

Best Evidence Summaries of Topics in Mental Healthcare

BEST in MH *clinical question-answering service*

Question

In people with autism and depression and/or anxiety, how effective are selective serotonin reuptake inhibitors (SSRIs), compared with any other or no intervention, for improving all patient outcomes, factoring in adverse effects of medication?

Clarification of question using *PICO* structure

Patients: People with autism and depression and/or anxiety
Intervention: SSRIs
Comparator: Any other or no intervention
Outcome: All patient outcomes, factoring in adverse effects of medication

Clinical and research implications

No relevant systematic reviews or randomised controlled trials could be found for this question.

What does the evidence say?***Number of included studies/reviews (number of participants)***

N/A

Main findings

N/A

Authors conclusions

N/A

Reliability of conclusions/Strength of evidence

N/A

What do guidelines say?

The National Institute of Health and Care Excellence guidance, 'The management and support of children and young people on the autism spectrum' (2013), makes the following research recommendations for SSRIs for children and young people with autism and anxiety:

"2.4 Treating comorbid anxiety in children and young people with autism

What is the comparative clinical and cost effectiveness of pharmacological and psychosocial interventions for anxiety disorders in children and young people with autism?

Why this is important

Early trials of CBT for anxiety in children and young people with autism have been promising but have methodological shortcomings. Furthermore, the common pharmacological approaches have not been evaluated in this population.

A parallel-arm RCT should compare pharmacological and psychosocial interventions with placebo in children and young people with autism and an anxiety disorder. Pharmacological treatment should be with a selective serotonin reuptake inhibitor (SSRI) and dosing should follow research in typically developing children but with the option of evaluating outcomes at lower doses. The SSRI should be blinded with an identical placebo and an 'attention' or other psychosocial control group. The psychosocial intervention should be manualised and based on cognitive behavioural approaches shown to be effective in previous trials. The sample should cover the full age and intellectual range of children and young people and the size powered to deliver precise effect size estimates for both active arms.

Primary outcome measures should be reduction in anxiety symptoms by parent report. Secondary outcomes may include self- and teacher-report, blinded measures such as heart rate and skin

conductance, patient satisfaction, changes in adaptive function, quality of life and disruptive behaviour. Adverse effects should be evaluated and an economic evaluation included.” (p.33)

Date question received: 28/08/2015

Date searches conducted: 03/09/2015

Date answer completed: 04/09/2015

References

Guidelines

National Institute of Health and Care Excellence (2013). *The management and support of children and young people on the autism spectrum*. NICE clinical guidance 170. DOI guidance.nice.org.uk/cg170

Search details

Source	Search Strategy	Number of hits	Relevant evidence identified
<i>Guidelines</i>			
NICE	SSRI autism depression anxiety	5	1
<i>Systematic Reviews</i>			
MEDLINE	<ol style="list-style-type: none"> 1 exp asperger syndrome/ or exp autistic disorder/ (17872) 2 (autis* or asperger*).ab,ti. (28953) 3 1 or 2 (31351) 4 Depression/ (84520) 5 exp Depressive Disorder/ (86247) 6 depress*.ab,ti. (345068) 7 4 or 5 or 6 (383830) 8 *Anxiety/ (28224) 9 *Anxiety Disorders/ (16411) 10 anxiety.ab,ti. (125938) 11 8 or 9 or 10 (133905) 12 exp Serotonin Uptake Inhibitors/ (32905) 13 (SSRI* or SNRI* or (serotonin* and (reuptake or re-uptake) and inhibitor*) or (citalopram or dapoxetine* or escitalopram or fluoxetine* or fluvoxamin* or paroxetine* or sertraline* or desvenlafaxin* or duloxetine* or milnacipran or venlafaxin*)).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier] (36567) 14 12 or 13 (45668) 15 7 or 11 (457280) 16 3 and 15 (2324) 17 14 and 16 (108) 18 (systematic\$ review\$ or meta-analytic\$ or metaanalysis or metaanalysis or meta analysis or meta?synthesis or meta synthesis or meta?regression or meta regression).ab,ti. (123816) 	2	0

	<p>19 ((synthes\$ adj3 (literature or evidence)) or integrative review or data synthesis or research synthesis or narrative synthesis or systematic study or systematic studies or systematic comparison\$ or systematic overview\$ or evidence based review or comprehensive review or critical review or quantitative review or structured review or realist review or realist synthesis).ab,ti. (48661)</p> <p>20 exp Meta-Analysis/ (59531)</p> <p>21 meta-analysis.ab,ti,pt. (88098)</p> <p>22 18 or 19 or 20 or 21 (177824)</p> <p>23 (medline or pubmed or Cochrane or embase or cinahl or psyc?lit or psyc?info).ab. (107966)</p> <p>24 ((literature adj3 search\$) or (database\$ adj3 search\$) or (bibliographic adj3 search\$) or (electronic adj3 search\$) or (electronic adj3 database\$) or (computeri?ed adj3 search\$) or (internet adj3 search\$) or included studies or (inclusion adj3 studies) or inclusion criteria or selection criteria or predefined criteria or predetermined criteria).ab. (128877)</p> <p>25 ((assess\$ adj3 (quality or validity)) or (select\$ adj3 (study or studies)) or (data adj3 extract\$) or extracted data or (data adj2 abstracted) or (data adj3 abstraction) or published intervention\$ or ((study or studies) adj2 evaluat\$) or (intervention\$ adj2 evaluat\$) or confidence interval\$ or heterogeneity or pooled or pooling or odds ratio\$ or Jadad or coding).ab. (804870)</p> <p>26 23 or 24 or 25 (922329)</p> <p>27 review.pt. (2037511)</p> <p>28 26 and 27 (137979)</p> <p>29 26 and 27 (137979)</p> <p>30 (review\$ adj4 (papers or trials or studies or evidence or intervention\$ or evaluation\$)).ab,ti. (118401)</p> <p>31 22 or 26 or 28 or 29 (998973)</p> <p>32 (letter or editorial or comment).pt. (1503208)</p> <p>33 31 not 32 (991265)</p> <p>34 Animals/ (5569471)</p> <p>35 Humans/ (14320577)</p> <p>36 34 not 35 (4004707)</p> <p>37 33 not 36 (902874)</p> <p>38 limit 37 to yr="2010" (53907)</p> <p>39 17 and 38 (2)</p>		
EMBASE	<p>1 exp asperger syndrome/ or exp autistic disorder/ (41984)</p> <p>2 (autis* or asperger*).ab,ti. (36977)</p>	9	0

	<p>3 1 or 2 (48047) 4 Depression/ (271322) 5 exp Depressive Disorder/ (345677) 6 depress*.ab,ti. (444999) 7 4 or 5 or 6 (569899) 8 *Anxiety/ (43253) 9 *Anxiety Disorders/ (12488) 10 anxiety.ab,ti. (174232) 11 8 or 9 or 10 (186140) 12 exp Serotonin Uptake Inhibitors/ (154474) 13 (SSRI* or SNRI* or (serotonin* and (reuptake or re-uptake) and inhibitor*) or (citalopram or dapoxetine* or escitalopram or fluoxetine* or fluvoxamin* or paroxetine* or sertraline* or desvenlafaxin* or duloxetine* or milnacipran or venlafaxin*)).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword] (90829) 14 12 or 13 (158441) 15 7 or 11 (665337) 16 3 and 15 (5740) 17 14 and 16 (811) 18-48 Systematic review filter 49 17 and 48 (9)</p>		
PsycINFO	<p>1 exp Autism/ (22906) 2 exp Aspergers Syndrome/ (2437) 3 (autis* or asperger*).ab,ti. (35804) 4 1 or 2 or 3 (36311) 5 exp Major Depression/ or exp "Depression (Emotion)"/ (123307) 6 depress*.ab,ti. (231811) 7 5 or 6 (237509) 8 exp Anxiety Disorders/ or exp Anxiety/ (116399) 9 anxiety.ab,ti. (145302) 10 8 or 9 (190179) 11 exp Serotonin Reuptake Inhibitors/ (11015)</p>	19	0

	<p>12 (SSRI* or SNRI* or (serotonin* and (reuptake or re-uptake) and inhibitor*) or (citalopram or dapoxetine* or escitalopram or fluoxetine* or fluvoxamin* or paroxetine* or sertraline* or desvenlafaxin* or duloxetine* or milnacipran or venlafaxin*)),mp. (20320)</p> <p>13 11 or 12 (21156)</p> <p>14 7 or 10 (364023)</p> <p>15 4 and 14 (3177)</p> <p>16 13 and 15 (97)</p> <p>17-26 Systematic review filter</p> <p>27 16 and 26 (19)</p>		
<i>Primary Studies</i>			
MEDLINE	<p>1 exp asperger syndrome/ or exp autistic disorder/ (17872)</p> <p>2 (autis* or asperger*).ab,ti. (28953)</p> <p>3 1 or 2 (31351)</p> <p>4 Depression/ (84520)</p> <p>5 exp Depressive Disorder/ (86247)</p> <p>6 depress*.ab,ti. (345068)</p> <p>7 4 or 5 or 6 (383830)</p> <p>8 *Anxiety/ (28224)</p> <p>9 *Anxiety Disorders/ (16411)</p> <p>10 anxiety.ab,ti. (125938)</p> <p>11 8 or 9 or 10 (133905)</p> <p>12 exp Serotonin Uptake Inhibitors/ (32905)</p> <p>13 (SSRI* or SNRI* or (serotonin* and (reuptake or re-uptake) and inhibitor*) or (citalopram or dapoxetine* or escitalopram or fluoxetine* or fluvoxamin* or paroxetine* or sertraline* or desvenlafaxin* or duloxetine* or milnacipran or venlafaxin*)),mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier] (36567)</p> <p>14 12 or 13 (45668)</p> <p>15 7 or 11 (457280)</p> <p>16 3 and 15 (2324)</p> <p>17 14 and 16 (108)</p> <p>18 limit 17 to "therapy (best balance of sensitivity and specificity)" (17)</p>	17	0

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	<p>11 9 or 10 (190179)</p> <p>12 exp Serotonin Reuptake Inhibitors/ (11015)</p> <p>13 (SSRI* or SNRI* or (serotonin* and (reuptake or re-uptake) and inhibitor*) or (citalopram or dapoxetine* or escitalopram or fluoxetine* or fluvoxamin* or paroxetine* or sertraline* or desvenlafaxin* or duloxetine* or milnacipran or venlafaxin*)).mp. (20320)</p> <p>14 12 or 13 (21156)</p> <p>15 8 or 11 (364023)</p> <p>16 4 and 15 (3177)</p> <p>17 14 and 16 (97)</p> <p>18 limit 17 to "therapy (best balance of sensitivity and specificity)" (14)</p>		
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