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Making sense of the challenge of smoking cessation during pregnancy: a phenomenographic approach

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Abstract

In general, most women are familiar with the need to stop smoking when they are pregnant. In spite of this, many women find it difficult to stop. Using a phenomenographic approach, this study explored Swedish pregnant and post-pregnant women's ways of making sense of smoking during pregnancy. A total of 17 women who either smoked throughout pregnancy or stopped smoking during pregnancy were interviewed. Five different story types of how they are making sense of smoking during pregnancy were identified: smoking can be justified; will stop later; my smoking might hurt the baby; smoking is just given up; smoking must be taken charge of. Based on the study it is argued that the approach used in health education in relation to smoking cessation in antenatal care needs to move from information transfer and advice-giving to the creation of a dialogue. The starting point should be the woman's knowledge, concerns, rationalizations and prejudices. A model is suggested in which a woman may move in a space on three axes depending on life encounters, dialogue and reflections on meaning. The goal in health education would be to encourage movement along three axes: 'increase of self-efficacy towards control', 'increase awareness by reflection on meaning of the smoking issue' and 'avoidance of defense of the smoking behavior'.

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Introduction

For a woman who smokes, pregnancy is a period when continuing smoking becomes a real issue. Pregnant women who smoke are more motivated to cease smoking than other women of the same age (Haug *et al.*, 1994). Despite this, only about 30% of the women who are smokers when they become pregnant actually stop smoking. In addition, the decrease is not equally distributed, as women with low education levels do not stop smoking to the same extent as women with high educational levels (Lu *et al.*, 2001). In Sweden, about 50% stop smoking (Wallskär, 2003) and a low level of education is common amongst the women who are still smoking during pregnancy (Abrahamsson and Ejlertsson, 2000). This suggests that the tradition of how health messages about smoking are delivered in antenatal programmes and in the public sphere is more appropriate for women with a higher educational level, whilst approaches addressing the needs of women with a lower educational level need to be developed (Pickett *et al.*, 2002). (In Sweden educational level is seen as a proxy indicator of class.)

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In Sweden, almost all pregnant women participate in a health screening and health education programme during antenatal care, usually introduced after 8–12 weeks of pregnancy. Smoking habits have to be documented by the midwife during the 12th and 32nd week of the pregnancy, and she also gives smoking cessation advice and support (National Board of Health and Welfare, 1998).

Several studies have suggested that the individual woman's ways of thinking and her living circumstances (Graham, 1976; Maclaine, 1991; Lawson, 1994; Dunn *et al*., 1998), as well as her concerns about smoking (Arborelius and Nyberg, 1997; Oliver *et al*., 2001), need to be taken into account in health education. Researchers question the assumption that one model of health education fits all smokers, and suggest that health education needs to become more person-centered (Macleod Clark and Maclaine, 1992; DiClemente *et al*., 2000; Ershoff *et al*., 2000; McCurry *et al*., 2002) and grounded in a deeper understanding of how women make sense of smoking. This paper explores pregnant and post-pregnant women's ways of making sense of smoking during pregnancy, and the implications for health education about smoking cessation.

Method

In the mid-1970s, a specific approach to investigating how various phenomena actually might be conceived, termed *phenomenography* (Marton, 1981), was developed at Gothenburg University, Sweden. The approach has similarities to phenomenology since both approaches aim to describe a phenomenon, but from different viewpoints. Whereas phenomenology aims to describe essence and commonality, how the phenomenon really is, the aim of phenomenography is to investigate and describe the qualitatively different ways in which people experience, understand, see, conceptualize (i.e. *relate to*) phenomena in the lived world (Marton and Booth, 1997). Phenomenography is 'not a research method but rather a set of assumptions about humans, about science and about how we can acquire knowledge about other people's ways of experiencing the world' [(Sjöström and Dahlgren, 2002), p. 339]. The area of interest in phenomenography is the relationship between the phenomenon and the individual, thereby revealing the (often taken-for-granted) foundations for human ways of acting within and perceiving the world. It is thus the *variation* in ways of seeing which is the object of investigation for phenomenography (Marton, 1981, 1995; Marton and Booth, 1997).

In phenomenographic studies, data is usually collected through interviews. However, given that an interview is effectively a dialogue, what can be gathered from it is not really how someone sees or experiences something, but rather how this something is *talked* about (Säljö, 1994, 1997). Therefore, in a phenomenographic analysis, what is studied is both how something is talked about and possible ways of experiencing. To indicate that the results can be seen from these both perspectives, we use the term *ways of making sense* (Grundén and Ottosson, 2000; Ottosson, 2000) to indicate the unit of analysis. This term can be adequately used for the way sense is made in dialogue or equally well for a possible way of making sense for oneself, i.e. in thinking (or perceiving).

In a phenomenographic investigation, the researcher defines, building on a careful analysis of empirical data, qualitatively differentiated categories of description with respect to ways of making sense of the phenomenon under investigation. These categories and the relationships between them form, in phenomenographic terms, the *outcome space*, which is 'a description on the collective level' [(Marton and Booth, 1997), p. 114] and which constitutes the main result of the investigation (Marton, 1981; Johansson *et al*., 1985). This approach was used in order to uncover variations in how the pregnant women made sense of their experiences of smoking during pregnancy.

The outcome space is a description of the interpretations that have been made out of an analysis of all the interviews to create a set of different ways of experiencing a phenomenon (Marton and Booth, 1997). The findings from phenomenographic studies

have often been found useful in health care for trying to understand the nature of individual experiences of health issues (Sjöström and Dahlgren, 2002). In this case, the findings are differences in a set of story types that potentially are useful in health education. This variation in the way the women make sense of smoking or smoking cessation in the dialogue could possibly be a source for change in smoking behavior.

A conscious attempt was made to cover different backgrounds in order to increase the likelihood that variations in ways of making sense of smoking cessation during pregnancy would be possible to identify. Data was collected through interviews with pregnant and post-pregnant women who had a variety of smoking cessation patterns. These varied from completely stopping to having made no change at all. The point at which those that did change varied from early pregnancy to after the delivery. All women had a low education level. Other background variables that were taken into consideration were number of pregnancies, age, ethnicity, city/countryside living and civil status. Such variables in phenomenography reflect a general background to the outcome space on a collective level and thus they should not be linked to the individual category.

Midwives working in antenatal care in different centers of southern Sweden were asked to look for women with specific background variables. A range of women with various experiences of smoking and smoking cessation in pregnancy was chosen. When the midwife had identified a potential participant, this client was informed by the midwife about the study and asked if she were interested in participating. If the subject answered positively, the interviewer was given her name and telephone number. The woman was then contacted by telephone and asked if she was still willing to participate. If so, an appointment was made to meet either at the woman's own home (12 cases) or in a neutral setting (five cases). The subsequent 17 tape-recorded interviews were transcribed verbatim by the interviewer. In order to improve quality, transcriptions were made directly after each interview.

The interview was performed by one of the authors (A. A.) who has experience of addressing smoking in health care. An interview guide was used and the opening question 'What is *your* view of smoking during pregnancy?' was posed to all interviewees. The initial response was followed up by open-ended questions, most of them covered by the interview guide. Analysis was performed in parallel with data collection leading to preliminary categorizations. After the first 12 interviews, a set of five preliminary categories was explicitly formulated. The last five interviews were made in the same way as the first, but in addition the five preliminary categories were presented to the interviewee, who was asked to reflect upon them. These reflections contributed to the validation of the categories, but also made it possible to describe them more distinctly. It was judged that saturation had been reached after the 17th interview and data collection was finished.

Data have been analyzed in accordance with the phenomenographic approach. Each interview was first read through to gain an overview of the content. The content was then concentrated into themes that were used later to build the different aspects. The aspects were successively formed not only according to the content, but also by whether the themes were prominent or set in the background. Gradually, a set of story types of how, in different ways, the women made sense of their smoking in the dialogue (i.e., the outcome space) was developed.

Results

Some general characteristics in the ways the women made sense of the smoking were found in all the interviews. To be a smoker when you are pregnant was seen as being egocentric and therefore constituted shameful behavior.

> Yes, it feels terrible when you are a smoker and you're pregnant. You don't smoke in public. You just don't dare. You hide... It's shameful to be a smoker when you're pregnant. We smokers help each other sneak away to smoke so that no one will see us. [Interview 15]

Before pregnancy they had all expected that they would stop smoking as soon as they got pregnant, because they wanted the best for their babies. Later, when the pregnancy was a fact, they were confronted with their actual capacity to stop smoking. Some of them did succeed, some did not. Among all the interviewees, and particularly among those who did not succeed, a conflict was generated between not giving the best to their baby and the gains of smoking. In this conflict, various elements of the smoking, like experiences, hearsay, scientific facts, social circumstances and well-being, were struggled with. All women were found to be more or less familiar with facts about the risks of smoking, although at the same time some of them still trusted more in their personal experiences and hearsay of the risks. In those cases, the way the women presented their knowledge about risks was more of a construction that could be likened with bird nest building, a metaphor used by Leavey [(Leavey, 2000), p. 252]: 'It suggests that people weave together elements from different explanatory systems, but also draw from personal experiences, thoughts and feelings, to provide emergent and dynamic explanations for their behaviour'. This construction could also be seen as a resistance activity, highlighting the agency, and the creative and adaptive powers of the individual (Lee and Garvin, 2003).

The story types identified below, of how the women made sense of their smoking, can be regarded as constructions of knowledge created in a dialogue, used to consider and present the unwanted behavior for the interviewer and for the interviewee. At different times, different elements were either in the background or in the foreground. Of value to note is that the story types are on a collective level. On the individual level there is often a complex process, where different stories could be presented in different contexts. There are individual variations amongst the women in how stable the stories are that they tell during, after and between different pregnancies. For some women the way they make sense of their smoking could be stable, for others the story could change once, but for others there could be a fluctuation between different stories over a longer time span. The story types described below are therefore to be seen as more or less temporary social presentations in a dialogue of making sense of smoking.

Story types of making sense of smoking

Five different story types of how smoking is made sense of were identified in the data. In the present section, these story types are described along with illustrative quotations from the interviews.

Smoking can be justified

Here the key feature is the building of a protective wall of reasons that make smoking acceptable both for the woman herself and for others, probably so that feelings of shame could be avoided. Arguments are developed that refute possible criticisms of smoking. Reasons include, 'I only smoke low strength cigarettes', 'smoking helps reduce aggressions and improves my ability to have good social relationships' and 'there's lots that's much more dangerous'. A combination of personal experiences and hearsay are used to preserve the smoking behavior, while although there is a familiarity with the scientific evidence of risks, it is placed in the background. In this way it is seen as preventing the harmful effects from striking the woman or the baby.

> If you want to have the baby, I think that you want to do what is best for your child. I think that is clear. On the other hand, I think that nagging gives a mother-to-be a bad conscience and that today all expecting mothers have enough reasons for having a bad conscience as it is. They don't need to feel even worse, just because they are constantly being nagged at. I don't believe that a mother-to-be chain smokes deliberately... I believe that a child feels good if its mother feels good, and I wouldn't have felt good if I'd quit smoking, when I didn't want to quit. What I did was to cut down. I smoked more during this pregnancy than during all of my other pregnancies, and she weighed more at birth than my other children did. [Interview 1]

Of key importance are the taken for granted high demands put on the woman both by others and by

the woman herself to take care of the needs of the whole family. The well-being created by smoking was seen as necessary in her life situation.

> When I was pregnant the first time I smoked throughout the whole pregnancy. I was so young then, 21 years old. He didn't want me to have the baby, but I decided to give birth anyway and to manage all by myself. We lived together, but he still didn't want the baby. The situation was difficult and I smoked more then than I usually do. [Interview 4]

Thus smoking was seen as the best possible choice given in the existing life situation. It did not represent failure.

Will stop smoking later

Smoking and pregnancy was merely a backdrop and not even considered. The pregnancy was put to the back of the mind probably because the woman did not want to give up smoking, particularly where the general attitude to smoking was negative. 'Day after day smoking cessation is something you are aiming for, but later, after just this one last cigarette.'

> Yes, it was sort of like facing the dilemma of having to stop because it wasn't good for the child, but at the same time coping with the fact that it wasn't as easy to quit as you thought it would be. I thought that if I smoked two cigarettes, it wouldn't be so dangerous. A couple of cigarettes wouldn't really matter. That's how I reasoned every day and I never quit completely... I don't really know. I can't really sort it out. I just can't. I thought about quitting when I first heard about it, but it was only a thought... I just kept smoking. It was as if I felt that I didn't want to quit smoking. Even though I had said that I was going to quit, I continued and didn't think about anything else. [Interview 6]

Lack of any attempt to stop smoking was ascribed to a sense of lack of responsibility, often explained as a consequence of being young. Consequently, a possible success in stopping smoking was considered as proof of maturity. Again, there was a familiarity with risks of smoking, but they were kept in the background. The severity of the risks was doubted and thus did not need to be thought about. Again, personal experience and hearsay were considered more reliable. Continued smoking was justified by a shared responsibility with one's partner or other persons. In this story type the guilty conscience was kept in the background.

My smoking might hurt the baby

Here the key characteristic is the focus on the pregnancy and the exposure of the child to the risks from the woman's smoking. The combination of the internalization of the risks for the child with a lack of capability to gain control over the smoking makes the woman feel miserable during the pregnancy. The feelings of personal responsibility, failure and guilty conscience were significant, and few excuses for smoking were given.

> I couldn't keep away from them... It was very hard. Honestly it is a goddamned poison. I'm addicted to them [the cigarettes]... I've always said that if I were pregnant I would never smoke during my pregnancy and I would quit immediately. I've always said that that is what I would do and yet I still smoke. I'm carrying a living human being and I know how dangerous it is. I don't want to hurt my child. But I haven't quit smoking and I have such a bad conscience because I'm hurting my poor child. [Interview 3]

The intention to stop smoking was grounded in an obvious awareness of how smoking might hurt the child. However, the probability of the risks was struggled with by reflections on the own risk to be hurt. Inconclusive scientific evidence was not fully trusted, as it was not supported by personal experience.

> It limits the child's intake of oxygen and can result in heart damage, brain damage and developmental handicaps, I think. I've read a lot about it. Deformations, too, but it isn't certain that they are due to smoking. Children can develop speech problems and become blind. Maybe not a lot of children if you consider the numbers... I haven't seen any. Anyway you just can't help feeling bad about it, because you

> know. But you just don't want to believe that it could happen to you. You don't think it could happen to you. I guess that you try not to think about the things that are dangerous because they are too difficult to think about. You think that it won't happen to me. You think that I have three healthy children and there is no reason why anything should happen now, but at the same time you think, Oh God, what if something does happen? [Interview 3]

Basically, the lack of capability to stop smoking was faced and the smoking behavior was not defended as long as someone did not comment on it. However, as soon as someone challenged the smoking, a defensive posture was taken, which served to facilitate living with the feeling of guilt, thereby enhancing well-being. In addition, psychological well-being during the pregnancy declined with time for some women and smoking became even more important.

Smoking is just given up

The key feature is that smoking cessation was natural in the context of the pregnancy—you just did it. As such, it was rational to continue smoking as before after the pregnancy. In fact, they never stopped smoking; they only made a break.

One's own well-being was as important as the smoking cessation and thus easy because of feeling sick or because smoking did not taste good anymore. In other cases the well-being of the child was prominent, although there were variations in when the concern for the child was important enough to make smoking cessation natural. For some women it happened immediately, while for others it grew progressively. The two quotations below illustrate this variation.

> It wasn't an issue. The first time it was very easy. As soon as I found out that I was going to have a baby, I quit right away, practically the same day that I got the results of the pregnancy test. [Interview 2]

> I couldn't imagine myself having a big stomach that everyone could see and smoking at the same time. I started to think about that when I developed 'the big stomach'. That is when I began to understand that there was a baby inside. Before my stomach became large it was very hard for me to understand. I guess that I thought about it the whole time...that I didn't want to be like that when I was well into the pregnancy. [Interview 13]

The absence of smoking by other members in the family or the occurrence of social pressure may have been important for the woman's success in stopping smoking, especially as it was not a deliberate decision.

> In my first marriage, I wasn't surrounded by the smell of cigarettes and it might have been easier then... I managed to stop smoking when I was pregnant with my children and when I nursed them. As soon as I stopped nursing them the desire to smoke came back. I didn't feel it when I was pregnant or when I was nursing my infants. Then I didn't feel the need for cigarettes, but the day after I quit nursing I began to feel the need again. [Interview 3]

Knowledge about the risks of smoking could either be superficial or well grounded, and belief in the risks could either have its roots in personal experiences and hearsay or in scientific evidence.

Smoking must be taken charge of

Central in this story type is that smoking is described as an addiction that you must liberate yourself from.

> I can't promise that I'll never start smoking again, but I can promise that I will never allow cigarettes to become a part of my everyday life again. I will never allow them to control me. I feel liberated. I feel in control, when I don't give in to the temptation. But I admit that I might consider smoking a cigarette. When I think about smoking it isn't the fact that it is dangerous that's important, rather it's the feeling that it's I who can control the urge to smoke that's important to me. [Interview 14]

A genuine concern of the risks for the child was prominent, even if the knowledge about facts of the risks of smoking in some cases was very sparse. Scientific evidence was emphasized, rather than personal experience and hearsay. When examples from the personal area were considered, they were seen as personal and less valid than scientific evidence. In addition, information about risks might have been looked for in order to facilitate focusing on how the smoking might make the unborn child feel. Another way to facilitate smoking cessation was to focus strongly on small steps, e.g. not smoking 1 day at a time. A sense of being strong enough to take the risk to try to be without smoking was present. The decision making to stop smoking came successively to maturity along with an increase of self-efficacy. Success created even more success.

> When I smoked I felt strong in a way, but now that I have quit, I have matured in another way. I have become stronger because I managed to quit smoking... I tell myself that I will not fail and I really hope for my own sake that I will succeed. I am so self-confident now that nothing can affect me. I become stronger and stronger with each passing day. [Interview 8]

The women had learned to cope with social circumstances without cigarettes, even though the conditions of life challenged the smoking cessation.

> This time it was harder because he didn't plan to quit and, if I wanted to quit, it would have to be my own decision...he wondered why it was necessary...that is why I was forced to do it all by myself. [Interview 2]

The well-being caused by smoking needed to be replaced during the process of smoking cessation, as this cessation caused a kind of emptiness that needed to be filled. The satisfaction from acting in line with what you really believed was the best for yourself and for the child could be a substitute.

Discussion

We have demonstrated the story types women construct to explain their smoking behavior. The story types should be regarded as constructions of meaning in a dialogue (with oneself or with others) used to understand and to cope with their experiences of smoking as an unwanted behavior. If smoking is not given up during a pregnancy, a stigmatization is implied (Goffman, 1990), as smoking when pregnant is regarded both in the community and by the women themselves as a shameful behavior, in that you act irresponsibly, in particular in relation to your unborn baby (Lendahls *et al*., 2002). The issue of smoking becomes extremely significant when the woman becomes mindful of the pregnancy, as she then has a very limited time in which to stop smoking. However, as previously argued, the way the individual woman presents her story in a dialogue can look different at different times depending on the circumstances. In antenatal care, health education about the smoking issue can also be considered a life encounter for the pregnant woman who smokes. Thus, awareness as to the story types women tell may potentially provide valuable information on how to respond in a health education context to the smoking issue.

The five story types are illustrations within the collective space of how pregnant women who smoke present their smoking. Some patterns in the collective space of story types are shown as the three dimensions in Figure 1: 'extent of self-efficacy in the relationship with smoking', 'nature of awareness of meaning of the smoking issue' and 'nature of social presentation of the smoking behavior'. The dimension 'extent of self-efficacy in the relationship with smoking' constitutes how much the woman expresses a need to take control over smoking as a prerequisite for smoking cessation. The extremes are lack of control and control, which are the possible outcomes of her self-efficacy. The dimension 'nature of awareness of meaning of the smoking issue' relates to how much the woman has made explicit the whole picture of the smoking issue. The woman's identification of being a smoker and being pregnant and that the baby's well-being is dependent on her smoking are parts of that picture. Here, the two extremes are reflections and no reflections. The dimension 'nature of social presentation of the smoking behavior' demonstrates how easily the

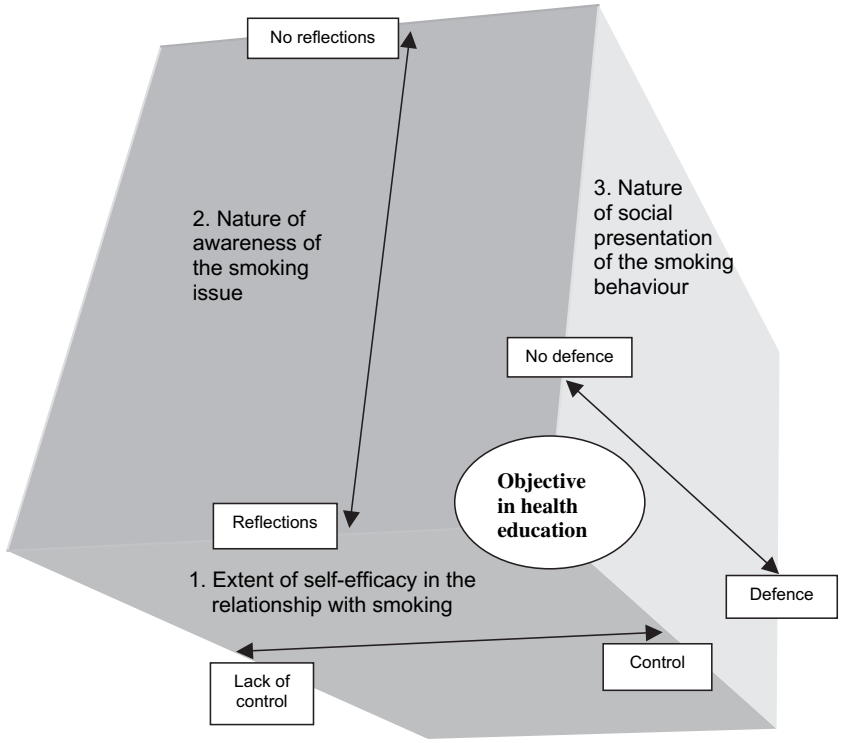

Fig. 1. The three dimensions and the extremes within the presented story types by the smoking pregnant women. (1) *Extent of self-efficacy in the relationship with smoking* constitutes how much the woman expresses a need for taking control over smoking as a prerequisite for smoking cessation. (2) *Nature of awareness of the smoking issue* relates to how much the woman has made explicit the whole picture of the smoking issue. The woman's identification of being a smoker and being pregnant, and that the baby's well-being is dependent on her smoking are parts of that picture. (3) *Nature of social presentation of the smoking behavior* demonstrates how easily the woman reacts defensively when other people challenge her smoking.

woman reacts defensively when other people challenge her smoking. The extremes are defense and no defense.

An individual woman can potentially move anywhere on the different axes of dimensions in Figure 1, depending on life encounters, people or events, etc., taking on the different constructions of story types that are reflected in this study. The awareness of the dynamic in the presented model might be useful as a basis for how a midwife might respond in a health education context. In the following each story type will be discussed in relation to the dimensions Figure 1.

Smoking must be taken charge of is linked closest to smoking cessation in the long run. This story type, located in Figure 1 at the corner of control, reflections and no defense, can be seen as the overall objective of health education. For many of the interviewees telling this story, the pregnancy seems to have been a trigger event, defined by Cranton as 'an unexpected event that leads to discomfort or complexity in the learner' [(Cranton, 1994), p. 69]. Even if the pregnancy was planned, the feelings of being pregnant were sometimes unexpected. Smoking is no longer seen as something positive, rather as a constraint that is possible to attain control over. This is in line with a study which found the most important factor for women who had a high intention to quit smoking was the confidence they had in their ability to quit (Ershoff

et al., 2000). The decision to stop smoking matured in a complex interplay with reflections on how a success in stopping smoking would be achieved and of positive experiences of trying to get control over the smoking.

Smoking is just given up is the other story type closely linked to smoking cessation with no defense reaction. Reflections on pregnancy and well-being of the child naturally lead to temporarily giving up smoking when pregnant. Although, the woman still identified herself as a smoker, and did not see smoking cessation as beneficial for herself and that she needed to take control over it. The difference between this and the previous story type could be interpreted in the light of Stotts' (Stott, 1996) study, where the reasons for smoking cessation were found to originate either from internal factors like your own personal reasons or from external factors like an actual pregnancy. The high smoking cessation rates amongst pregnant women were related to external factors originating from the pregnancy, such as nausea or concern for the baby's health. Consequently, when pregnancy was over, the relapse rates to smoking were also high (Stotts, 1996, 2000). Getting the woman to reflect on her smoking from a broader picture other than simply for the sake of the baby would be beneficial as a focus in health education.

In *Will stop smoking later,* few reflections occur on being a smoker and pregnant, and also on the baby's well-being. Women with low intentions to quit smoking had in one study shown less confidence in their ability to quit and were less likely to agree that smoking might harm the baby (Ershoff *et al*., 2000). In this story type, the limited awareness of the smoking issue could be a rationalization of an experienced failure related to a low self-efficacy in taking control over smoking. Although this was not how it was presented. Instead, the woman saw herself as someone who will stop smoking and thus no defense of the behavior was necessary. Amongst women telling this story type, reflections about the importance of stopping smoking and difficulties in doing so need to be initiated. The acceptance of the reality of the pregnancy could be a trigger event for this process of raising awareness. Similarly, the woman's self-efficacy should be encouraged, particularly when she starts to consider the need for and the difficulty in taking control over the smoking. In this way, defense reactions could be avoided.

Comprehensive reflections were obvious from the woman telling the story type *Smoking might hurt the baby.* She was strongly aware that her smoking put the baby at risk and also of her own shortcomings of being an addictive smoker. The lack of control over her smoking was obviously related to a low self-efficacy, which in other studies has shown to be related to relapses (O'Leary, 1985; Quinn *et al*., 1991). With this story type, the objective in health education should be to support the woman's self-efficacy by encouraging all her intentions and efforts to take control. At the same time, the strong feeling of failure and guilt could easily generate defense reactions, and therefore it would be best to avoid challenging the woman by giving advice and information about the need to stop smoking. Her own reasons are enough.

The story type *Smoking can be justified* is a defensive posture in how the unwanted smoking behavior is socially presented when no possible way is seen to stop smoking in the context of everyday life. A distorted construction of reasons for smoking is built, like a wall against other people's opinions and one's own feeling of guilt and shame. This is in line with the results of a study by Dunn *et al.* (Dunn *et al*., 1998), where similar utterances among pregnant women were understood as erroneous ideas about risks of smoking and thus functioned as a justification for continued smoking. Thus, in this story type, there is a deadlock from which no way out can be seen. Therefore, support is needed to help the woman to find a way out from her perceived oppression without smoking. Otherwise, the self-efficacy issue cannot be addressed. The starting point is necessarily a respectful stance taken from the woman's view on smoking so she can reflect on her smoking.

The story types described here reflect the woman's dynamic relationship to smoking cessation that is related to, but not determined by, the different circumstances in which the woman is living. They

also indicate that a woman can potentially be moved anywhere on the axes described, depending on life encounters. Ideally for smoking cessation would be movement towards the corner control, reflective and not defensive. This fluctuation in the story types is basically different to the stability implied in the Stages of Change model. Therein, the woman is assumed to progress through specific linear stages towards smoking cessation. In addition, the model focuses on individual cognitive processes, which implies that the influence of the social context is not considered (Burton *et al*., 2000; Riemsma *et al*., 2002). We suggest, however, that the story types described here reflect temporary social presentations and are therefore useful to explore in the smoking cessation encounter. In health education, giving the woman the possibility of telling her story could potentially be a key to opening the door to the woman's own experiences of smoking. The goal in a dialogue would thus be to encourage the woman's movement towards reflection on meaning of smoking, feelings of control and avoidance of defense of the smoking. This would provide the basis for smoking cessation in the long run. In that, it is particularly important to emphasize how to cope with social circumstances without resorting to smoking.

The imbalance in knowledge and power between the midwife and the woman can be a problem in exploring the story types amongst pregnant women who smoke, as this balance has been shown to be essential in determining how patients trust health care personnel (Goold and Klipp, 2002). Also, there are studies indicating that the reliability of the source is important when deciding the veracity of information (Graham, 1976; Arborelius and Nyberg, 1997). One way to achieve a better balance could be to have the encounter situation as a dialogue, which might increase trust as the woman will become an active and respected part (Freire, 2002). A dialogue, where the knowledge of both parties is held as equally important and where the woman's autonomy is respected, gives opportunity for reflection on both personal experiences and hearsay, and also on scientific evidence. The dialogue thus might create a forum where health information not only is received, but also adopted as a basis for action. Moreover, in the dialoguing, the woman is seen as an active participant in the production, dissemination and use of knowledge (Lee and Garvin, 2003). Thus, the woman's awareness of smoking might increase in a way that will set the scientific evidence in the foreground in the process of making a decision about stopping smoking or not.

In traditional health education, giving information about risks of smoking is seen as crucial, whereas a smoking cessation programme based on dialogue might raise awareness by offering a possibility to sort out the experiences of smoking. It would even be counterproductive to smoking cessation to give information without the woman's consent, as it likely would push her into a defensive posture and decrease her self-efficacy if she does not succeed in stopping smoking. Our study suggests that giving information on the risks alone is not appropriate as the story types most closely linked to smoking cessation display a complex interplay of ways of making sense. The knowledge of the risk dimension is therefore only of minor importance and anyway only one part of the jigsaw puzzle, whereas more important in health education is to enhance the awareness of the smoking issue by reflection and enhance self-efficacy to take control over smoking, whilst at the same time avoiding defense of the smoking behavior.

The use of the story types presented in this study is in line with Lee and Garvin (Lee and Garvin, 2003), where it is suggested that health education should move from information transfer to information exchange. The social context for the individual and her activity during the encounter are of crucial importance for the outcome (Lee and Garvin, 2003). The consequences for health education emphasized in this study are, to use Tones' (Tones, 2002) way of putting it, a shift from persuasion of the individual to true education: a shift from advice on medically approved behaviors, involving a risk of victim blaming, to emancipation for empowerment. If health education activities are intended to contribute to the radical health promotion goals set up by the WHO, this shift is needed (Tones, 2002).

Conclusion

The approach in health education about smoking cessation at antenatal care needs to be further developed. It needs to move from information *transfer* and advice giving to information *exchange* (Lee and Garvin, 2003) through the creation of a dialogue. The starting point should be the woman's knowledge, concerns, rationalizations and prejudices, and the woman should get an opportunity to reflect upon and discover the meaning of those aspects for herself. It would also appear essential to enhance self-efficacy in order to take control over smoking, whilst at the same time avoiding defense of the smoking behavior. It can be argued that the objective in health education should be to explore the woman's story type and enhance her self-esteem in order to initiate a process primarily towards understanding smoking as something you have to and can take charge of, which in turn might increase the feasibility of smoking cessation.

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