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Review article

Challenging factors for enuresis treatment: Psychological problems and non-adherence

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Summary
The evidence for organic pathogenetic factors in enuresis and the discovery of effective therapies targeting the bladder and/or nocturnal diuresis have overwhelmed every potential role of psychological factors in pathogenesis and treatment. However, psychopathology is still important in enuresis because according to the document of the International Children's Continence Society (ICCS) 20—30% of the children with enuresis have at least one psychological/psychiatric disorder at rates two times higher than non-wetting children. The most common comorbid disorder with enuresis is attention deficit hyperactivity disorder. The aim of this review is to translate the existing evidence on the importance of a psychological screening into daily clinical practice of the medical practitioner. The use of the minimal psychological screening tool should be considered mandatory in each primary setting. If psychological problems are indicated, referral of the patient to a multidisciplinary setting should be considered, not only to allow psychological assessment to screen for a possible psychopathology, but also since therapy resistance might be expected. This review concentrates on two items from psychopathology/psychotherapy that might predict insufficient treatment response: the psychological comorbidities as described according to the DSM-5 criteria and the underestimated importance of therapy adherence. Adherence is a cornerstone of effective therapy in enuresis. It is a problem involving the doctor, the patient, and the parents. Increasing adherence takes effort and is time-consuming. But it is worthwhile knowing that several studies have demonstrated that high adherence is associated with high therapy success of enuresis. Eventually, this is the ultimate goal of treatment.

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Introduction

Psychological factors have been widely accepted as playing a major role in the pathogenesis of nocturnal enuresis. Research has clearly demonstrated that a major role should be given to a discrepancy between nocturnal diuresis volume and functional bladder volume overnight in combination with deficient arousal and/or sleeping disorders [1]. This evidence for organic pathogenetic factors and the discovery of effective therapies targeting the bladder and/or nocturnal diuresis have overwhelmed every potential role of psychological factors in pathogenesis as for psychotherapy in treatment in medical literature. Patients are now seen by clinicians rather than psychologists, but medical doctors are often not armed to identify psychopathology in a consultation of 10—20 min, neither do they have the time nor the specific techniques to motivate parents and children to adhere to the therapy.

Psychopathology is an important co-existing factor in enuresis. In the general population, 10—15% of the children have a comorbid clinical behavioral disorder. In children with enuresis, the rate is doubled according to the document of the International Children's Continence Society (ICCS) [2]. More specific, 20—30% of children with nocturnal enuresis fulfill the criteria of at least one disorder in the International Classification of Diseases-10 (ICD-10) or Diagnostic and Statistical Manual of Mental Disorders IV-TR (DSM-VI-TR). Moreover, regardless the type of monotherapy, the success rates are disappointing (23—60%) [2—6] with a rather high relapse rate. Although a bias in patient selection cannot be neglected, this study aims to elaborate on psychological comorbidity as a possible explanatory factor for the insufficient response rate. Not only psychological/psychiatric disorders but also subclinical symptoms (sadness, feeling upset, burden, etc.) as well as difficulties in therapy adherence are discussed in this paper.

Especially in primary care, these psychological factors are often far beyond the primary interest of the clinician. Moreover, convincing studies of these comorbidities are based on an extensive psychological assessment [2,7], making this not realistic and accessible for clinicians in primary and secondary care. The aim of this review is to translate the existing evidence on the importance of a psychological screening into daily clinical practice of the medical practitioner. Therefore, this review concentrates on two items from psychopathology/psychotherapy that might predict insufficient treatment response: the psychological comorbidities as described according to the DSM-5 criteria and the underestimated importance of therapy adherence.

Insufficient treatment response as a consequence of psychological problems

Psychological symptoms

Subclinical symptoms

Subclinical behavioral signs and symptoms, such as sadness, moodiness, feeling upset, embarrassment, humiliation, and guilt, are common and understandable reactions towards the wetting problem and are not disorders per se [2]. Children with enuresis experience a high level of stress, causing those symptoms. Moreover, they have a lower quality of life [8]. In a large population-based study, 36.7% of the children consider enuresis highly endorsed as a difficulty, ranking eighth behind other stressful life events [9].

Enuresis might also be a risk factor for the psychological well-being of the parents, especially the mothers, and can compromise their responsiveness towards the child. Mothers of children with enuresis report a lower quality of life, in terms of anxiety and depression, more stress and more intensity of pain than mothers of healthy children [10,11]. Moreover, they appear to be less accepting and more punishing than mothers of continent children [12].

If enuresis is left untreated it may lead to impaired quality of life not only in childhood but also in adulthood. Successful treatment leads to an improved quality of life according to the child [13]. Psychological symptoms will resolve by attaining continence, while manifest disorders or clinical symptoms usually do not [2].

Clinical symptoms

Most at risk to have a psychological disorder are older male children with a low socio-economic status who are admitted to a specialized clinic for secondary and/or non-monosymptomatic nocturnal enuresis [2,14,15]. One can differentiate among externalizing, internalizing, or other disorders. Externalizing disorders are behavioral disorders with visible behavioral symptoms, for example conduct disorder and attention deficit hyperactivity disorder (ADHD). Introversive and emotional symptoms, such as anxiety and depression, are internalizing disorders. Finally, some disorders could not fit between the previous two, such as autism spectrum disorder or anorexia.

Research on internalizing problems is rare. Internalizing problems may have a negative effect on self-esteem and vice versa. Several studies have shown that the self-esteem of children with enuresis is decreased [16—19]. In contradiction to our research group, who did not find lower self-esteem in children with enuresis than in healthy controls [20]. The main reason for this is that our study group not only used parent reports but also child reports. The parents reported more internalizing problems, probably because they are more attentive to those problems than parents of controls. Self-esteem can increase after successful treatment of enuresis [19]. There is a need for more formal and systematic evaluations of internalizing problems in children with enuresis.

Although internalizing problems can be present, externalizing disorders predominate [2]. The most specific comorbid disorder with enuresis is ADHD [21]. In an epidemiological study 9.6% of the children with enuresis had ADHD symptoms compared with 3.4% who only had ADHD and not enuresis [22]. Our research group confirmed the increased prevalence rate of ADHD in children with enuresis [7,23]. Children with enuresis from the tertiary care sample have a 3.4 times increased chance of having comorbid ADHD compared with children with enuresis admitted to non-tertiary care, corresponding to a prevalence rate of 28% and 10%, respectively [23]. Overall, 40% of the children with enuresis in our tertiary research group had ADHD. Fifteen percent were diagnosed with the