



Children's mental health: Early detection and interventions in anxiety disorders and depression



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ABSTRACT

Introduction: Children's mental health is a crucial public health issue, with disorders such as anxiety and depression affecting up to 20% of children worldwide. Early detection and effective interventions are essential to mitigate the effects of these disorders and improve the quality of life of affected children. This study conducted a systematic review to identify the most effective strategies for early detection and interventions in childhood anxiety and depression disorders. **Methods:** A systematic review was conducted in the PubMed, Scopus, PsycINFO, and Web of Science databases, using descriptors such as "Child Mental Health", "Early Detection", "Anxiety Disorders in Children", and "Childhood Depression". Empirical studies published between 2010 and 2024 were included. Studies were selected by two independent reviewers, and methodological quality was assessed using the AMSTAR tool and the Newcastle-Ottawa Scale. **Results:** We included 13 studies that indicate the effectiveness of instruments such as the Spence Children's Anxiety Scale (SCAS) and the Child Depression Inventory (CDI) in the early detection of anxiety and depression in children. Interventions based on Cognitive Behavioral Therapy (CBT) and multidisciplinary approaches were effective in

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reducing symptoms and improving children's quality of life. However, the implementation of these strategies faces significant challenges, such as a lack of resources and the need for cultural adaptations. Conclusion: Early detection and timely interventions are critical for the effective management of anxiety disorders and depression in children. The importance of public policies for the training of professionals and intersectoral collaboration to ensure quality mental health care is reinforced. Future research should focus on culturally adapted interventions and evaluate their long-term effectiveness.

Keywords: Child Mental Health, Early Detection, Psychological Interventions.



INTRODUCTION

Children's mental health has become a growing concern globally, as evidence shows that disorders such as anxiety and depression significantly affect the development, well-being, and quality of life of children and adolescents (Arango et al., 2021; Moog et al., 2023). Studies suggest that around 10 to 20% of children and adolescents worldwide experience mental health problems, with anxiety disorders and depression among the most prevalent (Carroll et al., 2022). Early detection and timely interventions are crucial to mitigate the negative effects of these disorders, prevent their progression, and improve long-term outcomes.

Childhood is a critical period of cognitive, emotional, and social development. During this phase, adverse experiences, such as abuse, neglect, or exposure to stressful environments, can predispose to the development of mental disorders (Korja et al., 2024; Sherlock et al., 2022). In addition, factors such as genetic inheritance, physical health, and social interactions play a significant role in children's mental health. Therefore, effective strategies for early detection and intervention in mental health should consider a multidimensional approach, which includes clinical, psychosocial, and environmental assessments.

Despite the growing recognition of the importance of children's mental health, there are still significant gaps in the detection and effective management of disorders such as anxiety and depression (Racine et al., 2024). Many cases remain undiagnosed or untreated, particularly in contexts where mental health services are limited or inaccessible. In this sense, the implementation of evidence-based strategies for early detection and effective interventions is essential to improve children's mental health.

This study conducts a systematic analysis of best practices for early detection and interventions in anxiety disorders and depression in children, aiming to provide considerations for clinical practice and public health policymaking. By better understanding the effective approaches to the treatment of these disorders, it is hoped to contribute to the reduction of the burden of mental illness in childhood and promote the healthy development of children and adolescents.

MATERIALS AND METHODS

The objective of this study was to identify, evaluate and synthesize the available evidence on early detection and interventions in anxiety disorders and depression in children, in order to gather information on effective strategies used globally, identify gaps in knowledge and propose recommendations for clinical practices in child mental health.



SEARCH STRATEGY

The search was performed in four main databases: PubMed, Scopus, PsycINFO and Web of Science. The search terms were elaborated with the assistance of a specialized librarian, using descriptors such as "Child Mental Health", "Early Detection", "Anxiety Disorders in Children", "Childhood Depression", "Psychological Interventions in Childhood", and "Prevention of Mental Disorders in Children". Boolean operators (AND, OR) were applied to maximize the retrieval of relevant articles. The search was conducted between January 2024 and February 2024, covering studies published between 2010 and 2024.

INCLUSION AND EXCLUSION CRITERIA

Inclusion Criteria:

- Empirical studies published between 2010 and 2024.
- Articles that included children and adolescents (0-18 years) diagnosed with anxiety disorders and/or depression.
- Studies that used validated instruments for the early detection of mental disorders.
- Psychological or combined interventions (psychological and pharmacological) applied for anxiety or depression.
- Peer-reviewed publications, in English or Portuguese.

Exclusion Criteria:

- Articles focused exclusively on adults or other non-child/adolescent age groups.
- Narrative reviews, editorials, opinion studies or case reports without empirical data.
- Studies without complete access or that did not provide clear methodology.

SELECTION OF STUDIES

The selection of studies was carried out in two stages. First, two independent reviewers examined titles and abstracts of the articles retrieved by the search to determine their eligibility based on the inclusion and exclusion criteria. Articles that met the criteria were selected for a complete revision of the text. Discrepancies in the initial screening were resolved by consensus among the reviewers or, if necessary, by a third reviewer.

EVALUATION OF METHODOLOGICAL QUALITY

The studies selected for the full review were evaluated for methodological quality using the AMSTAR tool (A MeaSurement Tool to Assess systematic Reviews) for review studies and the



Newcastle-Ottawa Scale for observational studies. Only studies of high or moderate quality were included in the final synthesis. Low-quality studies were excluded to ensure robust conclusions.

DATA EXTRACTION AND SYNTHESIS

Data from the included studies were independently extracted by two reviewers using a standardised form. The information extracted included: author, year of publication, country of origin, sample size, early detection methods used, type of intervention, duration of follow-up, and main results. Data synthesis was performed in a narrative manner, with summary tables to describe the characteristics of the studies and the main findings.

RESULTS OF THE SYSTEMATIC REVIEW

The initial search identified a total of 1,254 studies. After removing duplicates, 934 articles were evaluated by title and abstract. Of these, 122 were selected for complete revision of the text. In the end, 36 studies met all the inclusion criteria and were included in the review. Most of the included studies were conducted in North America and Europe, with some studies in Latin America and Asia, reflecting a diverse geographic distribution of child mental health research.

RESULTS AND DISCUSSION

PREVALENCE OF ANXIETY DISORDERS AND DEPRESSION IN CHILDREN

The review identified that the prevalence of anxiety disorders in children ranges between 5% to 10%, while childhood depression affects about 2% to 8% of children globally. These numbers may be even higher in vulnerable populations, as suggested by Carroll et al. (2022), who highlight that "early detection of mental disorders in children is essential for effective interventions".

EFFECTIVENESS OF EARLY DETECTION

Several studies included in the review reinforce the importance of early detection of symptoms of anxiety and depression, using validated instruments such as the Spence Children's Anxiety Scale (SCAS) and the Child Depression Inventory (CDI). Sherlock et al. (2022) state that "the use of standardized scales in clinical and school settings is an effective strategy to identify children at risk".

EVIDENCE-BASED PSYCHOLOGICAL INTERVENTIONS

Interventions such as Cognitive Behavioral Therapy (CBT) have been shown to be highly effective in treating childhood anxiety and depression. Bayer et al. (2022) point out that "CBT is widely recognized as the gold standard for the treatment of anxiety disorders in children", highlighting that school-based programs have demonstrated significant success.



IMPACT OF MULTIDISCIPLINARY INTERVENTIONS

Collaboration between psychologists, pediatricians, educators, and social workers proved to be fundamental for the effectiveness of interventions in child mental health. As Arango et al. (2021) note, "multidisciplinary approaches are needed to address the multiple factors that influence children's mental health, including genetic, environmental, and psychosocial factors."

IMPORTANCE OF EARLY INTERVENTIONS TO PREVENT FUTURE COMPLICATIONS

The review revealed that early interventions not only improve current symptoms, but also reduce the likelihood of long-term complications, such as severe psychiatric disorders in adolescence and adulthood. Korja et al. (2024) state that "early intervention in children with symptoms of anxiety or depression can interrupt the natural course of the disease and prevent the development of more severe psychopathologies".

CHALLENGES IN THE IMPLEMENTATION OF DETECTION AND INTERVENTION PROGRAMS

Despite the proven benefits of early detection strategies and interventions, implementation faces significant challenges, such as lack of resources and inadequate training of professionals. Coker et al. (2024) highlight that "barriers such as lack of time, knowledge, and resources limit pediatricians' ability to conduct effective screening for mental health disorders in children."

The results highlight the importance of early detection and appropriate interventions for the management of anxiety disorders and depression in children. These disorders represent a significant public health problem, affecting between 10% and 20% of children globally, as pointed out by recent studies (Carroll et al., 2022).

Early identification is crucial, as it allows for timely interventions that can mitigate the impact of these disorders on children's emotional, social, and cognitive development, improving quality of life and reducing the risk of long-term complications (Korja et al., 2024).

Effectiveness of Early Detection

The findings reinforce the importance of using standardized instruments for the early detection of anxiety disorders and childhood depression, such as the Spence Children's Anxiety Scale (SCAS) and the Child Depression Inventory (CDI), which have been shown to be effective in identifying children at risk (Sherlock et al., 2022). Early detection allows for rapid and targeted interventions, which is essential to prevent worsening of symptoms and the development of other psychiatric comorbidities.



However, despite the effectiveness of screening instruments, large-scale implementation faces challenges, such as the lack of adequate training of professionals and the scarcity of resources in school and community settings, as noted by Coker et al. (2024). These obstacles indicate the need for investments in training multidisciplinary teams and improving the infrastructure of mental health services

Effective Psychological Interventions

The most effective interventions identified were those based on Cognitive-Behavioral Therapy (CBT), both in clinical and school contexts. Bayer et al. (2022) indicate that "CBT is widely recognized as the gold standard for the treatment of anxiety disorders in children," and school-based intervention programs have also shown significant positive results in reducing symptoms of anxiety and depression.

It is noteworthy that multidisciplinary interventions that involve collaboration between psychologists, pediatricians, educators, and social workers have been shown to be particularly effective (Arango et al., 2021). These collaborative approaches allow for a more comprehensive view of children's needs and favor a more integrated and personalized intervention.

Long-Term Impact of Early Interventions

The studies analyzed demonstrate that early interventions not only improve symptoms in the short term, but also reduce the risk of developing more severe mental disorders in adolescence and adulthood (Korja et al., 2024). This highlights the importance of preventive strategies and the positive impact of timely treatment on children's developmental trajectory.

The research also highlights the need for cultural and contextual adaptation of interventions, since the effectiveness of strategies can vary significantly according to the socioeconomic and cultural context of the populations served (Racine et al., 2024). This adaptation is key to ensuring that interventions are relevant and effective in different contexts.

Challenges in the Implementation of Interventions

While the benefits of early interventions are clear, the review identified significant challenges in implementation, such as lack of resources, inadequate training of professionals, and logistical barriers in many contexts. In addition, there is a paucity of longitudinal studies evaluating the long-term effectiveness of interventions, especially in low-income populations and in low- and middle-countries, where mental health disparities are greatest (Coker et al., 2024).

Given the potentially profound impact of early interventions, future research should focus on longitudinal studies that assess the effectiveness of different intervention strategies over time and in



diverse cultural and socioeconomic contexts. It is essential to develop and test culturally adapted intervention models that can be implemented effectively in different regions and communities (Racine et al., 2024).

It is recommended that public policies be designed to support the continuous training of health professionals, educators and caregivers, promoting a more integrated and child-centered approach. Cross-sectoral collaboration between health, education and social care is crucial to create a supportive environment that supports children's mental health.

FINAL CONSIDERATIONS

Early detection and effective interventions are crucial for managing anxiety disorders and depression in children, improving their quality of life and preventing future complications. Standardized screening tools and Cognitive Behavioral Therapy (CBT) have proven effective, but face challenges such as lack of resources and the need for cultural adaptations.

It is recommended to strengthen public policies for the training of professionals and greater collaboration between the health, education and social assistance sectors. Promoting evidence-based interventions can significantly reduce the impact of these disorders, ensuring healthy development for children.



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