

[Pharmacological intervention for somatoform disorders in children and adolescents](#)

Q9: What is/are the effective and safe interventions to treat somatoform disorders in children and adolescents in non-specialist health settings?

Background

Somatoform disorders are among the most prevalent mental disorders. These conditions may lead to impairment of function and considerable suffering. Generally they are more common among adults but some disorders such as conversion disorder are also commonly seen in children and adolescents. The patients usually seek help from emergency or primary care and most primary and secondary health care workers in low and middle income countries do not have the required skills to identify and manage such disorders. The traditional approach towards these disorders has been to warn the health care professional not to misdiagnose an organic condition with such disorders. However recent evidence shows that this has been an overemphasis and actually such misdiagnosis is becoming much rarer than before. There is not still an agreement on how to manage these disorders in primary and secondary care. Since the somatoform disorders are less frequent in children and adolescents, we also searched for separate systematic reviews on conversion disorders.

Population/Intervention(s)/Comparator/Outcome(s) (PICO)

Population: children and adolescents with somatoform disorders

Interventions: pharmacologic or non-pharmacologic treatments

Comparator: care as usual

Outcomes: overall performance at school and family

adverse effects of treatment

symptom reduction

user and family satisfaction

Pharmacological intervention for somatoform disorders in children and adolescents

improvement in physical health

reduction in risk behaviour

List of the systematic reviews identified by the search process

The following systematic reviews were identified as the most recent. No reviews were found specifically on children and adolescents.

- Kroenke K (2007). Efficacy of treatment for somatoform disorders: a review of randomized controlled trials. *Psychosomatic Medicine*, 69:881-888.
- Ruddy R, House A (2005). Psychosocial interventions for conversion disorder. *Cochrane Database of Systematic Reviews*, (4):CD005331.

Narrative description of the studies that went into the analysis (including a study-by-study table)

Kroenke, 2007, found 34 RCTs involving 3922 patients. Two third of the studies (n = 4 studies) involved somatization disorders and lower threshold variants, such as abridged somatization disorder (n = 9) and medically unexplained symptoms (n = 10). Cognitive behavioural therapy (CBT) was effective in most studies (11 of 13), as were antidepressants in a small number (4 of 5) of studies. Among other treatments the most consistent evidence was a consultation letter from psychiatrists to the primary care physician. Effective treatments have been established for all somatoform disorders except conversion disorder (1 of 3 studies showing benefit) and pain disorder (no studies reported). The problem with this systematic review was that it included all age ranges and not only children and adolescents.

Ruddy and House, 2005 systematically reviewed psychosocial interventions for conversion disorder and identified 269 references but only 3 finally qualified to be included. Even the three studies had different interventions and control groups so that they could not combine the results. The quality was identified as poor quality. Again trials were not excluded to age but in reality all three were on patients over 18.

PICO table

Serial no.	Intervention/Comparison	Outcomes	Systematic reviews used for review	Explanation
------------	-------------------------	----------	------------------------------------	-------------

[Pharmacological intervention for somatoform disorders in children and adolescents](#)

1	All types of treatment including both psychosocial (CBT, non-CBT psychotherapy, hypnosis, exercise, paradoxical intention, explanatory therapy and pharmacological. Comparison was "usual care" for most of the studies, also wait list and some other interventions for the rest.	Symptoms, functional status, psychological outcomes.	<ul style="list-style-type: none"> • Kroenke K (2007). Efficacy of treatment for somatoform disorders: a review of randomized controlled trials. <i>Psychosomatic Medicine</i>,69:881-8. 	
2	Any psychosocial intervention	Reduction in physical signs, relapse, leaving the study early, mental state, adverse event, quality of life, health service resource use, social adjustment patient and carer satisfaction; all for short term	<ul style="list-style-type: none"> • Ruddy R, House A (2005). Psychosocial interventions for conversion disorder. <i>Cochrane Database of Systematic Reviews</i>, (4):CD005331. 	

Summary analyses

In the first systematic review, wherever the effect size could be derived from the published data, the mean effect sizes were 0.92 for antidepressants (five studies), 1.43 for behavioural therapy (four studies), and 1.78 for CBT (five studies). No aggregate calculation for effect size in the second was possible.

Additional information

It is important to prevent harm. Harm may happen because of misdiagnosis. Medical examination to rule out physical conditions that can explain the symptoms is a requirement but this should not lead to unnecessary investigations (Stone et al, 2005) which will impose a lot of stress and cost on the patient and the health system.

Methodological limitations

The first review did not include a meta-analysis to cover all studies. The number of studies and patients were very small in the second review on conversion disorders.

Directness (in terms of population, outcome, intervention and comparator)

The systematic review on somatoform disorders has not specified age ranges. And the great majority comes from high income countries. The only systematic review on conversion disorder was found to be covering only adults (18+). The interventions in most of the trials have been offered by specialists.

Narrative conclusion

We found only two well conducted systematic reviews on treatment of somatoform disorders and conversion disorder. The systematic review on somatoform disorders identified cognitive behaviour therapy as the most effective intervention. Another simple intervention was also found effective which was a consultation letter from psychiatrists to primary care physician on how to manage somatizing patients. In a smaller number of studies antidepressants were also found effective. But this evidence is on all age groups and not children and adolescence.

References

- Stone J et al (2005). Systematic review of misdiagnosis of conversion symptoms and "hysteria". *British Medical Journal*, 331:989.
- Kroenke K (2007). Efficacy of treatment for somatoform disorders: a review of randomized controlled trials. *Psychosomatic Medicine*, 69:881-8.
- Ruddy R, House A (2005). Psychosocial interventions for conversion disorder. *Cochrane Database of Systematic Reviews*, (4):CD005331.

From evidence to recommendations

Factor	Explanation
Narrative summary of the evidence base	<p>We found only two well conducted systematic reviews on treatment of somatoform disorders and conversion disorder. The systematic review on somatoform disorders by Kroenke included 34 RCTs with 3922 patients. In those studies where the effect size could be derived from the published date, the mean effect sizes were 0.92 for antidepressants (five studies), 1.43 for behavioural therapy (four studies), and 1.78 for CBT (five studies). It identified cognitive behaviour therapy as the most effective intervention. Another simple intervention was also found effective which was a consultation letter from psychiatrists to primary care physician on how to manage somatizing patients. In a smaller number of studies (4 of 5) antidepressants were found effective. But the evidence was on all age groups and not children and adolescence.</p> <p>The Cochrane review on conversion disorder found only three controlled trials including 119 patients which met the inclusion criteria. No aggregate effect size calculation was possible. No conclusive results were found on the efficacy of specific psychosocial treatments so far. No systematic review on efficacy of pharmacotherapy was found either.</p> <p>Evidence is indirect and comes from studies on adults and not children and adolescents.</p>
Summary of the quality of evidence	<p>The quality of evidence for treatment of somatoform disorders was not evaluated in a systematic way but overall evidence on CBT is stronger and can be judged to be moderate but for other interventions as low quality. Evidence quality of studies on conversion disorder has been considered to be poor.</p>
Balance of benefits versus harms	<p>Since there is no evidence on harm induced by CBT and evidence on effectiveness for the wide age range, it is worth to recommend. As regards to antidepressants because of the evidence on their possible side effects in children and the weak and indirect evidence on efficacy, it is not worth to use them for treating somatoform disorders.</p>

Pharmacological intervention for somatoform disorders in children and adolescents

Values and preferences including any variability and human rights issues.	The right to health applies also to people with somatoform disorders. They should not be denied treatment or humiliated. Treatment of conversion disorder and somatoform disorders should not include harsh and inhumane interventions. Informed consent of patients about treatment is necessary. Contribution of social and family factors to the emergence of symptoms needs to be taken into consideration.
Costs and resource use and any other relevant feasibility issues.	Balance should be kept regarding the amount of investigations used to rule out physical conditions.
Recommendation(s) Pharmacological interventions to treat somatoform disorders in children and adolescents should not be considered by non-specialized health care providers. Strength of recommendation: STANDARD Brief psychological interventions, including cognitive-behavioural therapy (CBT) should be considered to treat somatoform disorders in children, if adequate training and supervision by specialists can be made available. Strength of recommendation: STANDARD Active consultation with a mental health specialist should be considered in managing these conditions, when possible. Strength of recommendation: STANDARD	

Update of the literature search – June 2012

In June 2012 the literature search for this scoping question was updated. No new systematic reviews were found to be relevant.

