Barriers & facilitators to smoking cessation in pregnancy & following childbirth from 3 perspectives: pregnant women, their significant others, & health professionals

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on behalf of study team

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NO CONFLICTS OF INTEREST
Identifying & overcoming barriers to service access & women’s motivation to stop smoking is challenging.
Aimed to improve understanding of what helps & hinders pregnant & postpartum women to stop smoking
Interviews with pregnant women, their partners/significant others, & health professionals

<table>
<thead>
<tr>
<th>Interviews Nov-13 to Dec-14 from 2 NHS sites</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant women who continue to smoke/recently stopped</td>
<td>41</td>
</tr>
<tr>
<td>of which Postpartum</td>
<td>10</td>
</tr>
<tr>
<td>Partners/Significant Others</td>
<td>32</td>
</tr>
<tr>
<td>Health professionals supporting pregnant women</td>
<td>48</td>
</tr>
</tbody>
</table>
Mean (range) Age

26 yrs (16-42)

No (%) under 25 yrs

18 (44%)

No. (%) in most deprived areas

20 (49%)

Mean (range) gestation at interview

19 weeks (12-29)

No (%) smoking at interview

26 (63%)

Postpartum women

- interviewed 5-12 wks after delivery
- 4 of 10 women smoking at interview
Pregnant and postpartum women (2)

Risk perceptions:
All acknowledged potential risk to the baby but levels of knowledge varied
• Assessment of risk the primary motivating factor for wanting to quit
• Avoidance of thinking or learning about risk

“I don’t [think of the risks]…. I’ve tried to avoid all the stuff because I don’t really want to know. I think you can get breathing problems…. and they can be small….but to be honest that’s about all I know… I’d prefer not to know.” (Area B, pregnant smoker)

• Greater certainty about risks of passive smoking postpartum - key concern after delivery
Influence of partners
• Partners’ smoking behaviour and attitudes to stopping smoking: impacted ease of quit attempts

“I think it’s harder with [partner] smoking because if he goes for a cigarette then I will go with him for one.” (Area B, pregnant smoker)

Experiences of health care professionals (HCPs): pregnancy care
• Midwives perceived as supportive and non-judgemental: lack of pressure to quit smoking

“She said that she didn’t believe that she needed to sit and lecture me... And actually that was what I wanted, I didn’t want an overbearing lecture, there is enough things going on during pregnancy.” (Area B, pregnant smoker)
Pregnant and postpartum women (4)

Experiences of health care professionals (HCPs) (2): Stop Smoking Services

- Flexibility of support key
- 1 to 1 rather than group support
- Mixed perceptions of cessation support
- Positive relationships with cessation advisers

“She has been brilliant really…just knowing that I’ve got someone there to talk to. I had that momentum to keep going knowing that I had that kind of network with somebody.” (Area B, pregnant woman3, non-smoker)

…aided by continuity and regular communication
Pregnant and postpartum women (5)

*Key Suggested Improvements/Interventions*

- **E-cigarettes**: interest but uncertainty about safety
- **Social network interventions**: possibility of increased pressure to quit
- **Mass media campaigns**: influence apparent from concern about second hand smoke
- **Smoking apps**: some positivity but need for pregnancy specific apps
- **Leaflets/Information**: stronger message about harm and more written information
Significant Others
Significant Others (2)

Smoking behaviour
• Majority were current or former smokers
• Many current smokers wanted to quit and had made previous attempts

Importance of smoking to relationship
• Not always stated/appreciated rather implicit: part of spending time together; a means of communicating

“I think you talk a lot more when you are out having a cig, so I think it’s good for communicating because you are both obviously smoking at the same time, ... if you were just sat watching TV or doing something else then it might not go through your head to remind each other what you have to do or everything you’ve got to tell them that happened during the day.” (Partner)
Significant Others (3)

Attitudes to smoking in pregnancy
• Negative, based on acceptance of harms of smoking in pregnancy
• BUT resistance to raising smoking in pregnancy: smoking a coping mechanism; fear of conflict and hypocrisy (current smokers)

“I feel like a hypocrite but it’s my grandchild you know, and, oh it’s crazy, but I wouldn’t have been happy with her (smoking)” (Mother)

Support for woman
• Most common response: avoidance of smoking in front of woman
• Varying commitment and success amongst those quitting simultaneously

my motivation was that if [name one] had to quit smoking then it wasn’t fair if I still smoked. And I was never going to smoke in her presence anyway, so it was a case of us stopping smoking at the same sort of time…” (Partner)
Significant Others (4)

HCPs (Midwives/GPs) raising smoking in pregnancy
• Brief advice: raises awareness but insufficient to support cessation

“I think it’s good because they get to understand and they get told it’s harmful and what you can do, but I don’t think that in itself is helpful in expecting to stop the smoking. It’s good to understand what it’s doing but it’s not good to help it stop because it’s nothing to help you stop.” (Friend)

Nature of stop smoking support for pregnant women
• Appreciation for one to one support: flexible and responsive

“…if [name] is feeling, I mean she hasn’t for weeks now but before if she felt like she was close to going and buying a packet she could phone [smoking cessation adviser] and she was always ready to talk to her and sort of give her encouragement and things. She couldn’t have done it without it.” (Mother)
Significant Others (5)

Key Suggested Improvement/Interventions

• **Social or peer network interventions**: positively received but uncertainty about who best to involve (smoking status)

• **Financial incentives**: mixed but mainly negative responses

• **Websites and apps**: limited awareness but potentially useful

• **Text messaging**: accessible and convenient

• **E-cigarettes**: substantial experience and possibly useful for pregnant women also

• **Media campaigns**: limited impact on pregnant women but influential for SOs (again) in terms of second hand smoke

• **Graphic imagery**: greater use of images to visualise impact on baby
# Health Professionals

<table>
<thead>
<tr>
<th>Professional group</th>
<th>Site A</th>
<th>Site B</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSS advisors/ managers/ admin</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Midwives</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Midwifery managers</td>
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<td>1</td>
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<td>Health visitors</td>
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<tr>
<td>Obstetricians</td>
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<td>1</td>
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<tr>
<td>GPs</td>
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<tr>
<td>Service commissioners</td>
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<tr>
<td>Community pharmacists</td>
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<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>
Health Professionals (HPs) (2)

Referral

• Most non SSS HPs perceived their role as referring pregnant smokers to SSS for support
• Prompts in paperwork and clinical systems were considered useful cues that “allow for the conversation” (Area A, HV1)
• Views on different referral pathways mixed
• Discomfort about ‘opt-out’ referral & taking away women’s choice

“Though I do offer everybody the chance to be referred to the smoking cessation person, but I don’t see it as my role to refer them if they are not at the stage when they are ready to stop smoking.” (Midwife)
Health professionals (HPs) (3)

Discussing risks
• HPs often avoided discussing risks as worried about upsetting clients, damaging relationships, & sounding judgemental
  “And if I start, if they see me as someone who is just going to nag them every time they come they might not want to come” (Midwife)

NRT
• Health professionals were somewhat cautious about NRT
• Perceived it to be helpful if prescribed quickly
  “...I always thought if you could give them the patches straightaway you would be half way there.” (SSA)
Health professionals (4)

**CO monitoring**

- Using CO breath monitors seen as helpful to boost motivation & highlight risks

“...And it does give you that you know opportunity to speak to everybody about smoking and the people that do have a high reading, it’s re-emphasising the facts, the impact it can have on the baby and the pregnancy.” (Midwife)

- Worry that CO monitoring upset women & led to them discontinuing with support
Health professionals (5)

Key Suggested Improvement/Interventions

• **Paperwork & communication:** more effective prompts & clearer info re priority; improve pathways between HPs

• **Training:** mandatory to improve confidence

• **Social or peer network interventions:** positive views but acknowledged challenges & need for increased capacity

• **Financial incentives:** mixed opinions

• **Social media:** positive views – appealing & accessible to those with busy schedules

• **Text messaging:** good way of keeping in contact with pregnant women - benefits over traditional forms of communication

• **Media campaigns:** support for more campaigns around risks in pregnancy
Evidence best represented by a Social Ecological Framework (SEF)
**Discussion (1)**

*Individual factors*

- Women’s and partner’s beliefs about risks of smoking central theme
  - Beliefs could be modified or changed by interventions including contact with HPs & in particular SSS
  - Many of these beliefs stemmed from norms often influenced by mass media campaigns or earlier interventions including health information in childhood or early adulthood
  - Risk perceptions often described as relating to smokers in population rather than themselves
  - Broad acceptance of risks BUT doubts raised about consistency or extent of risks
  - Distinction between risks ‘in utero’ & once baby born
Discussion (2)

Interpersonal factors

• Relationships with partners/SO’s central to how women experienced smoking, attempts to stop and maintain abstinence, and relapse
  – Living with a non-smoking partner/mother perceived as helpful
  – Stopping alongside woman described as helpful
  – Partners also acted as a barrier to cessation when 1) they smoked & continued smoking affected relationship, 2) pressure applied to woman to quit or maintain abstinence/blamed for potential harm

• Importance of a positive relationship between women and HPs emphasised in discussing smoking & supporting cessation
  – HPs could take a more assertive position regarding the risks of smoking in pregnancy & after birth
Discussion (3)

Community & societal factors
• Smoking considered a normal part of life
• Community norms undermined beliefs about risks
• Widespread expectation to resume smoking once baby born

Organisational factors
• Structural or systems factors seen as unhelpful
• Concerns about viability & communication of routine CO screening
• Problems around NRT provision
• Lack of home appointments offered by SSS
• Negative experiences with SSS
• Training for HPs key
• Opt-out referral pathway can help
Conclusions

- Perceptions & experiences of barriers and facilitators to smoking cessation in pregnancy are fluid and context dependent.
- Effective interventions must take account of the interplay between the individual, interpersonal and environmental aspects of women’s lives.
- Future research, and future service development, needs to go beyond a focus on the pregnant woman and her baby to wider networks and contexts.
Acknowledgements

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THANK-YOU