

Diapers, an underestimated cause of urinary tract infections in children

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Madam, Urinary tract infection (UTI) is one of the most critical and severe infections in children. It has been estimated that within the first 6 years of life, incidence of UTI is at least 2% in boys and 7% in girls, with 2.2% of boys and 2.1% of girls having contracted a UTI before the age of 2.¹ A study published in Clinical Pediatrics² compared the frequency of diaper changes in infants with and without UTI. The results showed infants suffering from UTI received a significantly lower frequency of diaper changes (mean=4.7 changes per day) when compared to infants without UTI (mean=7.5 changes per day). The authors suggested that decreased frequency of diaper changes allows more time for bacteria in urine and faeces to colonize in the peri-urethral area and then ascend towards the bladder, leading to an infection.

In another investigation, Fahimzad and colleagues showed that the use of superabsorbent diapers significantly increased the risk of UTIs, when compared to standard disposable and washable cotton diapers.³ This observation may have been due to a couple of factors. First, it is likely that superabsorbent diapers are changed less frequently, due to their higher price. Second, these diapers do not allow urine to evaporate, and the damp environment is ideal for the proliferation of bacteria. A 2017 report shows that high fertility rates have led to a

surge of diaper sales in Pakistan, and this sharp upward trend is likely to continue in the near future.⁴ A cross-sectional study in 2008 revealed that incidence of UTIs in Pakistani children remains high in children lesser than three years of age.⁵ Although diapers may seem like a more hygienic option, improper use could contribute to the incidence of infections. Physicians, especially paediatricians, should be aware of the above-mentioned associations, and should advise all new parents to frequently change the diapers, and to limit the use of superabsorbent diapers.

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