

Establish the prevalence of clinical depression among secondary school adolescents in Murang'a East Sub-County in Kenya.

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Abstract

Prevalence of clinical depression among adolescents varies across geographical, cultural, and socioeconomic contexts. According to the World Health Organization, depression is a leading cause of disability worldwide, including among school-going adolescents. This study sought to determine the prevalence of clinical depression among secondary school adolescents in Murang'a East Sub-County, Kenya. A cross-sectional correlational research design was employed, targeting 369 students aged 14–18 years from three purposively selected mixed-gender schools (rural, peri-urban, and urban). Of the 369 sampled students, 363 successfully completed the questionnaires. Participants were stratified by class levels (form two and three), and by gender within each stratum. Stratified simple random sampling was applied within each stratum to ensure gender proportionality. Data was collected using the Beck Depression Inventory-II (BDI-II), which classifies depressive symptoms into subthreshold, mild, moderate, and severe categories. 31.4% had subthreshold depression, 21.2% mild, 28.7% moderate, and 18.7% severe depression. Subthreshold depression emerged as the most prevalent, indicating significant emotional distress even among those not meeting the clinical threshold. Moderate and severe depression, accounting for nearly half the sample, signaled an urgent need for mental health intervention, that if undressed can potentially impact academic performance, and overall well-being. High prevalence of clinical depression among adolescents in Murang'a East Sub-County underscore the necessity for a comprehensive tiered mental health support system in schools, that includes preventive measures such as, creating awareness, early screening and psychoeducation, to professional interventions for those with acute symptoms. Schools are uniquely positioned as frontline institutions for identifying and addressing adolescent mental health challenges, hence the need to be strengthened to enhance this role.

Background

Prevalence of clinical depression among secondary school adolescents is a growing global concern. Studies indicate a notable rise in depression rates, particularly among girls. Daly¹ found a 7.7% increase in U.S. adolescent depression over a decade, with girls experiencing a dramatic surge. Similarly, a study conducted by Saluja et al.² in the US observed that girls were more prone to depressive symptoms than boys, with the prevalence increasing with age. These findings point to a gender disparity in adolescent mental health and call for gender-sensitive approaches in prevention and intervention strategies in schools.

Elsewhere, Shorey et al.³ identified a global prevalence of 34% for self-reported elevated depressive symptoms among 10–19-year-olds, with regions like Africa and Asia showing higher rates. Bhattarai et al.⁴ in Nepal reported that 44.2% of adolescents reported depression symptoms, linked to low social support and low self-esteem. Similarly, Nirudya et al.⁵ in India reported that a 37% depression prevalence. These studies highlight the widespread nature of adolescent depression and underscore the need for psychosocial support systems.

In Sub-Saharan Africa, depression among adolescents is influenced by structural and socio-demographic factors. Thus Sequeira et al.⁶ noted limited mental health services and poor policy integration across SSA. In yet another study Nzeadibe et al.⁷ found urban South African adolescents were more depressed than rural peers, with factors such as income, age, and race contributing. Oderinde et al.⁸ in Nigeria linked depression to maternal death, low socioeconomic status, and exposure to violence. These findings stress the need for tailored interventions and policy frameworks sensitive to local context and adversity.

Studies conducted in East Africa show high levels of adolescent depression. Thus Girma et al.⁹ reported that 28% prevalence in Ethiopia, linked to adverse childhood experiences and low social support. In Rwanda, Mukantwali et al.¹⁰ reported that 51% of high school students experienced depression. In Uganda, Nsereko et al.¹¹ reported that 26.6% of adolescents had clinical depressive symptoms, with girls and those living with one or no parent being particularly vulnerable. These patterns reflect shared risk factors across the region, including poverty, violence, and weak support systems.

Kenyan studies also reflect significant adolescent mental health concerns. Studies by Osborn et al.¹² reported that more than 42% of youths had elevated depression symptoms. Studies in Kakamega and Makueni reported depression rates of 45% and 58.9% respectively, with age and gender being key risk factors.^{13,14} Nyayieka et al.¹⁵ linked depression to academic performance, while Mbwayo et al.¹⁶ highlighted teachers' struggles in managing mental health in schools. Elsewhere, Kamau et al.¹⁷ emphasized delayed access to care. On the whole, these findings call for urgent school-based and policy-level responses to adolescent mental health in Kenya.

Adolescent females are generally more prone to depression than their male counterparts, due to factors, such as hormonal changes, societal expectations, and gender-related stressors¹¹ Depression in this age group is frequently undiagnosed and comorbid with other mental or behavioral disorders. Parenting environment, family history of mental illness, exposure to trauma, bullying, academic pressure, and substance use have been implicated as risk factors¹⁸ Understanding these determinants is crucial for developing targeted interventions and improving adolescent mental health outcomes

Objective

The main objective of this research was to determine the prevalence of clinical depression among secondary school adolescents in Murang'a East Sub-County, Kenya. By identifying how widespread clinical depression is within this population, the study aimed to shed light on the extent of the mental health burden affecting adolescents in the county. Result of the study, provide valuable insights that could guide development of targeted mental health interventions, enhance mental health support systems in schools, and influence policy decisions aimed at promoting adolescent well-being.

Methodology

This study adopted a cross-sectional correlational research design to explore the relationship between perceived parenting styles and clinical depression among adolescents in Murang'a East sub-County, Kenya. A total of 363 students, drawn from 33 schools, from three mixed-gender secondary schools, from rural, peri-urban, and urban settings, successfully completed questionnaires. Participants were aged between 14-18 years. The school were purposively selected, with sample allocation done in proportion to school enrollment. Participants were stratified

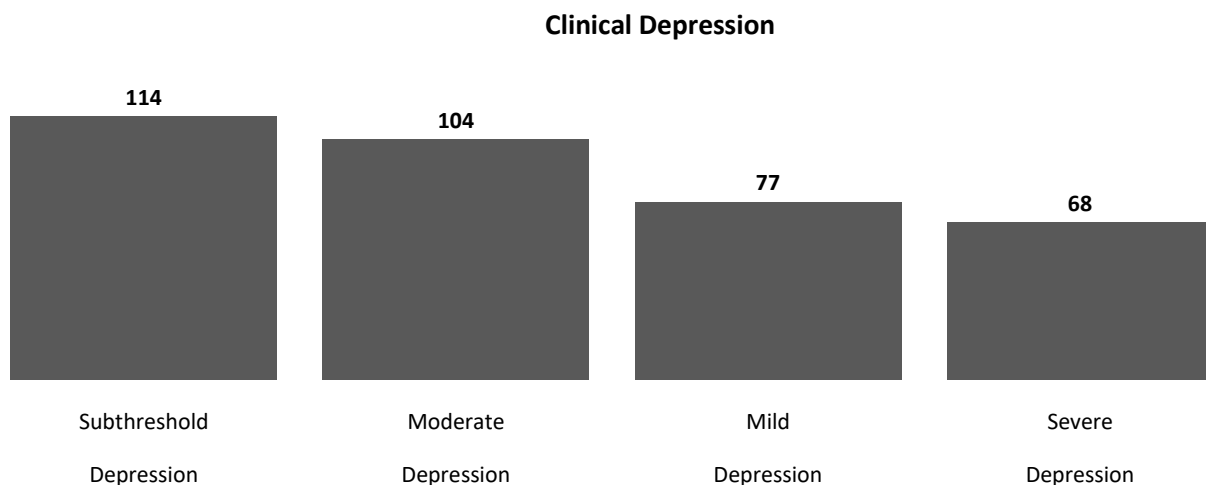
by class levels (form two and three), and by gender within each stratum. Stratified simple random sampling within each stratum ensured gender proportionality. Data was collected using the Beck Depression Inventory-II (BDI-II) to measure presence and severity depressive symptoms. In addition to this standardized instrument, a demographic section was incorporated into the questionnaire to capture data on gender, class level, family structure and family social economic status.

Results

The table below presents descriptive findings on prevalence of clinical depression using BDI-II. Based on standard cut off scores 0–13 (no depression), 14–19 (mild depression), 20–28 (moderate depression), and 29–63 (severe depression), students were classified into four main categories of depression severity: subthreshold, mild, moderate, and severe.

Figure 1

Descriptive Findings for clinical depression prevalence



Results revealed varying levels of depressive symptoms across the four BDI-II categories. Specifically, 114 (31.4%) students presented with subthreshold depression, 77 (21.2%) mild depression, 104 (28.7%) moderate depression, and 68 (18.7%) severe depression. These findings indicate that more than half of the respondents were experiencing varying levels of emotional and psychological distress, ranging from early-stage symptoms to clinically significant depressive disorder.

Subthreshold depression emerged as the most prevalent form of depressive symptomatology, reported by 114 (31.4%) students. Although these students scored below the clinical threshold (cut-off score of 14), their responses suggested presence of notable distress that does not meet the full criteria for a depressive disorder. Subthreshold symptoms such as low mood, irritability, and reduced motivation may appear subtle but are clinically important, as they are associated with a heightened risk of developing major depression later in life. High prevalence of subthreshold depression highlights the need for preventive mental health strategies, including early identification, regular emotional well-being assessments, and low-intensity interventions in school settings.

Moderate depression, was reported by 104 of 363(28.6%) students, representing the second most common category. These students scored between 20 and 28 on the BDI-II, indicating persistent and clinically significant depressive symptoms. Adolescents in this group are likely to experience considerable functional impairment, including poor academic performance, difficulty maintaining peer relationships, and a decline in daily motivation. Presence of moderate depression in nearly one-third of the sample underscores the urgent need for school-based psychological support services and access to professional mental health care when necessary. Schools should prioritize the development of internal support structures such as counseling units, mental health clubs, and trained staff to address students' emotional needs.

Mild depression was reported by 77 of 363 (21.2%) students, whose scores ranged from 14 to 19. Although less intense than moderate or severe depression, mild depression still carries the potential to disrupt learning, concentration, and emotional regulation. Students in this category may benefit from early interventions such as guided peer support, psychoeducation, and mental health awareness programs. Importantly, mild depression presents a critical opportunity for intervention before symptoms intensify.

Finally, 68 of 363 (18.7%) students reported severe depression, scoring between 29 and 63. These students are at the highest risk and may present with symptoms such as hopelessness, social withdrawal, and suicidal ideation. Presence of severe depression in this population necessitates immediate professional assessment, crisis intervention mechanisms, and collaboration with families and health professionals to safeguard the students' welfare.

Conclusion

It is concluded that clinical depression is highly prevalent among adolescents in Murang'a East sub-County, with a substantial number of students experiencing moderate to severe symptoms. These levels of depression, if left unaddressed, may impair academic performance, social relationships, and negatively impact psychological well-being. The distribution of depression severity underscores the need for tiered interventions ranging from preventative mental health education for students, to targeted psychological support for those with more acute symptoms.

Results of this study affirm that schools are strategically positioned to serve as the first line of detection and support in addressing adolescent mental health issues. Therefore, integrating mental health into the broader school health framework is not only necessary but urgent.

Recommendations

The Ministry of Education, in partnership with the Ministry of Health, should design and implement structured school-based mental health programs, that focus on awareness education, emotional wellness promotion, and student led programs such as, mental health clubs, peer support programs, and regular mental wellness activities.

Equally important is the capacity-building of teachers and school counselors through mental health training to enable early identification of depressive symptoms and timely referral for professional help. Parental and community engagement should also be prioritized through sensitization campaigns aimed at reducing stigma and fostering supportive home environments.

At the policy level, the Ministry of Education and other relevant stakeholders should embed adolescent mental health into the national school health framework. This requires formulation and enforcement of clear guidelines to support school-based mental health promotion and responsive strategies.

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