

Psychosocial Aspects of Strabismus in Children

Makhmudova Dilorom Teshaevna

Assistant teacher at the Department of Ophthalmology, Pediatric Ophthalmology at the Tashkent State Medical University, dts_2005@bk.ru

Bobokha Lyubava Yurevna

Assistant teacher at the Department of Ophthalmology, Pediatric Ophthalmology at the Tashkent State Medical University, lubavaboboha@gmail.com

Annotation: Strabismus in children is one of the most common ophthalmic pathologies that affects not only visual functions, but also psychosocial development. This review analyzes current data on the psychological and social consequences of strabismus, including impaired self-esteem, the risk of anxiety and depression, difficulties in interpersonal interaction and educational activities. The features of the influence of the disease on the family and cultural environment are considered, as well as factors that increase stigmatization and limit the social integration of the child are identified.

Special attention is paid to the need for a multidisciplinary approach, including ophthalmic correction, psychological support and pedagogical support. The article presents data on the role of specialized questionnaires and rehabilitation programs that make it possible to comprehensively assess the quality of life of children with strabismus and develop individualized assistance strategies. It is concluded that successful adaptation and improvement of the quality of life of patients are possible only with the combined efforts of medicine, psychology and pedagogy, and the prospects for further research are related to the prevention of psychosocial consequences and the creation of effective models of family and social support.

Keywords: Strabismus, children, psychosocial aspects, quality of life, psychological support.

Review purpose

This review article is aimed at summarizing current data on the psychosocial aspects of strabismus in children. Special attention is paid to the impact of this condition on the psychological well-being, quality of life and social adaptation of the child, as well as the role of the family and the educational environment. In addition, the review examines the importance of a multidisciplinary approach in diagnosis, treatment and rehabilitation, which allows us to identify promising areas in the prevention and correction of psychosocial consequences of strabismus.

Materials and methods

The review is based on the analysis of publications devoted to the psychosocial aspects of strabismus in children. The search and selection of sources was carried out among peer-reviewed articles published in leading international scientific journals indexed in the databases PubMed, ScienceDirect, SpringerLink, MDPI, SAGE and BMJ Open. Priority was given to original clinical studies, systematic reviews, and validated quality-of-life questionnaires reflecting the psychological, social, and educational consequences of strabismus. The selected works were subjected to a meaningful analysis in order to systematize existing data, identify the main patterns and determine the prospects for further research.

Introduction

Strabismus occurs in 2-5 % of children and is considered not only as an ophthalmological, but also as an interdisciplinary problem. In addition to reducing visual functions, it has an impact on the child's mental health, forming emotional difficulties, impaired self-esteem, and limiting social adaptation [1].

Modern ophthalmology traditionally focuses on surgical and optical correction, while the psychosocial consequences of the disease are much less studied. Some studies indicate that these aspects make a significant contribution to the decline in the quality of life of children and their families, which emphasizes the need for a multidisciplinary approach to treatment and rehabilitation [2-4].

Analysis and discussions

Psychological consequences

Strabismus has a significant impact on the formation of a child's self-esteem. Children with this disorder are more likely to show self-doubt, have difficulties communicating with their peers, and are prone to social isolation. These features can become the basis for anxious experiences and impaired emotional well-being [5].

In addition, patients with strabismus have a higher risk of developing anxiety and depressive symptoms compared to their peers without visual pathology. Psychological difficulties are often compounded by negative attitudes of others and bullying in the school environment, which increases the sense of isolation and reduces the adaptive potential of the child [2].

Of particular importance is the impact of strabismus on cognitive and emotional development. Research shows that chronic stress associated with treatment needs and social stigma can contribute to delayed self-confidence formation and reduced cognitive resources. These factors emphasize the importance of timely identification of psychological problems and the inclusion of specialized support in comprehensive care for children with strabismus [1,3,4].

Social and educational aspects

Strabismus often causes social stigmatization. Children with this disorder may be subjected to bullying and bullying, which creates a sense of isolation and reduces social activity. These factors negatively affect integration into the team and limit opportunities for normal interpersonal communication [6].

Strabismus also has a significant impact on the learning process. These children are more likely to have difficulty concentrating, reading, and writing, which affects academic performance. Interaction with teachers and classmates can also be complicated due to a lack of understanding of the specifics of the condition, which increases the risk of social discrimination [2,3].

In the long run, social constraints can affect professional choice and self-determination. Limited access to certain activities, combined with chronic stress and low self-esteem, reduces opportunities for full-fledged self-realization. This emphasizes the need to develop school support programs and individual support for children with strabismus [1,4,7].

The role of the family and cultural factors

Strabismus has a significant impact not only on the child himself, but also on his family. Parents often experience feelings of anxiety, stress, and guilt associated with both the diagnosis and the need for long-term treatment. Such emotional experiences can reduce the level of parental support and affect the quality of family relationships [3].

Cultural differences also play an important role in the perception of strabismus. In some societies, this defect is viewed primarily as an aesthetic problem, which increases the risk of stigmatization. In other cases, the disease is perceived as a medical condition that requires comprehensive intervention, which contributes to greater social support and reduces discrimination [6,7].

Family support is the most important factor in a child's successful adaptation. Studies show that a high level of parental involvement in the treatment and rehabilitation process significantly increases the effectiveness of psychological assistance and promotes social integration. In this context, it is the family environment that forms the basis for overcoming stigmatization and preserving the emotional stability of the child [2,4].

An interdisciplinary approach to treatment

Comprehensive management of children with strabismus goes beyond the scope of ophthalmic correction and involves the interaction of specialists of different profiles. In addition to surgeons and ophthalmologists, psychologists, educators, and speech therapists play an important role in helping to cope with the emotional and social difficulties that accompany the disease [2].

Early diagnosis and timely intervention are key factors for a child's successful adaptation. The inclusion of psychological support and educational support allows not only to correct visual impairments, but also to reduce the risk of anxiety and depressive disorders associated with social isolation. International experience shows that multidisciplinary rehabilitation programs significantly improve the quality of life of patients [4,5].

The use of specialized questionnaires and quality of life scales is becoming an important tool for integrating a multidisciplinary approach. Their development and implementation make it possible to objectively assess the impact of strabismus on the child's psychological state, social functions, and educational achievements, as well as to form individualized support programs [7,8].

Conclusion

Strabismus in children is not only an ophthalmological, but also a pronounced psychosocial problem. It affects a child's emotional state, self-esteem, social contacts, and academic performance, as well as family and cultural background. Current research highlights the need to move from a narrowly medical approach to a multidisciplinary approach that includes ophthalmic correction, psychological assistance, and pedagogical support. Comprehensive support helps to minimize the risk of anxiety and depressive disorders, reduce the level of social stigmatization and improve the quality of life of children with strabismus.

Literature

1. Tadiotto TF, Artuso De Hungria CC, Stofel Ventorin B, Frota A, Morais L, Costa L, et al. Quality of life in children with strabismus. *Rev Bras Oftalmol* [Internet]. 2022 [cited 2025 Sep 19];81:e0018. Available from: <https://www.scielo.br/j/rbof/a/6rT8zqs9L9GqTWCZWGdW9M/?format=html&lang=en>
2. Huang TL, Pineles SL. Strabismus and Pediatric Psychiatric Illness: A Literature Review. *Children* [Internet]. 2023 Apr 1 [cited 2025 Sep 19];10(4):607. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC10136741/>
3. Randhawa S, Griffiths N, O'Brien P, Panter C, Boparai K, Harrad R, et al. Qualitative Exploration of the Visual Function Impairments and Health-Related Quality of Life Impacts of Amblyopia in Adult and Pediatric Populations. *Ophthalmol Ther* [Internet]. 2023 Oct 1 [cited 2025 Sep 19];12(5):2505. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC10441976/>
4. Schuster AK, Elflein HM, Pokora R, Schlaud M, Baumgarten F, Urschitz MS. Health-related quality of life and mental health in children and adolescents with strabismus - Results of the representative population-based survey KiGGS. *Health Qual Life Outcomes* [Internet]. 2019 May 7 [cited 2025 Sep 19];17(1):1–8. Available from: <https://hqlo.biomedcentral.com/articles/10.1186/s12955-019-1144-7>
5. Haine L, Taylor I, Vaughan M. The Psychological Impact of Amblyopia Treatment: A Systematic Literature Review. *British and Irish Orthoptic Journal*. 2025;21(1):1–14.
6. Althiabi S, Aldarrab A, Alenezi SH, Alharbi BA, Aljbreen AJ, Alsalamah GF, et al. Psychological and Social Challenges Parents of Children With Strabismus Face in Qassim Region, Saudi Arabia: A Cross-Sectional Study. *Gen Pract*. 2023;
7. Alobaisi S, Alromaih AI, Aljulayfi AS, Alanazi SM, Aldossari S. Knowledge, Attitude, and Practice Among Parents of Strabismic Children in Saudi Arabia: A Cross-Sectional Study. *Cureus* [Internet]. 2022 Dec 30 [cited 2025 Sep 19];14(12). Available from:

<https://pubmed.ncbi.nlm.nih.gov/36726916/>

8. Hatt SR, Leske DA, Yamada T, Bradley EA, Cole SR, Holmes JM. Development and initial validation of quality of life questionnaires for intermittent exotropia. *Ophthalmology* [Internet]. 2009 [cited 2025 Sep 19];117(1):163. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC2815177/>