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## Q/ Does primary nocturnal enuresis affect childrens' self-esteem?

### EVIDENCE-BASED ANSWER

**A/** YES. Children with primary nocturnal enuresis often, but not always, score about 10% lower on standardized rating scales for self-esteem, or scores for symptoms similar to low self-esteem (sadness, anxiety, social fears, distress) than children without enuresis (strength of recommendation [SOR]: **B**, systematic review of cohort and case-control studies with some hetero-

genous results).

Enuretic children 8 to 9 years of age are less likely to have lower self-esteem than older children, ages 10 to 12 years (SOR: **B**, case-control study).

Successful treatment of primary nocturnal enuresis improves self-esteem ratings, probably to normal (SOR: **B**, randomized, controlled trial, prospective cohort, and case-control studies).

### Evidence summary

A systematic review including 4 case-control and 3 cohort studies of the impact of nocturnal enuresis on children and young people found that bedwetting was often, but not always, associated with lower self-esteem scores (or scores for symptoms similar to lower self-esteem) on standardized questionnaires.<sup>1</sup> The studies defined self-esteem in various ways and used a variety of questionnaires to measure it, so direct comparisons weren't possible.

The first case-control study in the review found that enuretic older children (10-12 years) and girls had lower self-esteem scores than younger children (8-9 years) and boys. The second case-control study reported lower self-esteem scores on only 1 of 3 assessment instruments.

The third case-control study, which compared self-esteem scores in enuretic children with scores for children who had asthma and heart disease, found that enuresis was associated with the lowest self-esteem. The final case-control study reported that young ado-

lescents with enuresis were more likely to suffer "angry distress."

The first cohort study in the systematic review found a significantly higher incidence of sadness, anxiety, and social fears in children with enuresis than in children without and reported that 65% were "not happy" about having enuresis.

In the second cohort study, children with more severe enuresis, and girls, had significantly worse self-esteem scores than children with mild enuresis or boys (actual scores and some statistics not supplied), although these findings weren't replicated on the second standardized scale that the investigators used.

The third cohort study reported that 37% of approximately 800 children with enuresis rated it "really difficult," on a 4-point Likert scale.

### How enuresis treatment affects self-esteem

The same systematic review, plus 2 additional studies, demonstrated that successful treatment of enuresis improves self-esteem

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scores, likely to normal.<sup>1-3</sup> A randomized controlled trial found that treatment improved self-esteem scores by about 5%; children with the greatest treatment success showed the largest improvement (no statistics supplied).<sup>2</sup>

In a prospective cohort study, treated children demonstrated about a 30% improvement in scores measuring anxiety, depression, and internal distress.<sup>3</sup> A case-control study in the systematic review also found about a 30% improvement in self-esteem scores among successfully treated children (both boys and girls) and a return to nonenuretic norms.<sup>1</sup> Scores for unsuccessfully treated children didn't improve.

### Recommendations

A guideline on the management of bedwetting from the National Institute for Health

and Clinical Excellence (now called the National Institute for Health and Care Excellence) says that enuresis can have a deep impact on a child's behavior and emotional well-being and that treatment has a positive effect on self-esteem.<sup>4</sup>

The Evidence-Based Medicine guidelines for enuresis in a child<sup>5</sup> say that enuresis as such does not indicate a psychological disturbance and that psychotherapy may be useful when enuresis is associated with significant problems of self-esteem or behavior.

The American Academy of Child and Adolescent Psychiatry practice parameter for children with enuresis states that the psychological consequences of enuresis must be recognized and addressed with sensitivity during evaluation and management.<sup>6</sup> **JFP**

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