Prevention in children and adolescents
AEPap/PAPPS

Major depression screening

Authors: Ana Gallego Iborra and PrevInfad group.

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RECOMMENDATIONS

Evidences on primary care recommendation of children and adolescents' depression screening were searched. It is a prevalent problem that tends to chronicity and that appears as the result of biological, psychological, social and environmental factors. Due to its complexity, most of the activities of its primary prevention (positive parentality enforcement, conflict resolving skills or school bullying prevention) exceed the sanitary area.

There are no studies addressing health results in screened compared to non-screened population, so we have to draw conclusions from intermediate results. Population screening is justified if there exist tools with a good diagnosis efficiency accepted by the target population, and an effective therapy (the earlier the start the better) with few and well tolerated adverse effects.

Screening test

In mental health, population screening consists in questionnaires that allow to measure no-direct observable phenomena. A questionnaire must meet adequate psychometric properties (validity, sensibility, specificity) to be used as a screening test. It must be easy to answer and easy to be interpreted. It must not take long and must be valid for the target population. Positive results should be confirmed through structured interviews where compliance of diagnostic criteria have to be assessed.

Most of the studies evaluating the performance of the screening tests for children depression are of low quality. Among the observed deficiencies are: an excessive time interval for the diagnostic verification, the implementation in hospitalized population or the evaluators' lack of blinding.

The best studied questionnaires are the BDI (Beck Depression Inventory) and the PHAQ (Patient Health Questionnaire Adolescent). The first one has a specific version for children and adolescents but has a problem for its applicability in primary care: it consists of 20 questions and needs over 10 minutes to be fulfilled and over 25 to 50 minutes to be interpreted.

The PHAQ questionnaire was designed for primary care and it has been validated for the EE.UU. adolescent population. It consists of nine questions, it has a short version of two questions (although with a lower psychometric performance), it includes a question about suicide and it permits to screen and categorize, but it is not validated por the Spanish adolescent population.

We have not found studies that evaluate the potential adverse effects associated to child and adolescent depression screening.

We have not found studies that evaluate screening depression questionnaires' performance in children and adolescents with two or more risk factors of major depression.

Summarizing, most of the questionnaires used as population screening tools have a low evidence grade. BDI and PHAQ have a moderate evidence grade of usefulness, being the second one more applicable in primary care, although it has not been validated in Spanish adolescent population.

Treatment

a) Children less than 12 years:

The results of the studies that evaluate the effectiveness of psychotherapy in children are inconsistent, most of them have a small sample size and they are not able to show its effectiveness.

As for the pharmacological treatment, there are studies showing improvement of the symptoms with fluoxetine in children older than 8 years with major depression, but in younger children there is no evidence of effectiveness of antidepressant drugs.

b) Adolescents older than 12 years:

Studies supporting the effectiveness of psychotherapy are available, specifically cognitive-conductual therapy and interpersonal therapy in the treatment of adolescent depression; either alone or combined with pharmacological treatment depending on the severity of the condition.

Well-designed studies conclude that the first-choice drug in children older than 8 years and adolescents is fluoxetine, in the acute episode and also in relapse prevention (maintenance treatment).

Combined therapy (psychotherapy and fluoxetine) achieved a 37% remission rate in the TADS study, higher than psychotherapy or fluoxetine alone, in cases of moderate to severe major depression. There are studies, though of lower methodological quality

and smaller sample size, that support other pharmacological alternatives when fluoxetine fails.

c) Adverse effects of the treatment:

We have not found studies that evaluate the side effects of psychotherapy applied to the treatment of depression in childhood and adolescence.

Apparently, it is proved that antidepressants increase the risk of suicide ideation, especially during the two first weeks of treatment. No clinical trials have been found designed for the analysis of this effect, although several populational studies seem to prove that their benefit is higher than the risk.

Summarizing, there are not evidence supporting the use of psychotherapy in the treatment of depression in children and there is a moderate grade of evidence of effectiveness of fluoxetine in children older than 8 years. In adolescents, there is evidence that psychotherapy and also fluoxetine are effective, as acute episode therapy as well as maintenance treatment, even though respondent rates are not high.

	Screening (test efficiency)	Treatment (effectivity)	Net benefit
Children <12 years	Low quality of evidence	Low-moderate quality of evidence: no effectiveness of psychotherapy	Moderate grade of confidence that the net benefit is non-existent
Adolescents >12 years	Low quality of evidence, with evidence of moderate quality for BDI and PHAQ	Moderate quality of evidence: effectiveness of psychotherapy, combined and pharmacological therapy	Moderate grade of certainty that the net benefit is moderate

PrevInfad recommendations

- Depression screening in younger than 12 years is not recommended.

  Recommendation D

- Given the lack of availability of a useful screening tool, easy to implement in primary care and validated in Spanish adolescent population, we cannot presently evaluate the benefit-risk balance of depression in adolescents.

  Statement I

- Nevertheless, due to the relevance of major depression as a chronic illness with high morbidity load, mortality risk, social and personal burden and with the potential of improvement with treatment, PrevInfad considers:

  The primary care pediatrician should develop communication and active listening skills, should be trained in depression symptoms' detection, in risk factors and stressing vital situations' evaluation and in suicide conduct exploration in case of suspicion of major depression.

  Group PrevInfad recommendation