

The Effectiveness of Effective Prevention Strategies in Reducing Eye Trauma Among Working-Age Males from Low-Income Backgrounds: A Literature Review

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Introduction:

Eye trauma is a significant yet largely preventable cause of visual impairment worldwide. Working-age males from low-income backgrounds experience a disproportionately high burden of ocular injuries due to occupational exposure, limited access to protective equipment, and reduced health literacy. Despite the well-documented epidemiology of eye trauma, structured prevention programs targeting this high-risk population remain limited. This literature review evaluates the effectiveness of prevention strategies designed to reduce the incidence and severity of eye injuries among working-age males from low-income backgrounds.

Methods:

A narrative review of peer-reviewed literature was conducted using PubMed, PubMed Central, and academic databases. Studies addressing ocular trauma epidemiology, socioeconomic disparities, occupational risk factors, and prevention interventions were included. Particular attention was given to research evaluating educational programs, protective eyewear initiatives, and structured prevention strategies applicable to high-risk occupational environments.

Results:

The literature consistently demonstrates that working-age males from low-income populations experience significantly higher rates of ocular trauma. Major contributing factors include employment in high-risk industries such as construction, manufacturing, and agriculture, as well as reduced access to preventive resources and health education. Studies show that prevention strategies—including the provision of protective eyewear, workplace safety education, and targeted interventions in high-risk environments—can substantially reduce the incidence of eye injuries. However, evidence specifically evaluating structured programs such as the ABCs of Ocular Trauma within this demographic remains limited.

Conclusion:

Ocular trauma among working-age males from low-income backgrounds represents a preventable health disparity driven by occupational risk and socioeconomic barriers. Existing evidence supports the effectiveness of preventive interventions, particularly protective eyewear and safety education. Nonetheless, further research is needed to evaluate structured prevention programs tailored to this high-risk population. Such efforts may inform public health strategies and occupational safety policies aimed at reducing preventable vision loss.

Keywords: ocular trauma, eye injury prevention, low-income males, ABCs of ocular trauma, occupational health, health disparities

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