Conduct Disorder amongst Children in an Urban School in Nigeria

Type of Article: Original

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ABSTRACT

Background

Conduct disorder is a childhood behavioral disorder characterized by aggressive and destructive activities that cause disruptions in the child's natural environments such as home, school, church, or the neighbourhood. It is a source of concern to the clinicians as it is comorbid with other mental disorders, particularly anxiety, depression and learning disabilities. The aim of this research was to evaluate the prevalence of conduct disorder amongst secondary school children in urban schools in Port Harcourt.

Method: A structured questionnaire based on Vanderbilt ADHD Diagnostic Teacher Rating Scale for oppositional defiant and conduct disorder symptoms was used. A list of signs taken from the Diagnostic and Statistical Manual text revision (American Psychiatric Association, 2000) that indicates a child may have Conduct Disorder was also used. A child must show a pattern of at least three of these behaviour groups for at least a year before the diagnosis was considered. The questionnaires administered to the students were filled with the assistance of the researchers and the classroom teachers. Direct verbal interview was conducted for those noted to have signs of conduct disorder.

Result: There were 885 students studied and 140 were diagnosed with conduct disorder, giving a prevalence of 15.82%. The age range of the entire students ranged from 9-18 years with a modal age of 13 years. Sex distribution of those with the conduct disorder was 112 males and 28 females (male: female ratio of 4:1). The various behaviours exhibited included bullying and or threatening classmates and other students, poor school attendance, stealing, and poor academic performance.

Conclusions: The prevalence of conduct disorder amongst school children is high. Poor academic performance and other associated comorbidities impair the quality of life of these children. Early identification and appropriate treatment will improve the course of this behavioral disorder.

KEY WORDS: Conduct disorder, urban schools, children.

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INTRODUCTION

Children and adolescents with conduct disorder are highly visible, demonstrating a complicated group of behavioural and emotional problems[1]. Serious, repetitive, and persistent misbehaviour is the essential feature of this disorder. These behaviors fall into four main groups: aggressive behaviour toward people or animals, destruction of property, deceitfulness or theft, and serious violations of rules. To make a diagnosis of conduct disorder, a child or adolescent must have displayed three or more characteristic behaviors in the past 12 months[2]. At least one of these behaviors must have been evident during the past six months[2]. Diagnosing conduct disorder can be a dilemma because children are constantly changing. This makes it difficult to discern whether the problem is persistent enough to warrant a diagnosis. In some cases, what appears to be a conduct disorder may be a problem adjusting to acute or chronic stress. These children often have difficulty maintaining friendships. Friends and family members become upset with their misbehaviour and often become more irritated when the children do not show remorse or guilt over their actions. They often have low self-esteem, even though their behaviour may make them appear tough, or self-assured[3,4].

These children may also participate in crimes and are often involved with the court system. They are also more likely to smoke, use alcohol or illegal drugs, engage in early sexual activity and other reckless behaviours[5]. These behaviors increase the risk of teenage pregnancy and sexually-transmitted diseases including human immunodeficiency virus (HIV) infection.

Boys are more likely to be diagnosed with Conduct Disorder than girls. Boys are also more likely to show aggressive behaviour, threats, vandalism, and confrontational behaviour than girls. Girls with Conduct Disorder are more likely to lie, skip school, run away, and shoplift, and are less confrontational in their behaviour[6].

The diagnosis of Conduct Disorder typically occurs when children are in higher primary school to early secondary school years. However, children as young as 5-6 years old can be diagnosed with the condition. Majority of children stop showing conduct disorder behaviours by the time they reach adulthood; however, some individuals continue to have similar problems through adulthood[1]. The U.S. Department of Health and Human Services estimates that between six and sixteen percent of males and two to nine percent of females under age 18 have conduct disorder ranging in severity from mild to severe [7]. There are no data of the disorder in Port Harcourt; therefore this study was conducted to ascertain the prevalence amongst an urban school population.

MATERIALS AND METHODS

The study was conducted in some secondary schools in Port Harcourt between 5th of January to 30th June 2009. Port Harcourt is a metropolitan city and the capital of Rivers State, one of the Niger Delta states in Nigeria. A two-staged stratified sampling method was used to select the schools. The schools were first stratified based on location. Simple random sampling, balloting from each sub-section of the strata, did the final selection. Some secondary schools in the D / line area of Port Harcourt were selected. Approval to carry out the study was obtained from the Principals of the various schools. Parents and guardians were informed about the questionnaires and verbal consent was obtained from the parents of the participants and the participants themselves who were up to18 years of age. The study was carried out by utilizing structured questionnaires (Appendices A & B). The questionnaire based on Vanderbilt Attention Deficit Hyperactivity Disorder (ADHD) Diagnostic Teacher Rating Scale for oppositional defiant and conduct disorder symptoms[8] required three or more counted behaviors from questions 19-28 for diagnosis (see Appendix A). A list of signs used for diagnosis of conduct disorder taken from the Diagnostic and Statistical Manual text revision (American Psychiatric Association, 2000) was also used[2]. A child must show a pattern of at least three of these behaviour groups for at least a year before the diagnosis was considered. Eight hundred and eighty five students from four different schools were recruited into the study. The questionnaires administered to the students were filled with the assistance of the researchers and the classroom teachers. Direct verbal interview was conducted for those noted to have signs of conduct disorder. The parents and or guardians were counselled and follow up sessions were planned and conducted for further interactions.

RESULT:

There were 885 students studied and 140 of them met the criteria for the diagnosis of conduct disorder, giving a prevalence of 15.82%.

Demographic Data:

The age range of the entire students ranged from 9-18 years with a modal age of 13 years. Sex distribution of those with the conduct disorder showed that 112 were males and 28 were females giving a male: female ratio of 4:1.

Other results:

All the children resided in Port Harcourt metropolis. Conduct disorder was highest amongst the children who lived with their parents compared to those who lived with other caregivers. Majority 88 (62.86%) lived with parents, 33(23.57%) lived with family relations and 19 (13.57%) were working as house helps to other families. Poor academic performance was more in those working as house helps, that is, 16 children out of 19 of them (84.2%); 27 (30.7%) children out of 88 for those who lived with parents and 20 (60.6%) out of 33 children in those who resided with family relations. All the children 4 (100%) who had epilepsy were those who lived with their parents. Three of the children with depression lived with their parents while 4 of them lived with relatives and one was a house help.

The various behaviours exhibited are shown on Table I. These included bullying and or threatening classmates and other students, poor attendance, stealing from peers amongst others. Table II shows the number of comorbid disorder associated with those who had conduct disorders.

The academic performances of the children who suffered from conduct disorder and related problems were poor. Their previous term result showed that their overall average ranged between 28-46%, none of them had up to 50% in their class academic activity. There were a number of them who indulged in use of hard drugs and alcohol. When interviewed about the reasons for usage, the answers ranged from seeing other friends using it in 78 (55.7%), usage at home by parents 16 (11.4%), and feeling of happiness and elation when the drugs were used 29(20.7%) . The different deviant behaviors exhibited by the children and the drugs used are shown on Table III. Amongst those that have been exposed to early sexual activity, two of the girls have had abortions done at ages 13, and 15 years respectively.

Table I: Behaviors exhibited by those with conduct disorder

Behaviour	Number	Percentage
Poor attendance record	89	63.57%
Frequent physical fights	77	55.00%
Lying to peers or teachers	34	24.29%
Bullying / threatening classmates and other students	22	15.71%
Stealing from peers	12	8.57%
Destruction of property	10	7.14%
History of frequent suspension	10	7.14%
Low self esteem masked by bravado	87	62.14%

Table II: Comorbid disorders associated with those with conduct disorders.

Disorder	Number	Percentage
Poor academic performance	63	45.0%
Learning disability	43	30.71%
Epilepsy	8	5.71%
Depression	4	2.86%
NIL	22	15.71%

Table III: Drugs used and other behaviours by those with conduct disorders

Behaviour	Number	Percentage	Sex	
			Male	Female
Tobacco smoking	62	44.3	55	7
Sniffing gum	50	35.7	41	9
Alcohol use	49	35.0	38	11
Sniffing snuff	44	31.4	35	9
Marijuana use	41	29.3	37	4
IV Drug use	11	7.9	9	2
Sexual exposure	18	12.9	11	7
NIL	22	15.7	13	9

DISCUSSION

Conduct disorder is generally diagnosed when somebody, often a child in school, comes to the attention of authorities (school, law enforcement, and others) most often because of misbehaviour[9]. The person might then be referred to a psychiatrist or psychologist for assessment and diagnosis. In this study the prevalence was 15.82 % with more males having the disorder. The findings are similar to other studies[3,6]. Usually a history of acting out in school, neighbourhood, home, and other social settings is obtained. Some of the students in this study actually admitted that they had been reprimanded by the law enforcement agents. Court-ordered treatment would likely occur if the person comes to the attention of the police and if a crime was involved[10]. A judge might order treatment as an alternative to jail, or before a sentence is served[4,11]. Some of those children in our study had had special treatment such as child tutoring, classroom intervention, social-cognitive skills training and family problem-solving. Many children with conduct disorder also have poor academic performance and learning disabilities.[12] This was also shown in our study where it was noted that about 30% of them had learning disability. The disability was picked up using academic performance. These children had severe problem with simple arithmetic sums solving, writing and reading and participating in other classroom learning activities. Poor academic performance was more in those working as house helps. This was not surprising because these children are usually very busy with performing household chores and other domestic duties. They hardly had quality time to spend reading their books. They also come late to school; they lacked good concentration and rarely did their given assignments.

Those who were bullies consistently challenged class / school rules, refused to do assignments and argued and or fought with other students often. This behaviour caused significant impairment in both social and academic functioning. They were usually the last in academic performance rating almost in class work with poor overall average in their school term work.

Children with suspected Conduct Disorder need to be referred for mental health assessment. If the symptoms are mild, the student may be able to receive services and remain in the regular school environment.

The use of drugs, alcohol usage and early exposure to sexual activity are not uncommon with children and adolescents who have conduct disorder[5]. They are also likely to be involved in crime and oppositional deviant disorders. These behavioural attitudes were seen amongst our study group.

CONCLUSION AND RECOMMENDATION

Conduct disorder is not rare in our environment. Prognosis may best be improved by the prevention of conduct disorder before it becomes so resistant to treatment. Early identification and appropriate and innovative treatment will improve the course of conduct disorder and possibly prevent a host of negative outcomes that are often a consequence of the behaviors associated with it. This should incorporate several components such as child tutoring, classroom intervention, peer training, social-cognitive skills training, parent training, family problem-solving and community interventions.

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APPENDIX A
Vanderbilt ADHD Diagnostic Teacher Rating Scale

INSTRUCTIONS AND SCORING

Behaviors are counted if they are scored 2 (often) or 3 (very often).

Inattention Requires six or more counted behaviors from questions 19 for
indication of the predominantly inattentive subtype.
Hyperactivity/ impulsivity Requires six or more counted behaviors from questions 1018
for indication of the predominantly hyperactive/impulsive subtype.
Combined subtype Requires six or more counted behaviors each on both the
inattention and hyperactivity/impulsivity dimensions.
Oppositional defiant and conduct disorders
Requires three or more counted behaviors from questions 1928 .

Vanderbilt ADHD Diagnostic Teacher Rating Scale

Name: Grade: _____
Date of Birth: _____ Teacher:_____ School: _____

Each rating should be considered in the context of what is appropriate for the age of the children you are rating.

Frequency Code: 0 = Never; 1 = Occasionally; 2 = Often; 3 = Very Often

1. Fails to give attention to details or makes careless mistakes in schoolwork 0 1 2 3
2. Has difficulty sustaining attention to tasks or activities 0 1 2 3
3. Does not seem to listen when spoken to directly 0 1 2 3
4. Does not follow through on instruction and fails to finish schoolwork 0 1 2 3 (not due to oppositional behavior or failure to understand)
5. Has difficulty organizing tasks and activities 0 1 2 3
6. Avoids, dislikes, or is reluctant to engage in tasks that require sustaining mental effort
7. Loses things necessary for tasks or activities (school assignments, pencils, or books)
8. Is easily distracted by extraneous stimuli 0 1 2 3
9. Is forgetful in daily activities 0 1 2 3
10. Fidgets with hands or feet or squirms in seat 0 1 2 3
11. Leaves seat in classroom or in other situations in which remaining seated is expected
12. Runs about or climbs excessively in situations in which remaining seated is expected
13. Has difficulty playing or engaging in leisure activities quietly 0 1 2 3
14. Is "on the go" or often acts as if "driven by a motor" 0 1 2 3
15. Talks excessively 0 1 2 3
16. Blurts out answers before questions have been completed 0 1 2 3
17. Has difficulty waiting in line 0 1 2 3
18. Interrupts or intrudes on others (e.g., butts into conversations or games) 0 1 2 3
19. Loses temper 0 1 2 3
20. Actively defies or refuses to comply with adults' requests or rules 0 1 2 3
21. Is angry or resentful 0 1 2 3
22. Is spiteful and vindictive 0 1 2 3
23. Bullies, threatens, or intimidates others 0 1 2 3
24. Initiates physical fights 0 1 2 3
25. Lies to obtain goods for favours or to avoid obligations (i.e., "cons" others) 0 1 2 3
26. Is physically cruel to people 0 1 2 3
27. Has stolen items of nontrivial value 0 1 2 3
28. Deliberately destroys others' property 0 1 2 3
29. Is fearful, anxious, or worried 0 1 2 3
30. Is self-conscious or easily embarrassed 0 1 2 3
31. Is afraid to try new things for fear of making mistakes 0 1 2 3
32. Feels worthless or inferior 0 1 2 3
33. Blames self for problems, feels guilty 0 1 2 3
34. Feels lonely, unwanted, or unloved; complains that "no one loves him/her" 0 1 2 3
35. Is sad, unhappy, or depressed 0 1 2 3

Anxiety or depression symptoms Requires three or more counted behaviors from questions 2935.
The performance section is scored as indicating some impairment if a child scores 1 or 2 on at
least one item.

PERFORMANCE
Problematic Average above average
Academic Performance
1. Reading 1 2 3 4 5
2. Mathematics 1 2 3 4 5
3. Written expression 1 2 3 4 5

Classroom Behavioral Performance
1. Relationships with peers 1 2 3 4 5
2. Following directions/rules 1 2 3 4 5
3. Disrupting class 1 2 3 4 5
4. Assignment completion 1 2 3 4 5
5. Organizational skills 1 2 3 4 5

Frequency Code: 0 = Never; 1 = Occasionally; 2 = Often; 3 = Very Often

Appendix B
Questionnaire structured for the study of Conduct Disorder and associated comorbidities.
1. Name .....
2. Age.....