

AN EXPLORATION OF RESTORING STRATEGIES FOR ADOLESCENT DEPRESSION IN LOW-RESOURCE SETTINGS: THE CASE OF FAMILIES IN KISUMU COUNTY, KENYA

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Abstract

*Families are witnessing a rise in adolescent depression, attributable to societal changes and weakened social fabric. Depression impairs adolescents' psychosocial functioning, with potential long-term risks that can manifest in adulthood if treatment is delayed, because adolescence is critical for optimal development. The importance of family lies in its roles of socialization, protection, and providing social support to its members. Despite approval of antidepressants and psychotherapy as conventional treatments, they remain highly inadequate, costly, and inaccessible, especially in low-resource settings. Guided by Family Resilience Theory, the study explored the strategies adopted by families when responding to adolescent depression in low-resource settings such as Kisumu County. It employed a convergent mixed-method approach and a cross-sectional design. Face and content validity were ensured through expert analysis, review, along with internal consistency reliability. Closed and open-ended questionnaires were administered to purposively sampled main respondents, who were parents of adolescents diagnosed with depression within the preceding 12 months. Key informant interviews were conducted with psychologists, counsellors, social workers, and psychiatrists selected purposively. Necessary approvals were obtained, and adherence to ethical considerations ensured. Quantitative data were analysed descriptively, using frequency counts, percentages, means, and standard deviations, and inferentially using Spearman's correlation. Qualitative data were thematically analysed, with findings presented through tables and narratives. There was consensus on helpfulness of collaborative problem solving ($M = 4.01$, $S.D = 1.10$) and daily family prayers ($M = 4.06$, $S.D = 1.25$). However, external help seeking ($M = 2.62$, $S.D = 1.42$), and relocating adolescents ($M = 1.95$, $S.D = 1.23$) were perceived as avoidant strategies which worsened adolescent depression outcomes. The study concludes that there was a weak and statistically significant negative correlation between collaborative problem-solving and adolescent depression outcomes ($r = -.27^{**}$). However, following hospital-based instructions had a very weak and statistically significant negative correlation with adolescent depression outcomes ($r = -.19^*$), yet it is clinically recommended. The study recommends that the Ministry of Health, in collaboration with Kisumu County Government, should develop and implement structured, evidence-based family support programs beyond informal practices to equip families with the skills to support.*

Keywords: adolescent depression, family, low-resource settings, restoring, strategies

Introduction

Depression is a major cause of illness, disability, and mortality among adolescents globally (World Health Organization [WHO], 2024). According to Shorey et al. (2022), 34 percent of 10-19-year-olds are at risk of depression. Furthermore, 50 percent of mental illnesses in adulthood begin by age 14, yet many cases go undetected (WHO, 2024). Depression adversely impacts health, social relationships, and academic achievement of adolescents. According to Zygouris (2024), it significantly increases suicidal risk among adolescents, up to 30 times higher than in the general population. Moreover, adolescents diagnosed with depression are more at risk of developing depression later in adulthood (Henkens et al., 2022).

Depression imposes significant socioeconomic costs and greatly affects quality of adolescents' lives (Cuijpers et al., 2020), with total costs being considerably high (König et al., 2020). As revealed by McGorry et al. (2022), over 48 percent of adolescents with mental illnesses fail to complete high school, which consequently leads to future dependency and unstable families. While they experience high global rates of depression, Moitra et al. (2022) revealed that less than a third of depressed persons receive professional mental healthcare. Similarly, African Population and Health Research Centre et al. (2022) indicated that less than 10 percent of adolescents in Kenya seek professional help.

The complex nature of adolescent depression defies standardized treatment (National Institute of Mental Health, 2024), underscoring the need for contextually relevant, culturally sensitive strategies. This emphasises importance of identifying and managing depression promptly, especially in low-resource settings, as it is a major predictor of suicidality (Coppola et al., 2019). Therefore, strategies should be culturally sensitive because religious beliefs influence how individuals cope with distress and ultimately impact depression outcomes (Agwu et al., 2018; Lucchetti et al.,

2021). Given their close ties to adolescents, this can be achieved by leveraging families' potential.

Family is fundamental to socialization and emotional support of adolescents (Parsons & Bales, 1955). Murdock (1949) also noted that families fulfil essential functions in reproduction and economic provision. Through behaviour regulation and moral guidance, families create a stable environment that mitigates risks that may destabilise growth and development of adolescents. Moreover, according to Fosco and Lydon-Staley (2020), adolescents in cohesive families face fewer social problems due to strong psychosocial connections.

Family Resilience Theory suggests that families possess strengths and adaptive capacities that they utilize when faced with adversity (Walsh, 2021). These are maximized by building on existing resources. Family resilience comprises both processes and products of coping and adaptation as key functionalities of families to facilitate transformation and growth. It underscores natural healing processes whereby families resolve their problems (Zhu et al., 2023). The theory asserts that it enables them to take proactive steps, buffer disruptions, reduce risk of dysfunction, and support positive adaptation and resourcefulness in meeting future challenges (Siegel, 2018). It enhances understanding of how families navigate and adapt to challenges such as depression while underscoring dynamic interplay between individual, family, and contextual factors in shaping resilience outcomes.

Family resilience can be strengthened through quality family communications, which ease and resolve problems (Koilybayeva et al., 2023). This can be achieved by understanding family belief systems because they guide perceptions, behaviours, and family interactions (Huebner & Fickling, 2023). This is evident in the findings of Agwu et al. (2018) that families turn to hope in tough times. It reduces link between depression and suicidal attempts in adolescents (Pharris et al., 2023), consequently supporting recovery and family coping (Lim et al., 2022). Moreover,

adolescents with high hope are less likely to have suicidal thoughts and academic pressure (Zhou et al., 2024). This may also be enhanced through social support because it buffers relationship between stress and well-being (Cardinali et al., 2019), and shared family memories (Maurović et al., 2020); thereby enhancing recovery from depression.

Resilience can enable families to overcome stressful circumstances by developing coherence and reinforced shared identity (Cramm et al., 2018; Fosco & Lydon-Staley, 2020). They perceive challenges as manageable and learn about available resources that can help address their issues. However, cultural stigma and lack of awareness may be a hindrance to recovery (Gbadamosi et al., 2022; Bayer et al., 2021). Despite this potential, there is limited documentation of the strategies families adopt to enable recovery of adolescents facing depression, especially in low-resource settings. Hence, the study explored the family restoring strategies in response to adolescent depression in the low-resource settings of Kisumu County. This knowledge will be essential for developing culturally responsive, family-centred approaches.

Research Methodology

A convergent mixed-method approach and an exploratory cross-sectional design were adopted. This is recommended for social and health science problems, due to complexity of such phenomena (Dubey & Kothari, 2022).

Kisumu County was considered viable because it had the lowest disability adjusted life years at 2.06 percent among 15-49-year-olds; while at the same time, it reported the 5th highest deaths attributable to depression-related self-harm at 10.1 percent, as per reports of the Institute for Health Metrics and Evaluation [IHME] (2021). This reflects possible existence of inadequacies in depression mitigation.

Main respondents were parents of 10-to-19-year-olds diagnosed with depression during the time of study or, in not more than the past 12 months before the time of study, because they had greater

recall accuracy as reported by Dunlop et al. (2019). Parents were considered ideal because of the emotional bond with adolescents (Cardinali et al., 2019). Key informants were mental health professionals comprising counsellors, social workers, clinical psychologists, and psychiatrists.

Using Taro Yamane's formula at a 7 percent significance level, 198 parents of adolescents diagnosed with depression were sampled from a database of 6,598 adolescents who had been diagnosed with depression from January 2023 to January 2025 in the study area. The study purposively selected 130 parents who agreed to participate, representing 65.66 percent. The sample was considered adequate given the focused nature of the study and the contextual limitations associated with rural mental health research (Bekele & Ago, 2022). Purposive sampling enabled gaining deeper insights by recognising that the specific set of respondents were more knowledgeable about the phenomenon or had lived experiences (Fox et al., 2023). Key informants were also purposively selected because of their knowledge and expertise on the phenomenon.

Closed and open-ended questionnaires were administered to main respondents to enhance collection of in-depth data (Naz et al., 2022). Respondents filled out the questionnaires in the presence of research assistants to achieve a high response rate, with the researcher only assisting in a few instances. Assistance involved reading questions aloud, providing neutral explanations, and recording verbal responses, particularly for open-ended items. Caution was taken to avoid influencing responses, and all support was provided ethically to ensure authenticity in the responses while upholding informed consent and confidentiality throughout the data collection process. Key informants were interviewed using an interview guide to enrich the data collected by providing qualitative insights (Harris & Brown, 2019).

Experts in the disciplines of Sociology and Psychology were involved in the development and validation process of the instruments. To ensure

face, content, and construct validity, expert analyses and panel reviews were done to ensure the questions were relevant and coherent (Fox et al., 2023). A validity threshold of .88, which is higher than .70, which is recommended by Taherdoost (2016), was obtained. Research assistants, comprising community health promoters, were trained to ensure external validity (Thakur & Chetty, 2020).

Internal consistency reliability was tested, and a Cronbach's Alpha coefficient of .80 was obtained, which is greater than the .70 recommended by Taherdoost (2016). Thirty respondents were identified in Kisumu East Sub-County for a pilot study; a number which, according to Teresi et al. (2022), is adequate. Findings from piloting were analysed to inform modification of tools.

For a family to participate in the study, there had to be an adolescent aged 10-19 years old, staying in the family and having been diagnosed with depression at the time of study or within 12 months before the study. Secondly, identified adolescent must have disclosed to their parent(s) the depressive situation. Thirdly, respondents had to be aged above 18 years and willing to participate in the study, and be a resident of Kisumu County at the time of the study.

Quantitative data were computed into the Statistical Package for Social Sciences version 27.0 and analysed descriptively using percentage, frequency, mean, and standard deviation; and

inferentially using Spearman's correlation. Qualitative data was analysed thematically. Findings were presented using frequency tables and verbatim.

Before data collection, a National Commission for Science and Technology and Innovation license and other approvals from authorities were obtained. Compliance with ethical considerations was ensured. Respondents signed informed consent forms indicating that they voluntarily agreed to participate. Through guidance of Mental Health Officers, questionnaires were administered in hospitals to avoid breaching the privacy of subjects and for safety reasons. Data security protocols were ensured. Researchers refrained from collecting any information that could identify the respondents directly or indirectly; thus, they gathered the bare minimum of personal data.

Results and Discussion

Respondents were asked about the family restoring strategies adopted in response to adolescent depression in the study area. Findings are presented in subsequent sections.

Impact of adolescent depression on the family

Social manifestations of the impact of depressive condition on adolescents were tested by focusing on family-specific difficulties to examine the effectiveness of family restoring strategies adopted. Findings are summarised in Table 1.

Table 1

Impact of adolescent depression on the family

Item statement	Never	Slightly	Moderately	Highly	Extremely	Mean	Std. Deviation
Strained internal family social relationships	56 (43.10)	21 (16.20)	25 (19.20)	21 (16.20)	7 (5.40)	2.2462	1.30628
Strained external family social relationships	56 (43.10)	33 (25.40)	17 (13.10)	18 (12.30)	8 (6.20)	2.1308	1.26607
Family strained in performing duties	59 (45.40)	18 (13.80)	30 (23.10)	16 (12.30)	7 (5.40)	2.1846	1.28065

Note: Percentage is in parentheses

Cumulatively, as shown in Table 1, depression either highly or extremely strained internal family relationships for 21.60 percent of the families. This could be attributed to withdrawal of the adolescent, which may create a cycle whereby their behaviour negatively impacts family relationships and changes in communication patterns. Moreover, the depressive condition may bring about misunderstandings, resentment, and a breakdown in healthy communication, hence strained family relationships, which may be evident when there are divergent views on the depressive situation. A majority of families (59.3%) experienced either no or slightly strained internal family social relationships. This was confirmed by a low mean rating of 2.25 and a standard deviation of 1.31, suggesting that depression hardly strained social relationships in most families. This could be due to their ability to positively approach the situation.

Table 1 indicates that 18.50 percent of respondents indicated that depression strained external family social relationships. This could be a reflection of a bonded family, whereby problems faced by one of the members are shared. This may be attributed to stigma, which may cause some families to isolate themselves from others. In addition to time constraints, taking care of such adolescents may be overwhelming and exhausting. Consequently, burnout and reduced physical external social interactions may strain social relationships. On the other hand, 68.50 percent of respondents indicated that depression made their family have either no or slightly strained external social relationships. This was confirmed by a low mean rating of 2.13 and a standard deviation of 1.27. This indicates that a majority of families could still sustain cordial external social relationships, which may be a predictor of their

openness for external social support systems, consequently likely to boost the family resilience capacity.

As evident in Table 1, depression either highly or extremely strains performance of duties for 17.70 percent of families. This might be due to the adolescent's reduced capacity to perform daily tasks, hence compelling other family members to stretch and fill the gap of their reduced capability. This was reiterated in the sentiments of a majority of the respondents, who indicated that as part of the actions taken to help the adolescent diagnosed with depression, they reduced their task load. Difficulties could also be due to emotional strain on families and potential disruptions to family dynamics and communication, which may hinder family bond and joint involvement in performing tasks. Moreover, to adequately take care of adolescents, some members, in most cases, mothers, could be forced to sacrifice their roles and spend more time supporting adolescents. Conversely, 59.20 percent of respondents indicated that there were either no or slight strains in performing duties. These findings were supported by a mean rating of 2.18 and a standard deviation of 1.28, implying that despite depression in an adolescent, families could still perform their duties without much strain. This points to possible existence of strategies that enhance resilience and ability to withstand impact of depression.

Family restoring strategies in response to adolescent depression

To answer the question "With which strategies do families in low-resource settings in Kisumu County restore their optimal functioning in response to adolescent depression?", data were collected and findings presented in Table 2.

Table 2*Family restoring strategies in response to adolescent depression*

Item statements	Never	Rarely	Sometimes	Most of the time	Always	Mean	Std. Deviation
Following instructions given at the hospital	10 (7.70)	11 (8.50)	25 (19.20)	25 (19.20)	59 (45.40)	3.862	1.293
Having daily prayers in the family	8 (6.20)	10 (7.70)	19 (14.60)	21 (16.20)	72 (55.40)	4.069	1.253
Performing daily activities together as a family	8 (6.20)	16 (12.30)	33 (25.40)	32 (24.60)	41 (31.50)	3.631	1.221
Helping each other solve problems	5 (3.80)	8 (6.20)	24 (18.50)	37 (28.50)	56 (43.10)	4.008	1.103
Taking adolescent to live with another person	74 (56.90)	12 (9.20)	25 (19.20)	15 (11.50)	4 (3.10)	1.946	1.2282
Looking for help from non-professionals	43 (33.10)	19 (14.60)	29 (22.30)	23 (17.70)	16 (12.30)	2.615	1.4163

Note: the percentage is in parentheses

Table 2 illustrates that less than half (45.40%) of the respondents considered “following instructions given at the hospital” helpful. This was supported by a relatively high mean rating of 3.86, suggesting importance of professional healthcare guidance in recovery. Conversely, 7.70 percent dissented. This was confirmed by a standard deviation of 1.29, indicating moderate variation, which indicating that while most respondents found it helpful, a minority had differing opinions. This implies that while seeking professional mental health guidance can be perceived as a vital restoring strategy for families, significantly contributing to their well-being, variability in its utilisation may be attributed to challenges faced by some families in accessing professional treatment, such as costs for commuting, paying for services, and purchasing medication. Additionally, stigma associated with depression may deter use of professional mental health services. Nonetheless, despite the challenges related to professional treatment for depression, the moderately high mean rating indicates approval of its helpfulness, suggesting that a majority had positive experiences with hospital-based care. This could be attributed to devolution, which has enhanced access to primary healthcare services in the study area.

More than half of the respondents (55.40%), as shown in Table 2, agreed that “having daily prayers in the family” was helpful. This finding was supported by a high mean rating of 4.07 and a standard deviation of 1.25, indicating strong overall agreement among families regarding spiritual intervention as an essential measure in the adolescent depression recovery process. This could be attributed to the strong role of prayers in providing emotional comfort, hope, and a sense of community support within families. In many low-resource settings, prayer is seen not only as a spiritual act but also as a coping mechanism that helps build resilience, reduces stress, and strengthens family cohesion during times of psychological distress caused by economic hardships. Contrarily, only 13.90 percent had dissenting views, as they opined that daily prayers were either never or rarely helpful. This could be attributed to differences in individual beliefs, personal experiences with prayer, and perception that spiritual practices alone may not address complex psychosocial aspects of depression. It may also reflect a preference for clinical interventions over religious coping mechanisms.

As shown in Table 2, slightly fewer than a third of the respondents (31.50%) agreed that “performing daily activities together as a family” was helpful. On

the other hand, 25.40 percent of the respondents indicated that sometimes performing a list of activities was helpful. While the mean rating suggests a moderately positive agreement with this strategy, the relatively low agreement and moderate variability indicate that this approach was not uniformly valued among the respondents. This suggests that while shared family routines may foster a sense of stability and support within the family, not all families may find such practices consistently beneficial. Varied perspectives could also be attributed to the possibility of the triggers emanating from within the family, and difficulty in identifying activities enjoyed by adolescents. Dissenting views were observed as 18.50 percent indicated that performing daily activities together was either never or rarely helpful in recovery from depression. This could be attributed to various factors, including the possibility that some families experience strained relationships or lack emotional closeness, making shared activities feel forced or ineffective. Additionally, adolescents with depression may withdraw when they feel overwhelmed by social interaction, even with family members, which can diminish the perceived benefit of such activities. It may also reflect differing views on what constitutes meaningful engagement in family activities as a way of addressing the depressive situation.

"Helping each other solve problems," as evident in Table 2, 43.10 percent of respondents agreed that it was always helpful, with only 10.00 percent dissenting. High approval for this action was confirmed by a mean rating of 4.01 and a relatively low standard deviation of 1.10, suggesting a consensus on helpfulness of collaborative problem-solving. This was attributable to a belief that it may foster emotional support and promote a sense of shared responsibility in managing the adolescent's condition. This finding could be attributed to communality and relatively high emotional attachment among family members, which is reflected in their willingness to help another solve their problems. When families work together to resolve challenges, it may create a more stable and empathetic social environment, which is

conducive to recovery. This reduces feelings of isolation often experienced by adolescents with depression because adolescent gets the feeling that somebody is willing to help them address the problem; hence more likely to boost recovery from depression. Conversely, while there is overall consensus on helpfulness of collaborative problem-solving, perspective of 10.00 percent who dissented may also be of importance. Their dissent could be attributed to unresolved family conflicts, poor communication dynamics, and misunderstandings. In some cases, attempts at collaboration might be perceived as intrusive, unproductive, or even a source of additional stress for adolescents; this could be due to the complex nature of depression. Additionally, some families may lack skills and emotional readiness to engage in effective problem-solving, thereby limiting the perceived benefit of this approach.

Only a small proportion (14.60%) of respondents indicated that "taking an adolescent to live with another person" was either highly or extremely helpful in the recovery process. Although this proportion is relatively small, it suggests that relocating an adolescent may be seen as a way of removing them from stressful environments, especially if perceived cause of depression is from within the family. Conversely, 56.90 percent of respondents dissented. This was supported by a low mean rating of 1.95 and a standard deviation of 1.23, indicating general disapproval with the practice, with some variability in responses. This indicates that most families did not perceive physical relocation and separation from family unit as helpful in the recovery process. Such actions might be viewed as disruptive, counterproductive, and weakening psychosocial bonds, thus reducing familial support, which is vital during this period. Moreover, due to stigma attached to depression, allowing such adolescents to live with another person could expose them to ridicule and judgment, potentially worsening their situation. Furthermore, in modern society, given the financial difficulties most families face, along with weakened wider family ties, this might be

perceived as acts of avoidance transferring the family's burden to other persons.

As shown in Table 2, "looking for help from non-professionals" was considered helpful either most of the time or always by 12.30 percent. This was confirmed by a moderate mean rating of 2.62, suggesting minimal approval for the action. While this portion is lower, it suggests that seeking non-professional support boosted families' efforts to help an adolescent diagnosed with depression recover. This indicates the extent to which the participants were positive and open to external social support. Conversely, 47.70 percent of respondents had a contrary view and indicated that external help seeking was either never or rarely helpful, suggesting that openness to external help could worsen the depressive situation. This indicates a perception that looking for help from other people who are non-professionals is like unnecessarily sharing problems faced by the family with outsiders. This could be due to stigma,

personal values, which may lead to unwillingness to seek external help, and lack of evidence-based guidance, and may instead be counterproductive. In some cases, family problems shared with non-professionals may be misinterpreted or reshared, which could be detrimental to some adolescents who dislike publicity. While a larger portion of respondents dissented, high standard deviation of 1.42 implies mixed reactions; with 22.30 percent of respondents indicating that seeking help from persons non-professionals sometimes led to better outcomes. Varying perception on helpfulness of support received from non-professionals implies that, potentially, it could be misleading and inappropriate.

Relationship between family restoring strategies and adolescent depression

To establish effectiveness of family restoring strategies adopted, Spearman's correlation was run. Findings are presented in Table 3 below.

Table 3

Relationship between family restoring strategies and adolescent depression

Item statement	Spearman Rank Correlation (<i>r</i>)	
Following instructions given at the hospital	<i>r</i>	-.19*
Having daily prayers in the family	<i>r</i>	-.22*
Performing daily activities together as a family	<i>r</i>	-.11
Helping each other solve problems	<i>r</i>	-.27**
Taking adolescent to live with another person	<i>r</i>	.12
Looking for help from non-professionals	<i>r</i>	-.07

Note. Values represent Spearman's rho. * $p < .05$; ** $p < .01$.

Findings presented in Table 3 indicate that "following instructions given at the hospital" had a weak but significant negative correlation with adolescent depression outcomes ($r = -.19^*$), suggesting that following medical instructions was linked to better outcomes. This implies that families who actively adhere to professional guidance on how to recover from depression are more likely to experience improvement. This is attributable to positive experiences when seeking hospital-based treatment. In contrast, the weak correlation suggests the possibility of limitations

such as stigma, misunderstanding, financial constraints, and a mismatch with belief systems. These could pose a major hindrance to the family's capacity to help adolescents recover from depression. As indicated in the sentiments of one respondent who stated that,

"...sometimes she is very arrogant and gives me a hard time after she has come from the hospital because she is told some things which cannot apply at home...I am the one who knows what can work because I

understand her...” (Respondent-008, 48-year-old business lady, 31/01/2025)

Sentiments of respondent 008 indicate a disconnect between what the clinical psychologist advised and what could apply based on the social context. Similarly, one key informant said that,

“I am disappointed ... the government expects those with mental illness to also pay for drugs, just like other people with chronic illnesses such as diabetes. They are not considering that those with mental illness are out of touch with the world...” (KII-003, female counsellor, 14/02/2025)

Another key informant said that,

“... most people in associate depression with ‘madness’ because depressed persons sometimes get medical care in the same places where those with other chronic mental issues go... they are seen to be ‘mad’ people, whom people should not associate with because they are perceived to be bewitched ...” (KII-002, male psychologist, 13/02/2025)

Sentiments of KII-003 point to concerns on access, cost of medication, and goodwill of the government to address mental health as key challenges in addressing adolescent depression. Sentiments imply scarcity of treatment for depression as barriers (IHME, 2021). Sentiments of KII-002 also reveal stigma and discrimination associated with depression as a major obstacle to help-seeking. The findings were consistent with Moitra et al. (2022), who pointed out that only slightly less than a third of depressed persons receive professional treatment. According to Walsh (2021), the family’s adaptive capacity to overcome adversities. Realization of better outcomes when families follow hospital-based instructions implies the existence of strong adaptive capacity because they can comply with professional guidance, hence enhanced recovery of adolescents diagnosed with depression.

As shown in Table 3, “having daily prayers in the family” has a weak but significant negative correlation with adolescent depression outcomes ($r = -.22^*$), suggesting that it was linked to better outcomes. The positive consideration of daily prayers could be attributed to the buffering effect of prayers, as pointed out by Pharris et al. (2023) and Agwu et al. (2018), that most families managed to be strong and overcome adversities because of hope and strong faith, which acted as a buffer. The findings underscore the value of spirituality in facilitating recovery from adolescent depression. This approval for daily prayers is underscored by the observation that most families identified it as one of the actions they undertook to help them cope and protect themselves from burnout when taking care of the adolescent diagnosed with depression. Moreover, one of the respondents, when asked for her justification as to why she viewed herself to be the most proactive person in taking action to help the adolescent diagnosed with depression, stated that “... *I am the one who knows God... the others do not pray...*” (Respondent-073, 49-year-old female farmer, 31/01/2025). These sentiments underscore the value and emphasis placed on prayers as a beneficial action to boost recovery from depression.

As postulated in the Family Resilience Theory, prayers, which are an aspect of the family belief systems, play a vital role in how the family views the depressive situation; consequently, the actions they take. It also buffers them, reduces the risk of dysfunction, and supports positive adaptation (Siegel, 2018). This suggests that families who pray together may maintain better social relationships outside the family environment, associated with hope and high self-esteem in adolescents diagnosed with depression. These underscore the findings of Pharris et al. (2023), who found that adolescents experiencing depressive symptoms were less likely to attempt suicide if they had more hope in life. The benefits of daily prayers as an action were also pointed out by one of the key informants, who said that,

“Religious leaders play an important role in helping families with depressed adolescents... they listen, enquire, give assurance of safety, offer social support... sometimes, they connect the families to counsellors... I have a case where a depressed adolescent approached a Pastor who, after listening to the adolescent, called the parents and talked with them...” (KII-001, male counsellor, 13/02/2025)

“Helping each other solve problems” had a significant negative correlation with adolescent depression outcomes ($r = -.27^*$). This indicates that collaborative problem-solving was associated with improved outcomes. This implies that families who engage in collaborative problem-solving and support one another through challenges are better equipped to assist such adolescents in the recovery process. This may be due to enhanced interpersonal communication, emotional support, and increased self-esteem among adolescents, as they perceive that family members are available to assist when faced with a problem. The findings concur with observations made by Marchi et al. (2021) and Cramm et al. (2018), that when families have a sense of unity and shared identity, they contextualize adversities and can overcome stressful circumstances together; an aspect which could help enhance the recovery of an adolescent diagnosed with depression. As confirmed by the sentiments of one of the key informants, who underscored the role of families by stating that “... *families can do a lot in changing their thoughts which make them not have intense depression... if an adolescent is facing a problem and the family is not willing to help solve the problems, the situation may worsen...*” (KII-005, female social worker, 26/02/2025). These findings highlight the importance of collaborative problem-solving in the recovery process of an adolescent diagnosed with depression. The sentiments of KII-005 underscore the arguments of Walsh (2021) that the ability of family members to engage in solution-oriented communication strengthens the family's recovery capacity in the face of adversity,

such as adolescent depression. Problem-solving together further enhances psychosocial support and promotes a sense of control, both individually and collectively. These findings are also reflected in the sentiments of another key informant who said that “... *having a good social support system where adolescents feel loved provides room whereby, they can share their problems because they feel welcomed. Such an environment should be non-judgmental...*” (KII-003, female counsellor, 14/02/2025). As evident in the sentiments of KII-003, such an environment could be vital in helping the adolescent diagnosed with depression.

Collaborative problem-solving is one of the key aspects of Family Resilience Theory considered vital in enhancing family resilience capacity and cohesion, which promotes natural healing. Similarly, internal collaborative problem-solving boosts connectedness and social interactions among family members. This creates a conducive environment which greatly boosts the recovery of an adolescent diagnosed with depression.

As shown in Table 3, “performing daily activities together as a family” has a weak but non-significant negative correlation with adolescent depression outcomes ($r = -.11$). This indicates that, despite engaging in family activities may foster a sense of togetherness, it does not directly relate to improved adolescent depression outcomes. This may suggest that simply participating in family activities is not sufficient for recovery unless accompanied by intentional, supportive interventions aimed at addressing the challenges of adolescent depression. In contrast, sentiments of one key informant differed from the responses of parents. Key informant 003, who was a female counsellor, stated that “... *families can show social support and help adolescents in identifying activities which they enjoy or find fun in doing. This makes them engaged...*”. This highlights the importance of understanding what adolescents enjoy; an aspect best realised in a family with high connectedness and positive relationships among members.

In addition to perceived inconvenience as the family's desire to fulfil other daily needs, discontent may be attributed to psychosocial, financial, and time strains faced by families in taking care of adolescents, as observed by Bayer et al. (2021). Nonetheless, according to Izenstark and Ebata (2022), families should intentionally plan and openly try out different activities to foster closeness and thriving as a family unit. Some members may be influenced by cultural norms and values in traditional African society that influence how and to what extent adults in the family should interact with adolescents, which could explain why there is not a lot of agreement on how beneficial it is to carry out daily tasks together (Huebner & Fickling, 2023). In which case, too much engagement with adolescents may be perceived as a way of lowering oneself too much, and it could breed disrespect for elders.

These findings were inconsistent with observations made by Fosco and Lydon-Staley (2020) that short-term interventions, such as engaging in daily activities together, could help in improving family cohesion and consequently reducing the risk of adolescent depression. However, the findings may not apply to all contexts because the study focused primarily on two-caregiver families that were relatively high-functioning and comprised predominantly White, affluent families, as opposed to the current study, which focused on all types of families in low-resource settings. While engaging in activities shows a weak positive non-significant correlation, these findings emphasise the importance of families to learn about and support the interests of their members. This can significantly enhance their resilience. Moreover, as Walsh (2021) argues, family routine activities promote emotional bonding, shared responsibility, and thus aid recovery.

"Taking the adolescent to live with another person" was found to have positively weak and non-significant correlation with adolescent depression outcomes ($r = .12$). This implies that providing a new environment by relocating the adolescent to live with someone else does not

significantly contribute to improved outcomes. While action may reflect an attempt to remove an adolescent from a stressful environment, it could be perceived as isolation, which may be counterproductive. It may also point to a potential avoidance mechanism, which could be less effective in the long term for adolescents and their families.

Moreover, due to sociocultural value systems, relocating an adolescent may be viewed as preserving the dignity of the family, particularly when the adolescent becomes pregnant. Among the Luo community, which is the predominant community in the study area, such an adolescent would be relocated to stay with another wider family member until she gives birth. This was intended to protect the family from shame associated with adolescent pregnancy. Adolescent conception was considered a bad omen, which could further influence behaviour of other adolescents. Perceptions that relocating adolescents is harmful could be explained by some families' reluctance to talk about their struggles with others, possibly due to stigma and misunderstandings about depression, which, according to Gbadamosi et al. (2022), may make treatment and recovery more difficult, making the adolescent diagnosed with depression be more vulnerable and making their condition worse. Furthermore, changing the environment may damage family ties and relationships, which are crucial for improving ability to boost recovery from depression, in line with the Family Resilience Theory as put forth by Walsh (2021).

Conversely, while the findings reveal significant discontent with relocating an adolescent, it was contrary to the sentiments of one of the key informants who said that "... *sometimes we encourage parents to take the adolescents to live with another person in a different place. A case in hand is one when we realized that the trigger of depression was from within the family...*" (KII-005, female social worker, 26/02/2025). Mixed reactions, evident in the moderate standard deviation, imply that some considered it helpful.

Relocating an adolescent can disrupt emotional support and coping mechanisms, leading to a fragmented family system and diminished resilience.

As shown in Table 3, “looking for help from non-professionals” has a weak, but non-significant negative correlation with adolescent depression outcomes ($r = -.07$). While the correlation is almost negligible, it suggests that seeking help from people outside the family may lead to better outcomes. This could be attributed to increased openness to external support. This was also evident in the sentiments of one of the respondents, who acknowledged the role played by one of the neighbours, despite the daughter initially being unwilling to accept external support due to the fear of ridicule. The respondent mentioned that,

“She used to come and share with me what I should do. Her husband had also tried to commit suicide. She told me that there were some things that I would start observing, and I came to see them as she had explained them. She also told me how to live with the adolescent... This greatly helped me...” (Respondent-001, 40-year-old widow, farmer, 30/01/2025)

Sentiments of respondent 001 suggest progressive acceptance of external support and a pointer to the importance of social support groups comprised of individuals who had experienced depression and those who are either predisposed or already have the condition. These findings were consistent with the observations made by Evans-Lacko et al. (2018), who pointed out the need to encourage adolescents to seek assistance for depressive care and crisis prevention. Similarly, sentiments of respondent 001 suggest that, in as much, it could not be advisable, as per the sentiments of most of the respondents, some friends served a lot in equipping them with skills to help the depressed adolescent recover from depression. Another respondent stated that when seeking help from non-professionals, one should target “... *only*

those who can give the right information... someone may tell you that the adolescent is bewitched...” (Respondent 047, 53-year-old female nurse, 30/01/2025). These sentiments reflect the concerns about careful consideration of the persons from whom to seek support. It also highlights the possibility that belief systems may be misleading, and fear-laden information may affect seeking treatment for depression. The sentiments underscore the need for careful consideration of whom to seek support from to avoid being misled.

Gbadamosi et al. (2022), concurring with sentiments of respondent 047, revealed that stigma and misconceptions about depression may complicate the treatment process, thus increasing the vulnerability of adolescents diagnosed with depression to adverse outcomes. Outsourcing care from other people who are non-professionals may therefore weaken the capacity of the family to navigate the crisis collectively. This underscores the need to strengthen family-based interventions for adolescent depression. These mixed reactions could be due to misconceptions about depression. Progressive openness in seeking treatment for depression and acknowledgement of help from non-professionals imply that even in the face of few mental health professionals, the community members may be empowered through training to bridge the gap in resource constraints. Findings also reflect possibility of benefits of social support groups if incorporated.

Conclusion and recommendations

This current study concludes that there was a weak and statistically significant negative relationship between collaborative problem-solving and adolescent depression outcomes ($r = -.27^{**}$). However, following hospital-based instructions had a very weak and statistically significant negative relationship with adolescent depression outcomes ($r = -.19^{*}$), yet it is clinically recommended.

The study recommends that the Ministry of Health, in collaboration with Kisumu County Government, should develop and implement structured, evidence-based family support programs to equip

families with skills to support adolescents facing depression.

Declaration of generative AI and AI-assisted technologies in the writing process

The authors, while preparing this work, utilized Grammarly for refinement. After using this AI tool, the authors carefully reviewed and edited the content as necessary and assume full responsibility for the publication's content.

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MacDonald: Conceptualization, writing, review, editing, methodology, data analysis, and discussions. **Wilson:** writing, review, methodology, and discussions. **Michael:** writing, review, methodology, and discussions. **Taji:** writing, review, editing, methodology, data analysis, and discussions.

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Declaration of conflict of Interest

The authors declare that they have no competing financial interests or personal relationships which could have appeared to influence the work reported on this paper.

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