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PREVALENCE OF DEPRESSIVE SYMPTOMS AMONG SENIOR SECONDARY SCHOOLS ADOLESCENTS IN OSOGBO-OSUN STATE, NIGERIA

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ABSTRACT

Background: Adolescent depression is a significant health problem which can lead to detrimental consequences on the adolescents, their families and their communities. Interestingly, depressive symptoms among secondary school adolescents are often overlooked, as they can be confused with mood swings that they often experience at this age. The objective of this study was to determine the prevalence and the prevalent degree of depressive symptoms among Senior Secondary School Adolescents in Osogbo, Nigeria. Methods: This study adopted the descriptive survey design. The participants comprised two hundred and two adolescents in two selected senior secondary schools whose ages were between 13 years and 19 years. The statistical technique that was used to analyze data in this study was descriptive statistics. Results: Two hundred and two adolescents were recruited. This study revealed that depressive symptoms are common among female (62%) adolescents than their male counterparts (38%). Also, it was found that mild mood disturbance (23.8%) was the prevalent degree of depressive symptoms among the participants with 27% prevalence of depressive symptoms. Conclusion: Depressive symptoms are common in adolescents and unfortunately, they are unrecognized problems among adolescents which necessitate the need for recognition. In this wise, understanding the prevalence of adolescent depressive symptoms is important for developing appropriate screening strategies, treatment planning, and follow-up for those small proportion of adolescents who could become clinically depressed. There is need for proper understanding of the factors that influence depressive symptoms in order to reduce depressive symptoms among the adolescents.

KEYWORDS: Prevalence, Depressive symptoms, Adolescents, Nigeria.

INTRODUCTION

Adolescence is a transitional period from the age of 10 to 19 years, when young people undergo physical, biological, psychological, cognitive, social and economic changes.^[1] that affect the development of their health, well-being and health behavior.^[2] Adolescence can be divided into two parts: early adolescence (10-14 years) and late adolescence (15-19 years). During early adolescence, the physical changes in the development of the brain are obvious.^[3] Late adolescence comprises the latter teenage years and at this stage, most of the physical changes have already occurred, with the continuous development of both the body and mind. During these years, cognitive abilities are enhanced with analytical and reflective thoughts and the adolescent's

understanding of the social perspectives, their selfawareness and their inhibitory control are increased.^[4,5] Adolescent depression is a significant health problem which can lead to detrimental consequences on the adolescents, their families and their communities; presence of elevated depressive symptoms is a significant predictor of depression.^[6] Depression among adolescents is associated with considerable morbidity and has major socio-economic impact.^[7] Depression represents a major global mental health problem.^[8] According to the World Health Survey on mental disorders, it was found that about one in twenty people experienced an episode of depression during the last year.^[9]

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Depression can affect people at all ages, including children and adolescents. Several studies have shown that depressive symptoms occur over the course of childhood and adolescence and carry a great risk for the development of depressive disorders later in life.^[10,11,12] Interestingly, depressive symptoms in young children are often overlooked, as they can be confused with mood swings that children often experience at this age.^[13] One of every three to four children in early adolescence is estimated to meet the criteria of the DSM-IV for a mental disorder.^[14] More specifically, results from a study have shown that rates of depressive symptoms increased from 1% to 2% at the age of 13 and to 7% at the age of 15.^[15] In Nigeria, a cross-sectional study of 262 medical students from University of Nigeria, Enugu campus, one of the foremost medical schools in Nigeria was studied. The prevalence of depression among the students was 23.3%.[16]

Depression has been said to affect academic performance negatively, reduce quality of life and severely hinder social relationships among adolescents.[17] Moreover, depression leads to delinquent and risky behaviors affecting an individual's health, life quality, and society.^[18] Suicidal expression has long been associated with several psychosocial indicators, many of which are intensified during adolescence.^[19] Interestingly, depressive symptoms in young children are often overlooked, as they can be confused with mood swings that children often experience at this age. There is a dearth of published data on depression in Nigeria especially in Osun – State among this special population, hence the need for this study. This study aimed at determining the prevalence of depressive symptoms and also the prevalent degree of depressive symptoms among adolescents in senior secondary schools in Osogbo, Osun State, Nigeria.

MATERIALS AND METHODS

This study adopted the descriptive survey design. The sample for this study comprised 202 adolescents in two selected senior secondary schools in Osun State (102 participants from public senior secondary school; Osogbo Grammar School, Osogbo, Osun State and 100 participants from a private senior secondary school; Omoleye Private College, Ilobu, Osun State).

All adolescents aged between 13 and 19 years who gave consent were included in the study while students below 13 years and those above 19 years were excluded including those who refused consent.

Research Instrument

The Beck Depression Inventory (BDI)

Description of the Instrument

The Beck Depression Inventory (BDI) is a series of questions developed to measure the intensity, severity,

and depth of depression. It is composed of 21 questions, each designed to assess a specific symptom common among people with depression.^[20] The BDI was developed in 1961, adapted in 1969, and copyrighted in 1979. A second version of the inventory (BDI-II) was developed to reflect revisions in the Fourth Edition Text Revision of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR.^[21] The BDI is composed of 21 questions or items, each with four possible responses. Each response is assigned a score ranging from zero to three, indicating the severity of the symptom.^[22]

Interpreting BDI

The sum of all BDI item scores indicates the severity of depression. Scores from 1to 10 are considered normal, scores of 11 to 16 indicate mild mood disturbance, scores of 17 to 20 indicate borderline clinical depression, scores of 21 to 30 moderate depression, 31 to 40 indicate severe depression while over 40 indicate extreme depression.

Procedure for Administration and Data Collection

The participants read, understood the instructions before they responded to the items on the questionnaires by ticking the appropriate responses. The questionnaires were collected after all the participants have responded.

Data Analysis

The statistical technique that was used to analyze data in this study is descriptive statistics. The descriptive statistics used were frequency, percentage, charts, means and standard deviations.

RESULTS AND DISCUSSION

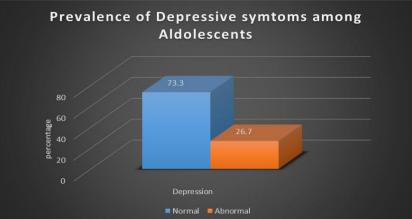


Fig 1 above shows that 73.3% (148) participants were normal while 26.7% (54) participants had depressive symptoms.

Degrees of Depressive Symptoms	Frequency	Percent
Normal	148	73.3
Mild Mood Disturbance	48	23.8
Borderline Clinical Depression	4	2.0
Moderate Depression	2	1.0
Total	202	100

Table 2 revels that mild mood disturbance is the most prevalent degree among the adolescents. That is, out of 54 participants having some degrees of depressive symptoms, mild mood disturbance was the prevalent degree with 48 participants. It was distantly followed by borderline clinical depression with 4 participants followed by moderate depressive symptoms with 2 participants.

Table 3 Depressive symptoms among male and female adolescents.

Degrees of Depression	Gender		Total
	Male	Female	Totai
Normal	60 (78.9%)	88 (69.8%)	148 (73.3%)
Mild Mood Disturbance	15 (9.7%)	33 (26.2%)	48 (23.8%)
Borderline Clinical Depression	1 (1.3%)	3 (2.4%)	4 (2.0%)
Moderate Depression	0 (0%)	2 (1.6%)	2 (1%)
Total	76 (100%)	126 (100%)	(100%)

Table 3 above shows that out of the 202 participants, there were 76 males and 126 females in this present study. 148 (73.3%) were normal while the remaining 54 were having one depressive symptom or the other. Also, out of the 54 that were having depressive symptoms, 16 were males while 38 were females, that is, ratio 1:1.4.

DISCUSSION

Depression is a common mental disorder due to high risk of the adolescence development stage.^[23] The result of this study shows that depressive symptoms are common among female adolescents than male adolescents. The result of this study corroborates with the studies.^[24] Mild mood disturbance is the most prevalent degree among the adolescents. It was distantly followed by borderline clinical depression and moderate depressive symptoms An Egyptian study reported that 10% of depressed female adolescents included in the study were classified as having moderate depressive state, while 30% had mild depressive state and 60% of them had sub threshold depressive state. $^{\left[25\right] }$

The prevalence of Depression (26.7%) is close to a study in Nairobi, Kenya which reported a prevalence of clinically significant depressive symptoms of 26.4% among the adolescents in secondary school.^[25] However, this result was far from the result from the study in Sri Lanka which revealed that 57.7% of the participants were having elevated depressive symptoms. This high prevalence may be due to unhealthy lifestyles of the participants.^[26]

Adolescents are generally apparent as a strong age group and yet 20% of them in any given year experience psychological disorders, most commonly depression and anxiety.^[27] Adolescence is the critical period for the development of self-esteem and self-identity, low selfesteem may endanger adolescents' emotional development.^[28]

Recommendations

• Mental Health Experts should do a good job on the adolescents especially the female ones during puberty; this will stem the increased prevalence of depression in female adolescents.

• Adolescents should endeavor to participate in sporting activities; which may reduce risk of depression and suicide

• Availability and accessibility of school mental health services should be ranked high in the scale of preference in secondary schools.

CONCLUSION

Depressive symptoms are common in adolescents. Depressive symptoms are unrecognized problems among adolescents that necessitate the need for recognition. Thus, understanding the prevalence of adolescent depressive symptoms is important for developing appropriate screening strategies, treatment planning, and follow-up for that small proportion of adolescents who could become clinically depressed. Current poor understanding of the factors that influence depressive symptoms makes these efforts challenging.

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REFERENCES

- 1. Sawyer, S. M., Azzopardi, P. S., Wickremarathne, D. and Patton, G. C. The age of adolescence. The Lancet Child and Adolescent Health: 2018; 2(3): 223-228.
- Currie, C., and Alemán-Díaz, A. Y. (2015). Building knowledge on adolescent health: reflections on the contribution of the health behaviour in School-aged Children (HBSC) study. The European Journal of Public Health: 2015; 25(suppl_2): 4-6.
- Mah, A., Geeraert, B. and Lebel, C. Detailing neuroanatomical development in late childhood and early adolescence using NODDI. PLoS ONE: 2017; 12(8): e0182340.
- 4. Dowsett, S. M. and Livesey, D. J. The development of inhibitory control in preschool children: Effects of "executive skills" training. Developmental Psychobiology: The Journal of the International Society for Developmental Psychobiology: 2000; 36(2): 161-174.
- Harrowell, I., Hollén, L., Lingam, R. and Emond, A. Mental health outcomes of developmental coordination disorder in late adolescence. Developmental Medicine & Child Neurology: 2017; 59(9): 973-979.
- 6. Clayborne, Z. M., Varin, M. and Colman, I. Systematic review and meta-analysis: adolescent

depression and long-term psychosocial outcomes. Journal of the American Academy of Child & Adolescent Psychiatry: 2019; 58(1): 72-79.

- Carrellas, N. W., Biederman, J. and Uchida, M. How prevalent and morbid are subthreshold manifestations of major depression in adolescents? A literature review. Journal of affective disorders: 2017; 210: 166-173.
- Singh, M. M., Gupta, M. and Grover, S. Prevalence & factors associated with depression among schoolgoing adolescents in Chandigarh, north India. The Indian journal of medical research: 2017; 146(2): 205.
- Kessler, R. C., Haro, J. M., Heeringa, S. G., Pennell, B.-E. and Üstün, T. B. The World Health Organization world mental health survey initiative. Epidemiology and Psychiatric Sciences: 2006; 15(3): 161-166.
- 10. Gaston, S. The long-term effects of parental incarceration: does parental incarceration in childhood or adolescence predict depressive symptoms in adulthood? Criminal Justice and Behavior: 2006; 43(8): 1056-1075.
- Lussier, A. A., Hawrilenko, M., Wang, M.-J., Choi, K. W., Cerutti, J., Zhu, Y. and Dunn, E. C. Genetic susceptibility for major depressive disorder associates with trajectories of depressive symptoms across childhood and adolescence. medRxiv: 2020.
- 12. Petersen, A. C., Sarigiani, P. A. and Kennedy, R. E. Adolescent depression: Why more girls? Journal of youth and adolescence: 1991; 20(2): 247-271.
- 13. Whitbeck, L. B., Hoyt, D. R. and Bao, W. N. Depressive symptoms and co-occurring depressive symptoms, substance abuse, and conduct problems among runaway and homeless adolescents. Child development: 2000; 71(3): 721-732.
- Copeland, W., Shanahan, L., Erkanli, A., Costello, E. J. and Angold. Indirect comorbidity in childhood and adolescence. Frontiers in psychiatry: 2013; 4: 144.
- 15. Lewinsohn, P., Moerk, K. and Klein, D. Epidemiology of adolescent depression. EconomNeurosci: 2000; 2: 52-68.
- Aniebue, P. and Onyema, G. Prevalence of depressive symptoms among Nigerian medical undergraduates. Tropical doctor: 2008; 38(3): 157-158.
- 17. Muslim N., Mohan N. M. M., Hamid L. A. M. A., Jamaludin M. F. and Rahman N. A. A. The Influence of Health Status Towards Academic Performance Among Undergraduate Students at the Universiti Selangor, Malaysia. Selangor Business Review: 2021: 58-71.
- Clair-Michaud M., Martin R. A., Stein L. A., Bassett S., Lebeau R. and Golembeske C. The impact of motivational interviewing on delinquent behaviors in incarcerated adolescents. Journal of substance abuse treatment: 2016; 65: 13-9.

- 19. Toomey R. B., Syvertsen A. K. and Shramko M. Transgender adolescent suicide behavior. Pediatrics: 2018; 142(4).
- 20. Jackson-Koku G. Beck depression inventory. Occupational Medicine: 2016; 66(2): 174-5.
- 21. Ororume A.S. and Timothy O.O. Sociodemographic influence on the level depressive symptomatology among nurses on shift-work schedule. Gender and Behaviour: 2018; 16(1): 11001-10.
- 22. Sahile M. A, Segni M. T, Awoke T. and Bekele D. Prevalence and predictors of antenatal depressive symptoms among women attending Adama Hospital Antenatal Clinic, Adama, Ethiopia. International Journal of Nursing and Midwifery: 2017; 9(5): 58-64.
- Huang X, He Z, Jiang X, Hou M, Tang Z, Zhen X, et al. Folic acid represses hypoxia-induced inflammation in THP-1 cells through inhibition of the PI3K/Akt/HIF-1α pathway. PloS one: 2016; 11(3): e0151553.
- 24. Breslau J, Gilman S, Stein B, Ruder T, Gmelin T. and Miller E. Sex differences in recent first-onset depression in an epidemiological sample of adolescents. Translational psychiatry: 2017; 7(5): e1139-e.
- 25. Khasakhala L, Ndetei D, Mutiso V, Mbwayo A. and Mathai M. The prevalence of depressive symptoms among adolescents in Nairobi public secondary schools: association with perceived maladaptive parental behaviour. African journal of psychiatry: 2012; 15(2): 106-13.
- Perera B, Torabi MR, Jayawardana G. and Pallethanna N. Depressive symptoms among adolescents in Sri Lanka: prevalence and behavioral correlates. Journal of Adolescent Health: 2006; 39(1): 144-6.
- 27. Organization WH. Diet, nutrition, and the prevention of chronic diseases: report of a joint WHO/FAO expert consultation: World Health Organization; 2003.
- Garnefski N, Kraaij V and van Etten M. Specificity of relations between adolescents' cognitive emotion regulation strategies and internalizing and externalizing psychopathology. Journal of adolescence: 2005; 28(5): 619-31.