

A13

Physical activity and quality of life in clinically affected youth: A systematic review

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Background

Physical activity (PA) is a critical determinant of quality of life (QoL) in children and adolescents. However, the relationship between PA, and QoL in clinically affected youth remains underexplored. This study aimed to review the effects of PA on QoL in children and adolescents with chronic health conditions.

Materials and methods

A systematic review of clinical trials published between 2019 and 2024 was conducted using the PubMed database. Inclusion criteria were randomized clinical trials in English involving clinically Affected Youth. Five studies were selected from an initial pool of 102 articles, evaluating the impact of PA interventions on QoL.

Results

Results reveal that exercise interventions significantly improve QoL outcomes in these populations. Specifically, a 16-week resistance-aerobic program reduced anxiety and improved QoL in domains of physical, social, and emotional functions, and psychological status in children with type 1 diabetes, while a 12-week physical and dietary intervention benefited those with inflammatory bowel disease. Stretching and isometric exercises improved QoL domains, such as general health, physical and emotional function, reduced fatigue, and remising the symptoms in children with chronic kidney disease. Clinical Pilates was effective for juvenile idiopathic arthritis in reducing pain and improving physical fitness, core stability, and physical, emotional, and social function. Resistance training with a high-protein diet enhanced conditions for Fontan patients improving cardiac output, leg and core strength, physical functioning, and general health. All these studies demonstrate notable improvements in cardiorespiratory form, muscle strength, and endurance which represent an important part of QoL. These findings emphasize the importance of tailored PA programs in

improving QoL and managing symptoms in young patients with chronic conditions.

Conclusions

PA is crucial in determining QoL in children and adolescents. Addressing the global inactivity crisis requires multidisciplinary, evidence-based interventions that integrate regular PA within daily routines, involving schools, families, and community institutions. Tailored PA programs for children and adolescents with chronic conditions demonstrate significant potential to improve QoL and symptom management.