

Smoking in Pregnancy Challenge Group response to Science and Technology Committee Inquiry on e-cigarettes

Introduction

1. The Smoking in Pregnancy Challenge Group is a coalition of public health, maternity and baby organisations working to support the Government's goal of reducing rates of smoking in pregnancy. The full membership is in Appendix 1. The group is co-chaired by Francine Bates, Chief Executive of The Lullaby Trust and Prof Linda Bauld, Deputy Director of the UK Centre for Tobacco and Alcohol Studies and Professor of Health Policy and the University of Sterling and co-ordinated by Action on Smoking and Health.
2. Smoking during pregnancy has serious consequences for the health of mother and baby. It is a leading modifiable risk factor for a range of poor pregnancy outcomes including stillbirth, miscarriage, pre-term birth and sudden infant death.
3. Women who smoke in pregnancy are more likely to have complex and challenging lives and to have a number of vulnerabilities. They are more likely to be young mothers, to come from more disadvantaged backgrounds and to have experience of mental health problems and substance use issues. This context can make quitting smoking even more difficult particularly as they are more likely to live in households where others smoke and in communities where smoking is common¹.
4. Based on evidence summarised by Public Health England², Royal College of Physicians³ and others The Challenge Group supports the use of e-cigarettes in pregnancy as a safer alternative to smoking for women⁴. The Group have published [guidance for Midwives](#) setting out the evidence around e-cigarettes and an [info-graphic for pregnant women](#) to support women in making a choice about how to address their smoking during pregnancy. These materials are available online: <http://smokefreeaction.org.uk/smokefree-nhs/smoking-in-pregnancy-challenge-group/>
5. The evidence we present here is drawn from expertise of members of the Challenge Group with thanks to academics within UKCTAS who have provided further insights through making available data from ongoing research. The focus of this response will be on health with issues relating to regulatory environment also highlighted.

Executive summary

- While many women will quit on their own when trying for a baby or after finding out they're pregnant those who do not are likely to need additional help to quit.
- E-cigarettes are commonly being used by women who smoke during pregnancy as an aid to quit or cut down. However, their use is less common than among all smokers making a quit attempt.
- There are many barriers to use of e-cigarettes as a quitting aid for pregnant women. Specifically concerns about safety and belief that there is social stigma attached to pregnant women using them
- Women receive inconsistent advice from health professionals around the use of e-cigarettes in pregnancy.
- Policy makers should ensure:
 - medicinal products are available to women to address their concerns and combat social stigma
 - the advice provided by health professionals is consistent.

- public misconceptions about e-cigarettes are addressed and women who might benefit from using products are not undermined from using them

Current use of e-cigarettes in pregnancy

6. It is estimated that around 26% of women smoke in the 12 months before becoming pregnant⁵ and around 10% of women smoke throughout their pregnancy⁶ with a majority quitting prior or directly following conception. Many women will quit spontaneously but those who experience disadvantage or have higher levels of addiction may need additional support to quit smoking. However, there is, as yet, little published research on the numbers of pregnant women who are using e-cigarettes as a means to quit smoking.
7. Emerging findings from an ongoing research project being led by the University of Nottingham and funded by Cancer Research UK has some early data on the rate of women using e-cigarettes in pregnancy. They have data from 733 pregnant women who are either smokers or ex-smokers. They find that 15% of these women report using an e-cigarette. It is possible that this is a lower rate of use than we might expect by looking at smokers as a whole. The Smoking Toolkit Study run by UCL⁷ finds that around a third of quit attempts involve the use of e-cigarette as a quitting aid. So while there is a significant group of pregnant smokers who use of e-cigarettes, vaping does not appear to be as common as it is among smokers in general who are trying to quit.
8. A further notable emerging finding from this research is the high proportion of women who use e-cigarettes but are also still smoking (78%), although almost all report cutting down the amount they smoke or smoking only occasionally. The remainder have quit smoking altogether and only use an e-cigarette.
9. The level of dual use found in this sample is higher than we see among all smokers. An ASH survey conducted by YouGov found that just under half (45%) of all people who currently vape are also smoking⁸. The Smoking Toolkit Study⁹, using slightly different survey methods and definitions, finds a higher rate at just over half of e-cigarette users but still well below the rates in pregnant women.
10. Pregnant women are vaping in order to quit or cut down the amount they smoke, however, it appears that they are less likely to successfully stop smoking altogether compared to others who use e-cigarettes, although clearly further research is required on this. Given the complex needs of women who smoke in pregnancy the findings around dual use are perhaps unsurprising. However, as there is no safe level of exposure for the baby from tobacco smoke during pregnancy an important objective for the future will be to identify ways to support more women to completely switch.
11. A qualitative study with pregnant smokers and recent ex-smokers currently submitted for publication¹⁰ has a number of useful insights for better understanding the attitudes of pregnant smokers to vaping. They found:
 - There were mixed understandings about the harms from e-cigarettes and some concerns regarding nicotine and addiction.
 - A clear desire for more assurances and guidance about using products from health professionals and evidence of inconsistent advice.
 - There were also indications that women would welcome products that were produced to higher standards and around which they could have more confidence about their use

- A high level of perceived social stigma attached to using e-cigarettes in pregnancy that could undermine a woman’s willingness to use products
12. There a small number of localities where proactive approaches to using e-cigarettes to support pregnant women to quit are being implemented. One project in Bristol is providing e-cigarette vouchers to priority groups of smokers, including pregnant women as part of supporting them to quit. This appears to be improving outcomes for smokers who are participating with quit rates 17% higher in the group provided with the voucher compared to those in the control group who did not receive e-cigarettes.
 13. Another project is in Leicester where they face a major challenge in bringing smoking rates among pregnant women down further. Around 27% of women are smoking when they come to their first booking appointment in Leicester and through full implementation of NICE guidance on smoking in pregnancy locally they have been successful in bringing the rate of smoking at time of delivery down to 10.8%. In this context they were keen to find innovative ways to bring their rates down further and have started to proactively offer women the option to use an e-cigarette in their quit attempt.
 14. To date the numbers of women choosing to use an e-cigarette with the service are small. In 2016/17 85 out of 228 pregnant service users used an e-cigarette, with or without NRT with a success rate of 60%. This compares with a success rate of 32% for NRT alone (139 women out of 228 used NRT only). This is not proof that e-cigarettes are more effective than NRT in helping pregnant women to quit but it does illustrate, from local service data only, that they can be effective aids when combined with behavioural support.
 15. The service has gathered some of the views of pregnant women in their service regarding e-cigarettes:

“I know it’s not without risks, but it’s got to be safer than smoking when you look at the chemicals in each” (quitter – initially NRT, then e-cig only)

“It gives me the freedom to smoke, without actually smoking” (quitter, e-cig only)

“It helps me to manage social situations where everyone else is smoking” (quitter, dual user)

“The patches help, but I’ve only ever had slip ups when I’ve not had my e-cigarette – I can cope if I forget to put my patch on but not if I forget my e-cigarette” (quitter, dual user)

“I decided not to use one because I felt like I would be replacing one habit with another” (quitter, no medication used)
 16. In other parts of the country the advice to pregnant women is different. In Blackpool, for example, they have produced an infographic for pregnant women on e-cigarettes with different advice to that provided by the Smoking in Pregnancy Challenge Group. While the Challenge Group’s infographic says: *“If using an e-cigarette helps you stay smokefree, it is much safer for you and your baby than smoking”*. The equivalent advice to women in Blackpool is: *“We cannot recommend the use of e-cigarettes during pregnancy until we know more about their safety.”* It is no surprise that women and health professionals are unclear about what action it is best to take during pregnancy.

17. A survey of stop smoking services conducted by University of Nottingham and awaiting publication asked service managers about how they deal with the issue of e-cigarettes with pregnant women. Most were unlikely to advise pregnant women to use e-cigarettes, but on the whole they were positive about the potential of products to help this cohort. Many mentioned that they would value clear national guidance before they take a more proactive stance.

Recommendations to the inquiry

18. These findings point to a number of important implications for future policy and regulation of e-cigarettes to maximise their potential for pregnant women.
- Pregnant women need assurances about the safety and quality of products and they need these assurances to come from trusted health professionals. There is a lack of consistent practice around e-cigarettes in pregnancy and this may well be undermining opportunities to support more women to be smokefree. In addition to the guidance already provided by PHE and the information provided by non-government experts such as The Smoking in Pregnancy Challenge Group and the NCSCT, front line health professionals need comprehensive guidance from NHS England on:
 - What they should say to a pregnant woman who smokes about e-cigarettes
 - How they should work with pregnant women using e-cigarettes as a quitting aid
 - What advice they should provide on e-cigarette use to other members of the household and postpartum
 - In view of the misunderstandings among health professionals regarding e-cigarettes, hospitals and other healthcare settings should ensure that their policies around the use of e-cigarettes reflect the best evidence and promote accurate understanding of the relative safety of e-cigarettes compared to smoking.
 - Given that early findings show that only 15% of pregnant women (compared to around a third of all smokers) are making a quit attempt are using e-cigarettes, and indications that e-cigarettes may improve quitting outcomes, there appears to be a major missed opportunity. Government should seek to further understand the barriers to wider uptake of e-cigarettes among pregnant women who smoke. This is in the context of e-cigarettes as a less harmful substitute for smoking in pregnancy. E-cigarettes should not be promoted to pregnant women who do not smoke.
 - The potential future availability of an e-cigarette on prescription could possibly address many of the concerns expressed by both pregnant women and health professionals. Given the indications from incentive schemes that subsidising the cost of e-cigarettes can make a difference to outcomes the Challenge Group believes there is a pressing need to ensure that the future market includes the availability of e-cigarettes on prescription.
 - Public perceptions matter to women's behaviour. While the public, and health professionals, continue to hold inaccurate views around the safety of using e-cigarettes it will continue to undermine their use as an aid to quitting either because women will not use them or because they will not use them enough, avoiding use in public places. The inaccurate public perceptions of vaping must be addressed through Government action and through the advice provided to health professionals nationally.

Current research landscape and further research needs

19. There is a substantial body of ongoing research around smoking in pregnancy with findings due to be published over the coming years. While the Smoking in Pregnancy Challenge Group believes there is a major programme of research needed to better understand the role of e-cigarettes in pregnancy we do not think it is appropriate or necessary to wait for further findings before providing advice to pregnant women. Women and babies are being harmed by smoking in pregnancy now. Taking no action while waiting for future research is not ideal. It is highly unlikely that any health impacts from vaping during pregnancy identified over time will be anywhere near the magnitude of those of continuing to smoke. We must be honest with women that while we expect e-cigarettes to be much safer than smoking they are unlikely to be risk free and there are things we do not know. But the absence of perfect knowledge is an insufficient reason to discourage women who might benefit from using products.
20. The Universities who make up the UK Centre for Tobacco and Alcohol Studies have a number of directly relevant studies underway. These include:
- CRUK funded survey being led by the University of Nottingham of pregnant ex-smokers, smokers and vapers to estimate the prevalence of e-cigarettes use before, during and after pregnancy and to identify and compare characteristics of women who use and do not use e-cigarettes. It will also look at attitudes to e-cigarettes and identify barriers and facilitators to use (emerging findings highlighted above).
 - Queen Mary University and colleagues in other UKCTAS Universities have a major NIHR HTA funded trial underway comparing the effectiveness of e-cigarettes as a quitting aid in pregnancy to using NRT. They will also follow up women postpartum to assess what, if any, impacts on the baby through vaping
 - St George's, University of London and colleagues in other UKCTAS Universities have undertaken qualitative research with pregnant women to better understand their knowledge, attitudes and use of e-cigarettes (some findings presented above)
21. Areas for further research beyond studies currently in the field:
- Providing further reassurances around the safety of e-cigarettes in pregnancy should be a priority. Both pregnant women and health professionals want further reassurance on this beyond existing body of evidence.
 - There is an identified issue with pregnant women around getting clear and consistent advice on e-cigarettes from health professionals. Further research understanding what would help to improve the consistency of advice from health professionals would be welcome.

Appendix 1 Full membership of The Smoking in Pregnancy Challenge Group

ASH
Bliss
Community Practitioners and Health Visitors Association
Faculty of Public Health
Family Nurse Partnership
Fresh
Institute of Health Visiting
NCSCCT
Royal College of GPs
Royal College of Midwives
Royal College of Nursing
Royal College of Obstetrics and Gynaecology
Royal College of Paediatrics and Child Health
Royal Society of Public Health
Sands
The Lullaby Trust
Tobacco Control Collaborating Centre
Tommy's
UKCTAS
Unite

¹ Royal College of Physicians, *Passive smoking and children*, London, RCP 2010

<https://shop.rcplondon.ac.uk/products/passive-smoking-and-children?variant=6634905477>

² McNeill et al, *E-cigarettes an evidence update: A report commissioned by Public Health England*, 2015, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/457102/E-cigarettes_an_evidence_update_A_report_commissioned_by_Public_Health_England_FINAL.pdf

³ Royal College of Physicians, *Nicotine without smoke*, London, RCP 2016

<https://www.rcplondon.ac.uk/projects/outputs/nicotine-without-smoke-tobacco-harm-reduction-0>

⁴ The Smoking in Pregnancy Challenge Group, *Use of e-cigarettes in pregnancy; a guide for midwives*, 2017 <http://smokefreeaction.org.uk/wp-content/uploads/2017/06/eCigSIP.pdf>

⁵ NHS Digital, *Infant feeding survey*, 2010 <https://digital.nhs.uk/catalogue/PUB08694>

⁶ NHS Digital, *Smoking at Time of Delivery*, 2017 <https://digital.nhs.uk/catalogue/PUB24222>

⁷ West R et al, *Smoking Toolkit Study*, 2017 <http://www.smokinginengland.info/>

⁸ ASH, *Use of e-cigarettes in Great Britain 2017*, 2017 <http://ash.org.uk/download/use-of-e-cigarettes-among-adults-in-great-britain-2017/>

⁹ West R et al, *Smoking Toolkit Study*, 2017 <http://www.smokinginengland.info/>

¹⁰ Bowker K et al, *Views on and experiences of electronic cigarettes: a qualitative study of women who are pregnant or have recently given birth*, submitted for publication