Clinical effectiveness and patient perspectives of different treatment strategies for tics in children and adolescents with Tourette syndrome: a systematic review and qualitative analysis

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Tourette syndrome (TS) is a common condition affecting up to 1% of children and young people and is characterised by motor and vocal tics. TS frequently occurs together with attention deficit hyperactivity disorder, autism spectrum disorder and obsessive–compulsive disorder. The main treatments for tics are medication and behavioural interventions. The study has two main components: part 1 – to identify from a systematic review of the published research literature of controlled trials which treatments for tics are most effective and part 2 – to understand from the perspective of young people with TS and their parents how they experienced treatment and care for TS, including which interventions they found helpful or harmful and what outcomes they valued most. Part 2 involved a national online survey of 358 parents/carers (295 contributing usable data) and in-depth interviews with 40 young people with TS. In the part 1, study antipsychotics and noradrenergic agents [clonidine (Dixarit®, Boehringer Ingelheim)] were found to be effective for treating tics in children and young people with TS. However, antipsychotics can cause troublesome adverse effects (sedation, weight gain and neurological symptoms) and aripiprazole (Abilify®, Otsuka) may be better tolerated than other antipsychotics. Habit reversal therapy was also found to be effective for treating tics. Overall, the number and quality of clinical trials is low and this downgrades the strength of the evidence and conclusions. Larger and better-conducted trials addressing important clinical uncertainties are required. The key themes identified in part 2 were difficulties in access to specialist care, delay in diagnosis, limited access to behavioural interventions (only 25% of young people had a behavioural intervention), the importance of anxiety and emotional symptoms in TS, lack of provision of information to schools and inadequate information regarding medication and adverse effects.
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