‘Imagine all that smoke in their lungs’: parents’ perceptions of young children’s tolerance of tobacco smoke

Jude Robinson* and Andrew J. Kirkcaldy

Abstract

Despite knowing the risks to their children’s health, parents continue to expose their children to tobacco smoke prior to and after their birth. This study explores the factors influencing parent’s behaviour in preventing the exposure of their (unborn) children to environmental tobacco smoke (ETS) and any changes to their smoking behaviour in the home during the first years of their children’s lives. Whether or not they stopped smoking during pregnancy, the women did not protect themselves from breathing in other people’s smoke. Yet once the baby was born, parents actively protected the baby from environmental tobacco, believing that the lungs of newborn babies were too immature to tolerate smoke. This protection lasted only for a matter of weeks for some babies, or stopped when they were 6–12 months old, linked to their parent’s belief that older babies could tolerate or avoid smoke. These findings suggest that changes made to smoking during the first weeks of a baby’s life are unlikely to be sustained, and key messages about the risks if ETS exposure need to be delivered repeatedly over the first 2 years of life and reinforced as the child gets older.

Introduction

High levels of smoking and smoking during pregnancy are associated with children experiencing multiple health and social disadvantages [1, 2], and it is important that timely and appropriate messages concerning the health risks to children from continued exposure to tobacco smoke are delivered to protect children from potential harms [3]. Maternal smoking during pregnancy and exposure to environmental tobacco smoke (ETS) has been linked to ectopic pregnancy and congenital defects in children [4] and associated with other complications in pregnancy, including bleeding and premature detachment of the placenta [5]. After a child is born, they are still at risk from the effects of smoking, either through inhaling ETS or by being breastfed by a smoking parent [6]. Exposure to ETS is associated with an increased risk of developing chronic conditions during childhood such as asthma, bronchiolitis and glue ear [7–9]. Living and sleeping in a smoky atmosphere is known to increase the risk of sudden infant death syndrome, with the risks increasing if both parents smoke heavily [10]. In addition, there is evidence linking ETS exposure with neurological problems in children, resulting in reduced educational attainment [11–13].

However, despite the delivery of specific advice about smoking cessation and the risks of passive smoking during pregnancy, many women continue to smoke throughout their pregnancy [14] and may resume smoking during the third trimester or soon after the birth of their child [15–17]. The reasons women give as to why they resume smoking after the birth of their baby are complex and include personal preference, addiction, a strategy for coping...
with stress and concerns with their body image [15, 18]. Other studies have identified a woman’s age, ethnicity, (low) income, social class and low levels of educational attainment as positive predictors of maternal smoking [19], with white women living in areas of economic and social disadvantage more likely to smoke than women living in more affluent circumstances [20, 21].

Maternal smoking is regarded as the determinant of ETS exposure for children, who are at greatest risk of exposure in their homes [22–24]. As maternal smoking during pregnancy and/or after the birth of a child is strongly linked to the mothers’ emotional state as well as their immediate social, economic and physical environment, interventions aimed at reducing or eliminating maternal smoking have had limited success, particularly with mothers living in hardship [1, 25]. In response, a number of interventions have been developed to encourage parents to introduce smoking restrictions in the home, rather than stop smoking. Although research has shown that mothers and fathers can modify their behaviour after the birth of a child [26, 27], and overall children’s exposure to ETS in the United Kingdom has declined since the 1980s, there is little evidence to suggest that smoking parents routinely protect their children from tobacco smoke in the home [22].

Effective interventions designed to change behaviour require an understanding of why and when people do the things they do. This study explores the factors influencing parent’s behaviour in preventing the exposure of their (unborn) children to ETS and any changes to their smoking behaviour in the home during the first years of their children’s lives.

**Method**

As smoking near children has become a socially stigmatized activity in the United Kingdom, one of the challenges of the research was to adopt a methodology that would enable participants to discuss issues around child health and smoking in a supportive and confidential environment [28, 29]. Focus groups have been used successfully to discuss sensitive topics and can also offer participants the opportunity to explore issues with their peers [30–32]. In spring 2004, SmokeFree Merseyside commissioned researchers at the Health and Community Care Research Unit at the University of Liverpool to undertake 10 focus groups with the smoking parents or carers of children aged ≤5 years, who normally resided with them. People who had stopped smoking within the previous 6 months were also eligible to take part to ensure that women who may have stopped during their pregnancy, but had smoked and may intend to resume, and people who may have recently quit were included. The proposal was subject to the University of Liverpool’s requirements for peer review.

Ten groups were organized across Merseyside, including six in the SureStart areas of Bootle and Litherland, West Everton and Breckfield, Kensington and Granby, Speke and Birkenhead North. The remaining four groups took place in Liverpool at Speke, Norris Green, Kensington and Granby. Seven groups included women who smoked, as children <5 years of age spend the most time with their mothers, and three groups with men. The focus groups were held in areas of high economic and social disadvantage where a locally commissioned survey had shown high levels of smoking in the home [33, 34]. The groups took place in local venues, accessible by foot by the majority of participants, with facilities to enable us to offer participants tea and coffee on arrival. Women’s groups were held during the day and timed to avoid the school drop off and pickup times. Male participants were given the option of either daytime or evening groups, and all the men preferred to take part in an evening group.

Anticipating a low recruitment rate [35], parents were recruited to the study in three ways: (i) by writing to 182 people who had taken part in a survey by the market research organization National Opinion Poll (NOP) and had been asked by NOP researchers whether they were happy to have their contact details passed on to the research team; (ii) through a recruitment agency that used a screening questionnaire to stop people in the street to ask
whether or not they would consider taking part and (iii) through people working at three local SureStart initiatives, community workers and by word of mouth from people who had already taken part in the groups or who had been contacted by another method inviting their friends. A payment of £25, plus £10 babysitting money, was also offered to participants in recognition of the time they were giving up to take part in the group. Only 11 people responded to the letters of invitation, with 37 people recruited by the recruitment agency, and the remaining participants finding out by word of mouth.

Seventy people took part in the groups, 54 women and 16 men. Almost half (47%) of the participants were aged 25–34 years, with 27% aged 35–44 years, ~22% aged 15–24 years, with three people aged 45–54 years. Over 90% described their ethnicity as ‘White’, with only two participants describing themselves as ‘Black’ and two as ‘Mixed Black Caribbean and White’, with others preferring not to state their ethnicity. This broadly reflects the ethnicity of the local population of Merseyside. Of the women in our group >70% described themselves as full-time carers of their children, with only five women employed part-time, and four women employed full-time (>30 hours a week). Of the 16 men who took part, 10 men described themselves as working full-time, with 2 people working part-time, with the remaining men preferring not to state their occupation.

All participants had at least one child <5 years old, and 11 participants had children <12 months old. Three women were also pregnant at the time of the focus groups. One participant had five children living in their household, 3 participants had four children, 21 participants had three children, 20 participants had two children and 25 participants had only one child living with them at the time of the study. Over 51 (72%) participants lived with a partner or other adult who smoked, and one parent also lived with a child who smoked.

The schedule used to facilitate the focus groups was developed by the research team for this project using existing published literature focussing on theories exploring knowledge and behaviour, but remained relatively open and non-directional, based on feminist theories of the need to privilege the knowledge and experience of participants [36]. This schedule was further developed during the course of the research to reflect emerging themes from the different groups. With the consent of the group the sessions were audiotaped and later transcribed. A moderator and observer attended all 10 groups, with J.R. moderating the women’s groups and A.J.K. moderating the men’s groups. The change of moderator may have impacted on perceived gender differences between the men’s and the women’s groups, but no specific changes in the way the focus groups were run was noted by the observers at the time. The group discussions lasted ~45 min, with ~10 min to negotiate ground rules and a 15-min discussion at the end for participants to ask questions and complete a mini-questionnaire. The mini-questionnaire was used to capture personal information from each participant, such as their age, ethnicity, number of children, and occupation and information about their smoking. In recognition that not all participants would be able to read and write, everyone was given the option to complete the questionnaire with a researcher.

The data were imported on to the computer software package NVivo. J.R. and A.J.K. independently developed an open coding framework, which was checked for agreement, and the remaining data were coded and then analysed thematically by J.R. The data from the mini-questionnaire were entered into SPSS and analysed by A.J.K. All data were anonymized, with electronic data stored in password-protected files and paper copies and audiotapes in (separate) locked filing cabinets. Any material identifying individuals was stored in a fireproof document safe, away from the other data.

**Results**

**Smoking during pregnancy**

From the discussions, it was evident that all of the participants were aware that maternal smoking during pregnancy could adversely affect the health of their baby. However, despite this awareness of this
key health message, only around half the women in the study had successfully stopped smoking during the early months, with around half of this group resuming smoking during the third trimester. Other women talked about how they had tried to cut down or smoke lower tar cigarettes, and the men discussed how their partners had either cut down or stopped smoking. Some women had only stopped because of pressure from their partner or because of morning sickness, and so their motivation was not to protect their baby from smoke. For the following extract and all other extracts, P1 denotes the first participant speaking, P2 the second and so on; M, and boldface, denotes the moderator.

P1 I had morning sickness that bad that I couldn’t even pick up a cigarette and I say now, if I hadn’t had that morning sickness with both of them then I would have probably smoked.

P2 Well you see I didn’t have no morning sickness at all.

P1 And I tried, that’s the weird part, I tried to have a ciggie and it was making me ill and I was still trying to have a ciggie. It’s like when you’ve got a chest infection you’ll have a chewy so it goes down easier!

All Laughing. FG1

Although the links between future ill health and low birth weight are well established and accepted in the medical field, only half of the women and a third of men cited the low birth weight of babies as a natural consequence of smoking during pregnancy. For the majority of participants, low birth weight, unaccompanied by other health problems, was not seen as a problem and could be attributed to factors other than smoking. For the women who continued to smoke or stopped and started again in late pregnancy, other than ‘guilt’ and a vague feeling that it was ‘better for the baby’ if you stopped, most women did not have any particular fears about continuing to smoke if they felt that there were valid, personal reasons for them to continue.

Exposure to ETS during pregnancy

Although the participants discussed in principle the need for pregnant women to stop smoking or cut down their smoking, none of the participants had considered the need for pregnant women to avoid smoky places or people who were smoking. The majority of women in this group had not imposed any smoking restrictions in their homes, and their partners had continued to smoke in the same rooms, often sitting next to them. This was true both for women who continued to smoke and for the women who had given up smoking.

M And what about your partners did they try and cut down with you.

P1 No.

P2 No. They like preaching when you are pregnant, when they are telling you are not supposed to be having a ciggie, they’re having a ciggie.

M But what about you breathing in their smoke, were they worried about that, did they stop smoking near you?

P3 No.

P2 They weren’t worried at all. FG10

Smoking partners were seen here as unsupportive, not because they exposed them and their baby to smoke but because they did not help the women to stop or cut down their smoking. The women described how they had continued to go to smoky places throughout their pregnancy and to sit with their partners and friends, all of whom smoked. Despite all of the participants being able to give an adequate definition of passive smoking at the start of the group discussions, the majority of participants said that it had not occurred to them that by inhaling someone else’s smoke, they were exposing themselves and their unborn baby to cigarette smoke.

M Did you think about passive smoking and the effects on your pregnancy at all?

P1 No.
You might have avoided smoky places if you felt sick though, but you wouldn’t be thinking my baby’s going to be breathing…

M Do you think that your partners are aware of it?

P4 No.

P1 No. FG5

They felt that giving up smoking while their partner continued to smoke was very unfair, and some cited it as a reason for their continuing to smoke:

My husband used to go on saying ‘just try and stop smoking’ but he was smoking and I said well you’re just as bad. And I just used to think why is he going on at me? He’s just as bad. If he had packed in then maybe I would have tried harder. FG5

The participants in the men’s groups discussed how they had smoked outside the house if their partner had asked, but others had continued to smoke in the house, and none of the male participants had actively avoided going to smoky places with their partner when they were pregnant. Therefore, although the mother’s smoking behaviour changed, the smoking behaviour of other people around them remained unchanged, as did their general environment, as none of the women attempted to create a smoke-free environment for themselves during their pregnancy. Therefore, even the women who gave up smoking throughout their pregnancy were exposed to ETS, in their homes and/or by continuing to visit smoky places.

Resuming smoking after the birth of the child

Around half the women in our study who had given up smoking during pregnancy resumed smoking within 2 months of the birth of their children. For some women it had been an immediate response to the delivery of their child, and they had started to smoke intentionally within hours of the birth. It was evident that the concerns these women expressed over the health consequences of their smoking for their babies ended when the physical link between them was broken, and these women clearly regarded their continued smoking as a risk only for themselves, no longer for their baby.

P1 As soon as I found out I was pregnant, I just stopped straight away. I threw my cigarettes in the bin and I just stopped like that, straight away and be really healthy and have a healthy pregnancy and then as soon as the baby was born, it was just like…

P2 Straight out and have a ciggie.

P3 I tried, but I was like a lunatic. FG1

P1 Oh I gave up straight away but the next day, I was out on Tuesday, Wednesday with the smoking room. I couldn’t smoke while I was pregnant but as soon as I had her I was straight back in that smoking room having a cigarette. FG5

Other women who had not smoked during their pregnancy did not resume smoking until some weeks or months after the baby was born, and these accounts suggest that these women may have wanted to give up but found that social and environmental pressures made them start again, particularly the stress associated with caring for young children.

I packed in and I didn’t start again until he was about 6 weeks old, I don’t know, I think it was because other people were smoking around me as well. FG8

These first few months of caring for a newborn child are particularly stressful and these women described how smoking contributed to their sense of well-being and ability to cope with caring.

I stopped smoking when I was pregnant anyway and I started again when my little girl was about
4 months old which was stupid, I should never ever have done it, but I think you go through a lot of changes in your life, you do need a comforter there which was obviously cigarettes. FG4

All of the mothers in this study had resumed smoking within 4 months of the birth of their child. Even though some mothers had given up during their pregnancy, they had either chosen to resume smoking immediately after the birth or had gradually started again, suggesting that the first few weeks and months after the birth represent a critical time for maternal smoking.

**Exposure to ETS after the birth**

Despite smoking behaviour and smoke exposure to ETS during pregnancy, all of the women and men taking part in this study strongly and unequivocally supported the principle that newborn babies should not be exposed to cigarette smoke. This was clearly an emotive subject for all participants, reflected in the language used to put across their views:

You are so paranoid about when they are newborn anyway, this little thing that you are protecting. FG2

It’s when they are a newborn baby you’re scared to smoke or whatever, you just don’t have no-one smoking. Because they are only small, aren’t they? Imagine all that smoke in their lungs. FG9

In order to protect their babies, parents described how they attempted to reduce or eliminate their exposure to tobacco smoke in the home, and elsewhere. Accounts from parents talked about the need to prevent exposure to ETS for ‘newborn babies’, who appeared to be conceptually distinct from (older) ‘babies’. Although definitions of how close they could safely smoke to newborn babies and what constituted a ‘newborn’ baby were not universal, for many parents this was the first stage in attempting to actively change their home environment rather than solely adjusting their own smoking behaviour. Although the changes in smoking made by a small number of parents were unlikely to have reduced their children’s exposure, they had made some effort, suggesting that messages about the risks of ETS exposure were getting through.

It is really when they are purely as infants in their cot in the kid’s bedroom or something like that, you didn’t smoke there, but anywhere in the house we just carried on as normal to be quite honest with you. FG3

For the majority of parents in this study, the birth of their baby radically changed their smoking behaviours, and this represents a critical event, as unlike previous changes in smoking behaviour described during pregnancy, where women cut down or gave up, but partners and friends continued to smoke near them, these changes affected their wider home environment. Furthermore they required the active support and participation by both parents and impacted directly on people other than themselves, carrying social as well as practical consequences. The discussions also made it clear that these changes were made to ensure the health and well-being of their children, rather than their own health or smoking preferences, and any reduction in the amount of cigarettes smoked was seen as a consequence of altering behaviours rather than a personal desire to smoke less.

**M Have you always had these rules or is it something that you have done since you have had children?**

P1 Since we’ve had children.

P2 Yes.

**M So if you didn’t have children you would...?**

P3 Probably carry on, smoking more in every room, probably.

P4 Until your rooms go yellow! FG4

Mothers and fathers described how they (had) avoided smoking in the same room as their newborn baby, and around a quarter of the women and men in this study had created a smoke-free home, by smoking only outside the house. Therefore, despite
smoking near their partner during their pregnancy, the men did alter their smoking habits after the birth of the baby. Smoking mothers who had managed to give up smoking and did not resume smoking until some months after the birth of their child were particularly vigilant and kept their houses as smoke free as possible, even if their male partner (still) smoked.

P1 I smoke downstairs, if I can I try not to smoke in front of them.

P2 I’m the same, I won’t smoke in the house—I smoke in the garden, and I don’t even want my kids to see me, if I see them at the window I put it behind my back. I feel really guilty.

FG1 I go in the back yard now since I’ve had the baby. I went in the kitchen with the other two, but once I had the baby it’s right out in the yard. FG10

For all women, and some fathers, smokers and temporary non-smokers, when relatives and friends visited the house, they were all asked to smoke away from the newborn baby, either in another room or even outside if the parents had decided to create a non-smoking house.

If any of the relations come I just tell them straight—you either stand out in the backyard or at the front because I won’t let them smoke. FG9

When asked if they experienced any difficulty in making requests not to smoke near the baby, the general response was that no one would smoke near a newborn baby, and so to make the request for them not to smoke was socially acceptable and would not compromise existing relationships.

M How easy is it to decide what other people do, either who live in the house with you or who visit the house?

P1 Anyone who visits goes in the kitchen to smoke.

P2 They’ve got to respect your wishes if they are coming into your house. FG6

Smoking with babies and young children

Despite the efforts parents had made to create a smoke-free or smoke-limited environment for their newborn babies, it was evident that very few parents had maintained a non-smoking environment for their children in the longer term, although the mothers of very young children expressed their intention to continue to do so. Less than a quarter of parents had continued to protect their children from ETS until they were of primary school age (5–11 years), and over half the parents had relaxed their smoking habits once their children were old enough to walk, at ~1–2 years. Around a quarter of parents described how they had relaxed their smoking habits once their babies were 6 months old, when they had started to crawl. The reasons for increasing their children’s exposure to cigarette centred around two areas related to the child’s physical development: firstly, their physical appearance, that is they looked older, and secondly, their ability to crawl or walk, which for many parents meant that they could take themselves away from the smoke if they wanted.

The kids get to a certain age and you sort of forget about it, you’ve got a new baby now, it’s not as bad, not smoke around them and in front of them. But you definitely make sure that when they are babies, no body you want to protect them in like a cocoon and you don’t want anything harming them, but when they get to a certain age when you know they can walk out the room…. FG1

This mother describes how her partner altered his smoking habits as the children got older and resumed smoking in the home. By mentioning ‘stress levels’ she clearly links smoking behaviours with the demands of looking after children:

I think it was more when the kids were younger he always used to [smoke outside] and I didn’t really smoke that much, being pregnant and that, but obviously stress levels get higher and as the kids get older you smoke more, but he always
smoked outside and as they got older he brought it more into the house. FG1

Another mother describes how hard it is to maintain a smoke-free environment outside the home once a baby becomes 6 months old as continued support from relatives and friends is needed:

Like when you first have the baby and you are going somewhere I’d phone them first and I would say, I’ll be coming round in a couple of hours do you mind stopping smoking in the living room, I don’t want to smell smoke? And when I walk in, and I get there, and they have the windows open. With a new baby people are more concerned, but after the baby gets to 6 months…. FG10

The maintenance of a smoke-free environment requires negotiation and cooperation from family and friends and became more difficult for parents if their partners, friends and relatives perceive that the child is ‘old enough’ to tolerate smoke. In the following abstract, this man was clearly uneasy about the assumption that children were unaffected by breathing smoke, but still smoked in the same room as his young child:

You think they are a little bit more grown up, their lungs and things are a bit more mature, after a couple of years. Probably they are not, but you think that they are. FG9

The results from this study suggest that the majority of participants who resumed smoking around the time their children were 2 years old had not actually made a conscious and articulated decision to smoke near their baby or child. Unlike their decision to not smoke in the presence of their newborn child, which had apparently been discussed between the parents, with some agreement between them about the ‘rules’ around smoking near their baby, smoking behaviours appear to have relaxed back to previous patterns, perhaps gradually, and had gone unchallenged by either partner. Although it is more difficult to abstract patterns of individual behaviour from focus group data, our data suggest that an early resumption of smoking occurred in households where both parents had continued to smoke, or had resumed smoking, and where parents found the ‘work’ of maintaining a smoking ban, in terms of personal effort, support and the maintenance of social relationships with smoking visitors harder to sustain than other parents.

P1 I can’t even remember whether I ever packed in smoking or not when I had the baby. You just fall into it, I can’t even say what age he was when I done it. He’s only 18 months now, but I remember we all used to stand in the front or out of the way and I can’t remember.

M Actually going back in again?

P1 Yes I don’t remember doing that I just know we used to stop. FG10

The resumption of smoking near young children is closely linked to the need to smoke by the mothers and the demands of caring for young, highly mobile children. Our data suggest that many mothers and fathers who try to create smoke-free environments are unable to maintain them.

M Something you said that was interesting, that you try not to smoke around young babies but then maybe things do relax about the way you treat children as they get older?

P1 Definitely.

M What sort of age, if you had to put months or years to it, and it might be different for different people?

P2 As soon as they get walking, you then get a bit ‘lacksy daisy’ I think.

P3 I found I smoked more then.

P1 Yes I did.

P4 When you’ve got three, you do it with the first, you are not as good with the second and you are definitely not as good with the third,
because you have already got that pattern going. Yes, okay you give up, but you don’t do it as much and at the end it is all scaled down and it goes very wrong.

P5 Sometimes you kind of think, well it’s only for half an hour, it’s not gonna be something that will do them any harm for half an hour sometimes you kind of think like that don’t you? FG4

Discussion

The results from this study support the findings from previous research that despite an awareness of the risks to health, women continue to smoke during pregnancy or may resume smoking during the third trimester or soon after the birth of their child. Although unhappy about their smoking, many women in this study clearly did not want to quit and were reluctant to modify their behaviour if it meant that they could not smoke. Many of the women cited their partners’ continued smoking as the reason for their inability to quit or why they started smoking again. Support from partners is important, as Wakefield et al. [16] found that women living with a non-smoking partner were more likely to quit during pregnancy, and a Norwegian study associated positive health outcomes, such as quitting or reduced smoking, with increased levels of support from partners [37]. However, even if partners cannot quit, they may be able to moderate their smoking behaviour during their partner’s pregnancy, if they accept that their smoking could adversely impact on the health of their unborn child, which would not only positively impact on the mothers smoking but also reduce their exposure to ETS in their home [26, 38, 39]. This suggests that these messages need to be directed at the partners of pregnant women throughout their pregnancy.

A key finding from this study is that mothers and their partners were unaware of the key health messages around the risks of passive smoking to pregnant women and their unborn babies. There was evidence to support the finding of previous research that they felt that the baby was somehow protected from its external environment by its mother, and so any ETS would not affect it in any way [38]. Although the majority of women in our study had attempted to change their smoking behaviour during pregnancy, the smoking behaviour of other people around them remained unchanged, and none of the women attempted to create a smoke-free environment for themselves during their pregnancy. Therefore, even the women who gave up smoking throughout their pregnancy described being exposed to ETS in their home by their partner’s and visitor’s smoking and by continuing to visit smoky places. This clearly has implications for the health of the baby and their mother, and interventions need to be developed to inform parents of the need to eliminate, or substantially reduce, their child’s exposure to tobacco smoke during pregnancy. Information that provides an explanation of how inhaled tobacco smoke can affect an unborn baby may encourage women to avoid smoky places and for smokers to be more conscious about smoking near pregnant women.

All the participants wanted to protect newborn babies from exposure to ETS. This may be a response to successful interventions by health professionals, but our research suggests that it is strongly linked to parents’ beliefs around the fragility of newborn babies and their inability to tolerate smoke. Crucially, these beliefs are shared by their wider social networks of family and friends, who supported the parents and cooperated by not smoking in the same room, or the house, as the baby. However, messages around the need to keep homes smoke free rather than reducing smoking need to be reinforced, as recent research in the United Kingdom concluded that only a total ban on home smoking significantly reduced the exposure of children to ETS [40]. Therefore, although parents are making some changes to their behaviour, they are unlikely to be doing enough to protect their children, even during their first few weeks of life.

Recent studies have identified some of the reported measures parents introduced to restrict smoking in the home [41], but necessarily represent a ‘snapshot’ of what was being done at a particular
time, rather than over the longer term. By the time their children were 2 years old, around three-quarters of participants in this study had resumed their previous smoking patterns and were smoking indoors around their children. The belief that as children become older they can tolerate smoke suggests that parents are not sufficiently aware of the continued risks to their child’s health as they grow older. Health messages about the vulnerability of children to the effects of inhaling tobacco smoke throughout their childhood need to be made more explicit to parents, who may be complacent as their children appear outwardly healthy. Information that emphasizes the continued immaturity of children’s respiratory system and the effects of school-age children inhaling tobacco smoke may be successful in changing the attitudes of parents. As health interventions tend to take place during routine contact with parents and their babies during the first weeks and months of life, it is important for healthcare professionals to recognize that early changes to smoking by parents are unlikely to be sustained in the longer term and need to re-enforce key message throughout childhood.

Funding

Smoke Free Merseyside Alliance

Acknowledgements

The authors would like to thank Gina Perigo and Tina Williams from SmokeFree Liverpool for their commitment to the project and Brenda Fullard, North West Regional Tobacco Lead, and Richard Glendinning from NOP World for their help and support. The authors also greatly appreciate the kind help of the health workers and managers from Speke, Everton and Breckfield, Norris Green, Kensington and Granby, Bootle, and Birkenhead North SureStart Initiatives.

Conflict of interest statement

None declared.

References

Parents’ perceptions of young children’s tolerance of tobacco smoke

32. Wilkinson S. Focus groups—a feminist method. Psychol Women Q 1999; 23: 221–44.

Received on July 28, 2006; accepted on November 1, 2007