduction

Adolescence is a critical period, in which a child transits to an adult. It spans from age 10 to 19 years.[1] It is characterised by turbulence because of the many bodily and hormonal changes which may have impact on how they reason and make decisions. The health needs of the adolescents differ from that of other children. They are at risk of developing mental health issues such as depression, suicide, aggression, anxiety, mood disorders, and social withdrawal/isolation.[2,3] Depression is one of the major causes of ill-health and disability among adolescents, whereas suicide is the third leading cause of death among the age group of 15–19 years.[4] Adolescents also have sexual and reproductive health issues such as rape,

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early pregnancy, and sexually transmitted diseases.[5,6] Other common problems in the adolescent include substance use and abuse, injuries from accidents and intentional violence, and malnutrition.[6]

It is general practice, especially in developing countries to see all paediatric clients together in a clinic. However, to achieve good health and development, adolescents should be seen in an adolescent friendly clinic where their issues can be addressed. These services should be accessible, acceptable, effective, appropriate, and equitable and should be in a safe and supportive environment.[7] The health-care services offered to adolescents include providing health information on adolescent sexual health, treatment of common illnesses, referrals to psychologist/social services, and counselling.

This study was carried out to determine the pattern of cases seen among patients presenting at the Adolescent and Social Paediatrics Unit (ASP) of the Alex Ekwueme Federal University Teaching Hospital, Abakaliki (AEFUTHA).

Materials and Methods

This was a retrospective study done to determine the pattern of cases seen at the ASP Unit of AEFUTHA, between the years 2017 and 2019. ASP is one of the subspecialties in the Department of Paediatrics, AEFUTHA. The ASP Unit was created by the hospital management in 2016 to meet the needs of the adolescent age group and children with social issues. The hospital is one of the tertiary health-care facilities in Abakaliki, Ebonyi state.

The ASP unit runs a weekly clinic on Mondays where all adolescents and other children with social issues are seen. It receives referrals from other subspecialties within and outside the hospital. The average monthly clinic attendance is 15. Patients who require admission are admitted in the 18-bedded male and female adolescent wards of the paediatrics department.

All patients seen by the ASP Unit within the study period were included in the study. Case files of the patients seen within the study period were retrieved from the hospital records. Relevant information was retrieved and entered into a proforma. These include age, gender, social class, diagnosis for both adolescent and nonadolescent age groups, treatment modalities, clinical subspecialties involved in management, and the outcome. Social classification was done according to the social class stratification by Olusanya *et al*.[8]

Data were entered and analysed using the SPSS software version 25 (IBM, New York, USA). Results were presented as ratios, means, and proportions, whereas comparisons were made with Chi-square test or Fisher's exact were applicable. $P < 0.005$ was considered statistically significant.

Results

A total of 220 clients were seen over the given period. Seventy-two (32.7%) of them were nonadolescents (age <10 years), whereas 148 (67.3%) were adolescents. The mean age of clients was 10.32 ± 6.42 (0–17) years, M:F of 1:2.4, and 83.6% belonged to the lower socioeconomic class. Ambulatory care and inpatient care were offered to 51.8% and 48.2% of clients, respectively. Regarding the clinical subspecialties involved in management, 46.4% of clients were managed by the paediatricians from the ASP unit alone, whereas 30% were comanaged with the psychiatrists, clinical psychologist, and social welfare. Other subspecialties involved were dermatologists, oncologists, infectious disease specialists, neurologists, and gynecologists in that order. Common diagnoses include sexual assault (16.4%), sepsis (11.8%), severe acute malnutrition (10.0%), acne (5.5%), HIV (5.5%), and PID/sexually transmitted infection (STI) (5.5%). Medical treatment alone was offered to 44.5%, whereas 20.0% and 35.5% received psychotherapy and combination therapy, respectively, as shown in Tables 1-3.

Among the adolescents, there were more females (75.7%), 44.6% belonged to the late adolescence, and 77.0% were of the lower socioeconomic class. Common diagnoses include sexual assault (24.3%), acne (8.1%), PID/STI (8.1%), HIV (8.1%), somatisation disorder (6.8%), suicide attempts (5.4%), oppositional deviant disorders (4.1%), and conduct disorder (2.7%). These are shown in Tables 1 and 2. There was a need for combination therapy (medical and psychotherapy) in 50.0% of the adolescents. Ambulatory care was sufficient enough in 73.0%. Outcome was discharged to follow-up in 55.4%, referred to other specialties in 36.5%, death in 8.1%, and no discharged against medical advice (DAMA). These are shown in Table 3. Death occurred in those with the diagnosis of cancer (66.7%), space-occupying lesion (16.7%), cyesis (8.3%), and HIV (8.3%).

Among the nonadolescent clients, as shown in Table 1, majority (47.2%) were aged > one to < six years, 61.1% were females, and 97.2% belonged to the low socioeconomic class. The common diagnoses among them were sepsis (30.6%), severe acute malnutrition (30.6%), and malaria (11.1%). This is shown in Table 2. Treatment was mainly medical (91.7%), 91.7% required inpatient care, 58.3% were discharged, 36.1% were referred, and 5.6% were DAMA. There were no deaths in the group. This is shown in Table 3.

There was a significant difference between the adolescents and nonadolescents with respect to diagnosis ($\chi = 180.662$; $P < 0.001$), treatment modalities ($\chi = 103.526$; $P < 0.001$), type of care received ($\chi = 81.060$; $P < 0.001$), and outcome ($\chi = 14.028$; $P = 0.002$). This is shown in Tables 2 and 3.

Discussion

In this retrospective review, 220 cases were seen in the ASP Unit in the time under review, with the most common cases being sexual assault, sepsis, severe acute malnutrition, acne, HIV, and PID/STI. The study reifies the experience of a tertiary specialist adolescent referral center located in a semi-urban city.

Table 1: Sociodemographic characteristics of the participants

Age group	Frequency, *n* (%)	Total, *n* (%)
Nonadolescents		
Infancy up to one year	28 (12.7)	72 (32.7)
Preschool greater than one–less than six years	34 (15.5)	
School age six–<10	10 (4.5)	
Adolescents		
Early adolescents 10–13	52 (23.6)	148 (67.3)
Middle adolescence >13–15	30 (13.7)	
Late adolescence >15–18	66 (30.00)	

	Nonadolescents (*n*=72; 32.7%), *n* (%)	Adolescents (*n*=148; 67.3%), *n* (%)	Total (*n*=220; 100.0%), *n* (%)
Gender			
Male	28 (12.7)	36 (16.3)	64 (29)
Female	44 (20.0)	112 (51)	156 (71)
Social class			
Upper	0	6 (2.7)	6 (2.7)
Middle	2 (0.9)	28 (12.7)	30 (13.6)
Lower	70 (31.8)	114 (51.9)	184 (83.6)

Table 2: Diagnoses of the study participants

Diagnosis (χ^2=180.66; *P*<0.001)	Nonadolescents (*n*=72), *n* (%)	Adolescents (*n*=148), *n* (%)	Total (*n*=220), *n* (%)
Sexual assault	0	36 (24.3)	36 (16.4)
Sepsis	22 (30.6)	4 (2.7)	26 (11.8)
Severe acute malnutrition	22 (30.6)	0	22 (10.0)
Acne	0	12 (8.1)	12 (5.5)
HIV	0	12 (8.1)	12 (5.5)
PID/STI	0	12 (8.1)	12 (5.5)
Oncologies	4 (5.6)	8 (5.4)	12 (5.5)
Somatisation disorder	0	10 (6.8)	10 (4.5)
Malaria	8 (11.1)	2 (1.4)	10 (4.5)
Suicide attempts	0	8 (5.4)	8 (3.6)
Psychosis	0	8 (5.4)	8 (3.6)
Ethical issues	0	8 (5.4)	8 (3.6)
Oppositional deviant disorder	0	6 (4.1)	6 (2.7)
Abnormal breast size	2 (2.7)	4 (2.7)	6 (2.7)
Physical assault/bullying	4 (5.5)	0	4 (1.8)
Acute gastroenteritis	4 (5.5)	0	4 (1.8)
Dysmenorrhea/menstrual disorders	0	4 (2.7)	4 (1.8)
Cyesis	0	4 (2.7)	4 (1.8)
Acute respiratory infection	4 (5.5)	0	4 (1.8)
Conduct disorder	0	4 (2.7)	4 (1.8)
Posttraumatic stress disorder	0	4 (2.7)	4 (1.8)
Space occupying lesion	0	2 (1.4)	2 (0.9)
Bleeding disorders	2 (2.7)	0	2 (0.9)

STI: Sexually transmitted infection, PID: Pelvic Inflammatory Disease

Among the patients seen, there were more females than males. Majority of the patients in the unit belonged to the lower socioeconomic class. The reason for this may be that Abakaliki is a semi-urban city, and most of the residents are subsistent farmers.[9]

Furthermore, the result showed that sexual assault was the most common case seen in the unit and also very high among the adolescent patients. This is in keeping with the rising scourge of sexual assault, especially in adolescents and children.[10] The result also showed that sexual assault was more common among females and those within the mid and late adolescence ages. The result is in agreement with a similar study done in South-east Nigeria by Manyike *et al*.[11]

Acne is known to be common among adolescents.[12] This was also portrayed in this study, as it was among the most common medical conditions observed. This is similar to the observation

Table 3: Treatment, outcome, and type of care received

	Nonadolescents (n=72), n (%)	Adolescents (n=148), n (%)	Total (n=220), n (%)
Treatment options (χ^2=103.526; P<0.001)			
Medical	66 (91.7)	32 (21.6)	98 (44.5)
Psychotherapy	2 (2.7)	42 (28.4)	44 (20.0)
Combination	4 (5.6)	74 (50.0)	78 (35.5)
Outcome (χ^2=14.028; P=0.002)			
Discharged with follow-up	42 (58.3)	82 (55.4)	124 (56.4)
Referred to other specialties	26 (36.1)	54 (36.5)	80 (36.3)
DAMA	4 (5.6)	0	4 (1.8)
Death	0	12 (8.1)	12 (5.5)
Type of care received (χ^2=81.060; P<0.001)			
Ambulatory care	6 (8.3)	108 (73.0)	114 (51.8)
Inpatient care	66 (91.7)	40 (27.0)	106 (48.2)

DAMA: Discharged against medical advice

in a study by Yahya,[12] although the index study had a lower prevalence. This is probably because the study by Yahya was a community study and ours a hospital-based study.[12] Aside sexual assault and acne, other common diagnoses in adolescents include HIV, PID/STI, and somatisation. Among the nonadolescent patients, the most common diagnosis was sepsis. Sepsis is known to be a common problem in developing countries such as Nigeria, as a result of poor health-care services among other factors.[13] Severe acute malnutrition was also common among them. These findings can be attributed to the fact that majority of them belonged to the lower socioeconomic class. It has been shown that there is an association between socioeconomic class and some conditions such as infectious diseases (sepsis) and malnutrition.[14,15]

Furthermore, about 54% of the patients seen in the clinic during this period were comanaged with colleagues from other subspecialties, especially psychiatry. This synergistic approach to the management of these patients brings to the fore, the advantage of multidisciplinary approach in the management of adolescents as a majority of the patients were later discharged to follow.

Conclusion and Recommendation

The study has portrayed that the common medical conditions seen among adolescents in the ASP unit include sexual assault, acne, HIV, PID/STI, and somatisation. These data can be useful in planning adolescent health-care services at institutional and national level and also for advocacy for resource allocation.

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Conflicts of interest

There are no conflicts of interest.

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