

Smoking cessation

What factors influence uptake of smoking in children?

Living in a smoking household and having peers who smoke are key factors associated with children smoking, a cohort study has found.

The investigators analysed data on 11,577 teenagers in the Millenium Cohort Study, a birth cohort of children born between September 2000 and January 2002 in the UK.

As well as the smoking history of the participants, the smoking status of caregivers and friends and information about maternal smoking during pregnancy and exposure to smoking in the same room were also recorded.

After adjustment for survey weighting, 16.0% (95% CI: 14.7-17.3%) of 13 and 14 year olds had ever smoked by the time they were early teens. Extrapolating these figures nationally, this equates to 228,136 teenagers in this age group in the UK.

Moreover, 2.8% (95% CI: 2.0-3.6%) of early teens were current smokers, equating to 39,653 nationally.

Children who reported that their current caregiver smoked were more than twice as likely ever to have smoked (26.0% vs 10.9%); adjusted odds ratio (AOR) 1.69 (95% CI: 1.38-2.06).

Among children who reported that at least some of their friends smoked, 35.1% had tried smoking, compared with 4.0% of those reporting no smoking among their friends; AOR 10.35 (95% CI: 8.35-12.81).

Current smoking was also more common among children whose caregivers currently smoked compared with those whose caregivers did not smoke (4.9% vs 1.2%) AOR 1.92 (95% CI: 1.16-3.19).

Reporting that at least some of their friends smoke, or not answering this question, was also associated with being a current smoker; AOR 22.29 (95% CI: 4.91-101.21) and AOR 9.21 (95% CI: 1.64-51.78) respectively. However, the confidence intervals were wide.

Children exposed to smoking in the same room were more likely ever to have smoked compared with those who were never exposed (20.3% vs 10.3%); AOR 1.55 (95% CI: 1.21-1.98).

Those whose mother smoked during pregnancy were more likely to smoke or have smoked than those whose mother did not. For example, 5.2% of children whose mother smoked during pregnancy were current smokers as early teens compared with 0.9% of children whose mother never smoked during pregnancy; AOR 2.16 (95% CI: 1.42-3.26).

Earlier age of first smoking was associated with continuing to be a current smoker.

'Our data highlight the "transmissible" nature of the tobacco epidemic in young people and support the need for further urgent and comprehensive action on smoking to protect children,' the study authors state.

The authors also conclude that the promotion of smoke-free homes has the potential to reduce youth smoking, and that tackling smoking in pregnancy can also reduce child smoking uptake.

DR PETER SAUL

Laverty AA, Filippidis FT, Taylor-Robinson D et al. Smoking uptake in UK children: analysis of the UK Millenium Cohort Study. *Thorax* published online first 15 November 2018. doi:10.1136/thoraxjnl-2018-212254

Obstetrics and gynaecology

Comparing incontinence rates following caesarean vs vaginal delivery of twins

Urinary stress incontinence is more likely following vaginal than caesarean section (CS) delivery of twins, a multinational randomised controlled trial has shown.

A total of 2,804 women were recruited to the Twin Birth Study between 32 weeks and term. All the women had uncomplicated twin pregnancies where the presenting fetus was cephalic.

Around half were randomised to planned CS delivery the other half to planned vaginal delivery. The groups were comparable in terms of maternal age, parity, previous CS, and history of previous incontinence.

Overall, 2,305 women (82.2%) were followed up after two years, of whom 1,155 were randomised to planned CS and 1,150 to planned vaginal delivery. Data were analysed on an intention to treat basis.

In the planned CS group, 1,035 (89.6%) delivered both twins by CS (of which 609 CS were performed prior to the onset of labour); 113 (9.8%) had a vaginal delivery of both babies, and seven (0.6%) had a vaginal delivery of one of the twins.

In the planned vaginal delivery group, 700 (60.8%) delivered both (657) or one (43) of the babies vaginally. A total of 450 (39.1%) had both twins delivered by CS.

Two years after delivery women were questioned about whether they had urinary, faecal, or flatal incontinence. Those who were classified as having

problematic incontinence were asked to complete an Incontinence Impact Questionnaire (IIQ-7). The possible scores ranged from 0 (no impact) to 100 (great impact).

Urinary incontinence was more common in women assigned to vaginal delivery. The figures for problematic incontinence were 93 (8.1%) and 140 (12.2%) for the planned CS and vaginal delivery groups respectively; adjusted odds ratio (AOR) 0.63 (95% CI: 0.47-0.83, $P = 0.001$). The impact of incontinence measured by the IIQ-7 questionnaire was similar in the groups with mean IIQ-7 scores of 18.4 and 19.1 respectively ($P = 0.82$).

In those women with no prior history of incontinence the rates were 6.8% for planned CS and 11.6% for planned vaginal birth, respectively AOR 0.56 (95% CI: 0.41-0.76, $P = 0.0002$). In those women who had a prior history of urinary incontinence no significant difference between the groups was observed (30.8% for planned CS and 24.1% for planned vaginal birth; AOR 1.4 (95% CI: 0.60-3.24, $P = 0.44$).

There were no differences in problematic faecal or flatal incontinence rates, or any other maternal outcomes, between the groups.

Maternal stress urinary incontinence is more common in the first few months after vaginal delivery following breech presentation than after CS in singleton pregnancies.¹ However, in the longer term, this difference disappears. The present large study has shown that this is not the case following twin pregnancy delivery.

Although an earlier study by the same investigators had found no significant early differences in neonatal outcome for planned CS versus planned vaginal birth in uncomplicated twin delivery² this later study has shown that urinary incontinence was significantly lower in women allocated to a planned CS compared with planned vaginal birth, but only in women with no previous history of incontinence.

Ultimately, the decision whether to opt for an elective CS or a planned vaginal birth will need to be made by the woman in concert with her obstetrician.

The study authors conclude: 'We found that planned caesarean delivery reduced the risk of problematic urinary stress incontinence, compared with planned vaginal birth, at 2 years

postpartum for the mothers of twins with no prior history of problematic urinary stress incontinence. Although this information may not, in itself, form the basis for a decision in favour of caesarean birth, it should be included in the counselling of women with twin pregnancies so that they can make an informed decision as to their preferred method of birth.'

DR CHRIS BARCLAY

Hutton EK, Hannah ME, Willan AR et al for the Twin Birth Study Collaborative Group. Urinary stress incontinence and other maternal outcomes 2 years after caesarean or vaginal birth for twin pregnancy: a multicentre randomised trial. *BJOG* 2018;125:1682-90

REFERENCES

- 1 Hannah ME, Whyte H, Hannah WJ et al. Maternal outcomes at 2 years after planned cesarean section versus planned vaginal birth for breech presentation at term: the international randomized Term Breech Trial. *Am J Obstet Gynecol* 2004;191:917-27
- 2 Barrett JFR et al. A randomized trial of planned cesarean or vaginal delivery for twin pregnancy. *N Engl J Med* 2013;369:1295-1305



Childhood trauma raises risk of drug misuse later on

Individuals who suffer abuse as children are more likely to use marijuana or cocaine later in life, a study from the United States has found.

The authors performed a secondary data analysis using information from the National Longitudinal Study of Adolescent to Adult Health. A nationally representative sample of individuals aged between 11 and 21 years were interviewed in 1994-95 (adolescence), and again in 2001-2, when aged 18-28 (emerging adulthood), and finally in 2007-8 when aged 24-34 (established adulthood). Data for all three interviews were available for 12,288 participants.

The study identified nine typologies

of self-reported childhood trauma: neglect; emotional, physical and sexual abuse; parental incarceration; parental binge drinking; witnessing, being threatened and experiencing violence.

Just over half the participants (53%) had experienced at least one childhood trauma. Emotional abuse was the most commonly reported trauma (16%), followed by neglect (12.4%) and being threatened with violence (12.1%).

There was a dose-response relationship between the number of traumas experienced and drug use at all three life stages, adolescence, emerging adulthood and adulthood, for both marijuana and cocaine.

The adjusted odds ratio (AOR) for marijuana use in adolescence when there had been one trauma versus none was 1.65 (95% CI: 1.42-1.92) while for four or more traumas versus none it was 6.92 (95% CI: 5.17-9.26); $P < 0.0001$ for trend.

The AOR for cocaine use in adolescence for one trauma versus none was 1.87 (95% CI: 1.23-2.84) and for four or more traumas versus none 9.54 (95% CI: 5.93-15.38); $P < 0.0001$ for trend.

Each individual trauma typology was independently associated with either marijuana or cocaine use in adolescence, emerging adulthood and/or adulthood.

The experience of abuse during childhood may be associated with a number of adverse effects, of which substance misuse is one, with a clear dose-response relationship.

The authors of this study state that early identification of childhood emotional trauma and signposting to resources to support children and young people may help reduce the risk of substance misuse during later life.

DR JEZ THOMPSON

Scheidell JD, Quinn K, McGorray SP et al. Childhood traumatic experiences and the association with marijuana and cocaine use in adolescence through adulthood. *Addiction* 2018;113:44-56

We welcome your feedback

If you would like to comment on any of the clinical reviews write to: editor@thepractioner.co.uk