

# Paediatric incontinence: early identification and treatment needed to prevent mental health problems

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Paediatric incontinence is often preventable and treatable, but many children and young people are not receiving the care they need.

Persistence of incontinence into adolescence is linked to an increased risk of mental health problems, but mental health is often not assessed or treated in adolescents with incontinence.

## About the research

Continence problems are common in childhood and often persist into adolescence.

For instance, around 3% of 14-year-olds have daytime urinary incontinence and 2.5% experience bedwetting<sup>1</sup>.

Young people with incontinence often feel pessimistic about their condition and they report experiencing shame, social isolation, peer victimisation, restricted social lives, and disrupted education<sup>2,3</sup>.

Many clinicians are unaware of the wider issues affecting adolescents with incontinence, leading to negative clinical care experiences and inadequate treatment<sup>4</sup>.

The impacts of incontinence on the daily lives of young people place them at an increased risk of developing mental health problems.

A recent study (2023), based on data from the Avon Longitudinal Study of Parents and Children, found that young people with incontinence are at greater risk of developing mental health problems in early adulthood<sup>5</sup>.

There is also evidence that mental health problems can increase the risk of new onset incontinence in children<sup>6</sup> and have an adverse effect on treatment adherence<sup>7</sup>.

These findings have important clinical implications because they highlight the need for mental health support for young people with incontinence, which is currently sadly lacking.

## Policy implications

- Clinicians need to know that incontinence has a negative impact on mental health, especially if it persists into later childhood and adolescence.
- Mental health and/or psychological support should be routinely available in paediatric bladder and bowel clinics but is currently lacking due to resource constraints.
- Parents and carers should be taught what is typical for their child's bladder and bowel health and acquisition of continence.
- Parents and carers should be encouraged to seek early assessment and intervention for any new or existing childhood incontinence or bladder/bowel issue.
- Parents, carers, and clinicians should be aware that constipation is often an underlying cause of childhood incontinence and should always be proactively treated as soon as it is recognised.
- Parents, carers, and clinicians need to know that many children do not simply grow out of incontinence and that problems often become more difficult to treat with increasing age.



## Achieving continence, the evidence base

- Most children are ready to become continent between the ages of 18 and 24 months.
- Potty training by 24 months not only reduces the risk of incontinence persisting to school age, but also allows earlier identification of a bladder or bowel problem.
- Much of the existing guidance about the best age to begin potty training is not based on scientific evidence.
- Most urinary and faecal symptoms, including incontinence, in children are preventable or treatable.
- Early assessment and treatment of childhood bladder and bowel issues is crucial to reduce the risk of these problems becoming chronic.
- NICE guidelines recommend that all children who are still wetting the bed at age 5 years should be given a bladder and bowel assessment by a healthcare professional.

An increasing number of parents in Western countries are delaying potty training until their child's third or fourth year.

Some websites aimed at parents warn of the "dangers of early potty training", but this is not supported by empirical studies.

Unevidenced concerns about possible negative effects of potty training too early, together with advances in nappy technology, have contributed to the trend for later potty training.

There is growing evidence that a later age at potty training is associated with a child's future risk of having problems attaining and maintaining bladder and bowel control.



Children whose potty training began after their second birthday have an increased risk of daytime urinary incontinence (alone and accompanied by bedwetting) at primary-school age<sup>8,9</sup>.

A survey<sup>10</sup> carried out in 2018 by ERIC and the National Day Nurseries Association (NDNA) along with feedback from families and health care professionals highlighted several key factors behind the trend in toddlers spending longer in nappies.

These include introduction of disposable nappies, lack of clear guidelines, changes in parenting style, changes to family life, and reduction in NHS services.

## Incontinence and mental health problems in adolescence

Our work provides evidence that the association between mental health problems and incontinence is likely to be bi-directional.

- Earlier research (2016, 2019) found that psychological stress in preschool children increases the risk of incontinence at primary school age<sup>9,11,12</sup>.
- Recent research<sup>6</sup> (2023) found that mental health problems and stress are associated with an increased risk of incontinence relapse in older primary school-age children.
- Recent research<sup>5</sup> (2023) shows that adolescents with incontinence were more likely to have a mental health disorder as a young adult.

**"Always thinking about it, always worrying about it"**

When compared to young people who do not have daytime urinary incontinence, those who have urinary incontinence at age 14 years are<sup>5</sup>:

- Three times as likely to suffer from anxiety at age 18 years.
- Nearly twice as likely to have depression or thoughts of self-harm at age 18
- More than twice as likely to suffer from binge eating at age 18

The reasons for the bidirectional relationships between mental health problems, stress, and incontinence need further research.

The perceived stigma of incontinence and difficulty concealing/controlling symptoms might explain why incontinence increases the risk of mental health problems.

Mental health problems and stress could also be risk factors for incontinence.

For example, it has been suggested that biological mechanisms that are linked to an increased risk of anxiety and depression (e.g. reduced serotonin levels, inflammation) might also affect bladder functioning<sup>13</sup>.

Many clinicians who treat incontinence do not have the resources to assess mental health. Furthermore, thresholds for acceptance to child and adolescent mental health services are high.

There is also a lack of integration of mental health with paediatric bladder and bowel services.

## Recommendations

### Department of Health and Social Care

- Paediatric community-based nurse-led bladder and bowel services should be universally available and be integrated with mental health support.
- The needs of young people transitioning from paediatric to adult bladder and bowel services need to be better recognised with specific management to maximise positive outcomes for the young person.

### Directors of Public Health

- Promote awareness of paediatric bladder and bowel issues through public health campaigns that encourage parents to seek help and raise awareness of the types of help that are available.
- Provide evidence-based information, support and guidance for parents and carers about potty training strategies.
- School nursing services should be contracted to provide support for children to manage their bladder and bowel health and any associated conditions or issues while at school.

### Health visitors

- Provide support and guidance for all parents and carers about early skill development for potty training in the first months of life and provide targeted support to those who have not become continent by their second birthday.

### Primary care

- Primary care healthcare professionals (GPs, practice nurses, health visitors etc) should assess children who present with bladder and bowel symptoms and offer appropriate proactive treatment and onward referral to specialist children's bladder and bowel services if symptoms do not resolve within three months.

### Specialist (level two) bladder and bowel care

- Paediatric bladder and bowel clinics should address the mental health needs of children and young people and provide clear, effective and appropriately resourced care pathways to child and adolescent mental health services.
- Adult bladder and bowel and urology services should be aware that young people transitioning from paediatric to adult care are at increased risk of mental health problems and respond with appropriate referrals to mental health services.

### Education

- All healthcare professionals working with children and young people need to be educated about bladder and bowel health issues in their basic and any speciality training to enable them to understand these problems and how to address them.

### Parents

- Parents and carers should be encouraged to seek early assessment and intervention if their child has problems attaining bladder and/or bowel control or for any new onset symptoms or incontinence. Constipation is often an underlying cause of childhood incontinence and should always be proactively treated as soon as it is recognised.

### Further information

1. Heron J, Grzeda MT, von Gontard A, Wright A, Joinson C. Trajectories of urinary incontinence in childhood and bladder and bowel symptoms in adolescence: prospective cohort study. *BMJ Open*. 2017 Mar 14;7(3):e014238. <http://doi.org/10.1136/bmjopen-2016-014238>
2. Grzeda MT, Heron J, von Gontard A, Joinson C. Effects of urinary incontinence on psychosocial outcomes in adolescence. *Eur Child Adolesc Psychiatry*. 2017 Jun;26(6):649-658. <http://doi.org/10.1007/s00787-016-0928-0>
3. Whale K, Cramer H, Joinson C. Left behind and left out: The impact of the school environment on young people with continence problems. *Br J Health Psychol*. 2018 May;23(2):253-277. <http://doi.org/10.1111/bjhp.12284>
4. Whale K, Cramer H, Wright A, Sanders C, Joinson C. 'What does that mean?': a qualitative exploration of the primary and secondary clinical care experiences of young people with continence problems in the UK. *BMJ Open*. 2017 Oct 16;7(10):e015544. <http://doi.org/10.1136/bmjopen-2016-015544>
5. Gordon K, Warne N, Heron J, von Gontard A, Joinson C. Continence Problems and Mental Health in Adolescents from a UK Cohort. *Eur Urol*. 2023 May 27:S0302-2838(23)02818-X. <http://doi.org/10.1016/j.eururo.2023.05.013>
6. Warne N, Heron J, von Gontard A, Joinson C. Mental health problems, stressful life events and new-onset urinary incontinence in primary school-age children: a prospective cohort study. *Eur Child Adolesc Psychiatry*. 2023 Apr 24. <http://doi.org/10.1007/s00787-023-02211-x>
7. Van Herzeele C, De Bruyne P, De Bruyne E, Walle JV. *J Pediatr Urol*. Challenging factors for enuresis treatment: Psychological problems and non-adherence. 2015 Dec;11(6):308-13. <http://doi.org/10.1016/j.jpuro.2015.04.035>
8. Joinson C, Heron J, Von Gontard A, Butler U, Emond A, Golding J. A prospective study of age at initiation of toilet training and subsequent daytime bladder control in school-age children. *J Dev Behav Pediatr*. 2009 Oct;30(5):385-93. <http://doi.org/10.1097/dbp.0b013e3181ba0e77>
9. Joinson C, Grzeda MT, von Gontard A, Heron J. A prospective cohort study of biopsychosocial factors associated with childhood urinary incontinence. *Eur Child Adolesc Psychiatry*. 2019; 28(1): 123–130. <http://doi.org/10.1007/s00787-018-1193-1>
10. Why are children potty training later? ERIC etc <https://eric.org.uk/why-are-children-potty-training-later/>
11. Joinson C, Grzeda MT, von Gontard A, Heron J. Psychosocial risks for constipation and soiling in primary school children. *Eur Child Adolesc Psychiatry*. 2019 Feb;28(2):203-210. <http://doi.org/10.1007/s00787-018-1162-8>.
12. Joinson C, Sullivan S, von Gontard A, Heron J. Stressful Events in Early Childhood and Developmental Trajectories of Bedwetting at School Age. *J Pediatr Psychol*. 2016 Oct;41(9):1002-10. <https://doi.org/10.1093/jpepsy/jsw025>
13. Vrijens D, Drossaerts J, van Koeveringe G, et al. Affective symptoms and the overactive bladder - a systematic review. *Psychosom Res*. 2015 Feb;78(2):95-108. <http://doi.org/10.1016/j.jpsychores.2014.11.019>

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