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Abstract Title

Communicating Pharmacogenomic Test Results to Pediatric Patients and Their Caregivers: A Communication Best Practices Tool for Healthcare Practitioners

Background

Pharmacogenomic (PGx) testing is an emerging companion tool that can optimize medication selection and dosing for young people. However, effective communication when counseling paediatric patients and their caregivers remains a crucial barrier to implementation.

Objective

We conducted a narrative review of the current literature on paediatric patient and caregiver knowledge, attitudes, and perceptions towards PGx testing. We also reviewed literature on pre- and post-test counselling tools and perspectives for communicating PGx testing results to paediatric patients and caregivers. We used the findings to develop a communication best practices tool to guide healthcare practitioners in counseling pediatric patients and their families.

Methods

Relevant literature was identified through searches of PubMed, Scopus, MEDLINE (Ovid), Embase, and Google Scholar. Additional references were identified from reviewing the bibliographies of the included articles. A total of 30 articles were included for data extraction. Data were charted in Microsoft Excel and organized by key points and themes. Findings supported the development of a PGx communication best practices tool for practitioners.

Results

Studies on the knowledge, attitudes, and perceptions of pediatric patients and caregivers towards PGx testing yielded seven key themes: mixed perceptions towards testing, autonomy, emotional impact, understanding and communication gaps, ethical/legal concerns, cost and coverage, and unexpected findings. Unrealistic expectations were a major concern, highlighting a need for clear communication. These insights guided the development of PEDIATRIC PGx TESTING, a mnemonics-based communication tool with structured pre- and post-test counseling points for healthcare practitioners to effectively convey PGx test results and address potential expectations, fears, and emotional responses.

Conclusion

A communication best practices tool for healthcare practitioners has been proposed, "PEDIATRICS PGx TESTING", to assist healthcare practitioners in delivering a thorough pre-test and post-test counselling to pediatric patients and their caregivers.

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