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Dedication.

I would like to dedicate this thesis to the memory of my parents, Colin who died at the start of this study and Beryl who died at the end. They are both greatly missed in many ways. I would like to give thanks firstly to my father who always believed that 'nothing is impossible if you put your mind to it' and to mother for reinforcing my determination to succeed.

Abstract of the Study

Background

The harmful effects of smoking during pregnancy have been well documented within the literature (Eastham and Gosakan 2010, British Medical Association [BMA] 2004). Consideration of these facts encourages many women in giving up the habit during this period. However, following the birth the decision to remain abstinent from smoking is often a difficult one for women to make with quite a number relapsing in the first few months. The risk factors for smoking during pregnancy predominantly focus on the health of the baby whereas the longer term risks and benefits of not smoking, although identified by women are not reinforced in preparation for post natal abstinence.

With knowledge of the high numbers of women relapsing to smoking postpartum the purpose of this study was to explore the experiences of women during transition to motherhood who stopped smoking during pregnancy.

A mixed methods study was undertaken using both quantitative and qualitative approaches in the form of questionnaires and interviews.

Participants

Women were initially recruited to the study through questionnaires made available in the antenatal clinics in two large teaching hospitals in the East Midlands. In total 216 questionnaires were returned from a possible 400, however, nineteen had been incorrectly completed so were excluded. Of the remaining 197 questionnaires 75 had been completed by women who had not smoked at the beginning of pregnancy and as such were excluded from the final analysis. Women willing to participate in the interviews left contact details on the questionnaires. In total 27 women were interviewed

on three occasions, once between 28 and 36 weeks of pregnancy and twice in the postpartum at six weeks and between three and six months. The women interviewed comprised women born in the UK and women born outside of the UK with ages ranging from 16-38 years of age.

Analysis

The questionnaires were analysed using SPSS which produced pertinent demographic details of the range of women within the catchment area for the study.

Data collected during the interviews were finally analysed as a continuous narrative from each woman aided by the use of NVIVO software.

Results/Findings

Data arising from the results of the questionnaires showed that 53.2% of the women were primigravida and 57.6% were in close contact with a friend or relative who smoked.

The data also indicated that the majority of women gave up smoking for the health of the baby and had little professional help in stopping. Some of the women considered that partners were supportive when stopping smoking, but overall, the women considered they stopped of their own accord.

Findings from the interviews revealed three original concepts that had a further six themes and 15 subthemes. Social influence, barriers and facilitators, and most significantly, pregnancy seen as a new start in life or just an interval were the three key concepts arising from the study. These concepts were further broken down into themes and sub themes that impacted upon a woman's relationship with smoking. The social influence of friends and family worked both positively and negatively for women with

regard to remaining a non-smoker, professional support was generally seen as positive. The health of the baby, breast feeding, self-efficacy and self-belief, nausea, the smell and taste of cigarettes and policy change were also drivers for stopping and staying stopped. Where relapse was more likely, women struggled with issues of guilt, stress and difficulty in breaking long standing habits. However, the overriding factor in remaining a non-smoker was the notion of beginning a new chapter in their lives; *a new life* they discussed planning to stop and the emergence of a new identity. For some women returning to smoking was a reverse of these ideas, viewing pregnancy as an interval or suspension of their lives and a return to smoking signified a return to their previous, familiar identity and confidence in who they were.

Conclusion

It is anticipated the findings from this research will contribute to the development of more successful interventions to aid long term smoking cessation in the future by adding to the knowledge of the complexities of smoking cessation during pregnancy and the transition to motherhood. Further research is recommended to look at supporting women in achieving higher levels of self-belief and self-efficacy and to consider pregnancy as a time to start a new phase in their lives. For interventions to be successful greater collaboration between health professionals and women must take place to ensure that such interventions meet the needs of the women.

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Presentations, Abstracts, Peer Reviewed Publications, Papers and Awards.

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Ashwin C A, Marshall J E, Standen P J. (2011) Why do women smoke after birth? Exploring women's experiences of postpartum relapse to smoking. *29th International Confederation of Midwives Triennial Congress (ICM)*, Durban.

McIntosh T, Marshall J E, Watts K, **Ashwin C A**, McIntyre H. (2011) Symposium: Tackling research methodologies and concepts from conception to reality: Five perspectives. *29th International Confederation of Midwives Triennial Congress (ICM)*, Durban.

Ashwin C A. (2010) Why do women smoke after birth? Exploring women's experiences of postpartum relapse to smoking. *Higher Degree Research Students Saturday Workshop*, University of Nottingham.

Poster Presentations.

Ashwin C A, Marshall J E, Standen P J. (2011) Why do women smoke after birth? *Graduate School Research Showcase*. University of Nottingham.

Ashwin C A, Marshall J E, Standen P J. (2011) Why do women smoke after birth? *Vitae Midlands Hub, 6th Annual Regional Final PhD Poster Competition*. Nottingham Conference Centre, Trent University.

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Abstracts.

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Ashwin C A, Marshall J E, Standen P J. (2012) Women's experience of postpartum relapse to smoking. *1st Annual Nottingham International Conference for Education and Research in Midwifery (NICER)*. University of Nottingham.

Ashwin C A, Marshall J E, Standen P J. (2011) Why do women smoke after birth? Exploring women's experiences of postpartum relapse to smoking. *29th International Confederation of Midwives Triennial Congress (ICM)*, Durban.

McIntosh T, Marshall J E, Watts K, **Ashwin C A**, McIntyre H.(2011)Symposium:Tackling research methodologies and concepts from conception to reality: Five perspectives. *29th International Confederation of Midwives Triennial Congress (ICM)*, Durban.

Ashwin C A, Marshall J E, Standen P J. (2011) Why do women smoke after birth? *Vitae Midlands Hub, 6th Annual Regional Final PhD Poster Competition*. Nottingham Conference Centre, Trent University.

Ashwin C A, Marshall J E, Standen P J. (2010) Why do women smoke after birth? Exploring women's experiences of postpartum relapse to smoking. *Graduate School Research Conference*, Nottingham.

Peer Reviewed Publications.

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Ashwin C A, Marshall J E, Standen, P J. (2012) Exploring women's experiences of smoking during pregnancy and the postpartum. *Evidence Based Midwifery*. 10 (4): 112-118.

Press Releases.

Ashwin C A (2011) Why do women smoke after birth? *Graduate School Research Showcase*. University of Nottingham.

Ashwin C A (2010) Why do women smoke after birth? *Graduate School Research Showcase*. University of Nottingham.

Awards.

University of Nottingham, Graduate Travel Prize 2011, *An Exploration of women's experiences of postpartum relapse to smoking*. **Value: £100.**

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List of Abbreviations.	
ASH	Action of Smoking and Health.
BDI	Beck Depression Inventory.
BMRB	British Medical Research Bureau.
CAQDAS	Computer Assisted/Aided Qualitative Data Analysis Software.
C(E)MACE/CEM ACH	Centre for Maternal and Child Enquiries/Confidential Enquiry into Child and Maternal Health.
CES-DI	Centre for Epidemiologic Studies-Depression Scale.
CINHAL	Cumulative Index for Nursing and Allied Health Literature.
DH	Department of Health.
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders-4 th Edition.
HCA	Health Care Assistant.
HSCIC	Health and Social Care Information Centre.
NICE	National Institute for Health and Clinical Excellence.
NHS	National Health Service.
NMC	Nursing and Midwifery Council.
NRT	Nicotine Replacement Therapy.
ONS	Office of National Statistics
PIS	Participant Information Sheet.
R&D	Research and Development.
RCT	Randomised Controlled Trial.
SPSS	Statistical Package for the Social Sciences.
UK	United Kingdom.
UoN	University of Nottingham.
USA	United States of America.
WHO	World Health Organisation.

Chapter One: Introduction to the Study.

Cigarette smoking is the most alterable risk factor enabling improvements in outcomes for mother, fetus and the newborn as it is also one of the most important risk factors resulting in adverse outcomes (BMA, 2004, Cnattingius 2004, Ebrahim et al. 2000). The effects of tobacco smoke exposure affect each trimester of pregnancy and beyond having an impact on the health and wellbeing of mother and child. Although a great many women stop smoking prior to becoming pregnant or during pregnancy (Mullen 2004; Solomon and Quinn 2004, Cnattingius 2004) many relapse in the postpartum period (Letourneau et al 2007, Solomon et al 2007, Ratner et al 2000, Zimmer 2000, Quinn et al 1991, Fingerhut et al. 1990).

In addition to the health risks to women and families through smoking during pregnancy and postpartum there are substantial costs to the National Health Service (NHS). Recent reports estimated the costs to the NHS to exceed £60 million pounds for maternal outcomes and up to £23.5 million for infants (Godfrey et al. 2010). The report also suggests that substantial savings could be made by investing in smoking cessation interventions for pregnant women. However, at present the majority of smoking cessation funding is aimed at achieving the 'four week quit' and little attention has been paid to the longer term benefits of maintaining smoking cessation postpartum.

Within the document 'Smoking Kills' (Department of Health [DH] 1998a) the government set out a range of policy measures which included key targets to reduce smoking in pregnancy. The NHS plan (DH 2002) suggested that if smoking interventions were carried out as a routine part

of antenatal care, there could have been 55,000 fewer women smoking during pregnancy by 2010. Hajek et al. (2001) reported that many of the pregnant smokers in the United Kingdom (UK) experienced socio-economic disadvantages and were more dependent smokers, thus government plans should begin to address these problems. However, as many women relapse postpartum it is of importance that the support is also continued during this period.

From documented evidence of previous studies it has been demonstrated that there is a high incidence of women who relapse to smoking in the postpartum period having previously stopped during pregnancy (Reitzel et al. 2010, Thyrian et al. 2006a, Fingerhut et al. 1990, Mullen et al. 1990, Ratner et al. 2000). Data offering explanations as to the reasons why women do not remain abstinent in the postpartum period includes concerns with breastfeeding/weaning (Ratner et al. 1999), mood in relation to weight gain (Levine and Marcus 2004), social networks (Nguyen et al. 2012), social/partner support and stress (Bottorff et al. 2000, Pollack and Dolan Mullen 1997). Studies have been undertaken to address the problem of relapse as discussed further within in Chapter two, (Reitzel et al. 2010, Thyrian et al. 2006a); however, very few have examined the personal experiences of women during this time. The majority of interventions are centred on the antenatal period, focusing on the health of the fetus/baby and less on the health and wellbeing of the mother. Moreover, Ratner et al. (2000) and Secker-Walker (1995) suggest the evidence to support interventions to reduce postpartum relapse demonstrate little long term success. Therefore for interventions to have more long term success it is crucial to gain a greater understanding of the reasons why women return to smoking postpartum, having previously stopped during pregnancy. The rationale to undertake this study was as a result of an extensive literature

review which resulted in minimal evidence exploring the experiences of women and smoking during the pregnancy continuum (Nichter et al. 2008, Bottorff et al. 2000, Edwards and Sims-Jones 1998).

The overarching purpose of this study is to explore the experiences of women who stopped smoking during pregnancy and either relapsed or remained abstinent from smoking postpartum. The focus of the study will be to gain an understanding of why some women relapse to smoking after stopping during pregnancy. In addition, it is anticipated this study will aid the development of improved interventions with the knowledge gained from the findings.

Chapter Two will review the available literature pertaining to the topic in order to appraise the multifaceted issues that potentially impinge on the relationship between women, childbearing and smoking. The literature review will also explore the theory of perceived self-efficacy (Bandura 1977a) in association with how a woman copes with the transition to motherhood and smoking cessation simultaneously.

To gain a greater understanding of why smoking has become an integral component in the lives of many women and families, Chapter Two will begin with an introduction to historical perspective of women and smoking. This will serve to inform the study of the dilemmas and choices of smoking through time and how it has been woven through the different social classes reaching a point of acceptability and then falling in popularity to modern day, leaving behind a trail of addiction and poor health.

This mixed methods study enabled the researcher to access a large number of women in order to gain a broad range of demographic data of the women under scrutiny by the use of questionnaires in the first instance. The advantage of collecting data by this method also enabled a varying

range of women to volunteer to participate in the second phase of the study, the interviews.

In order to become fully conversant with the experiences of women in the proposed study a phenomenological approach was taken whereby the researcher could gain an understanding of the 'lived experience'. The justification of following a qualitative route and more specifically, phenomenology will be considered in Chapter Three. This will be discussed in relation to other methods of data collection, illustrating the benefits and disadvantages of such methods. The chapter will conclude in demonstrating the validity of the chosen method and considering reflexivity in the researcher's position within the study before considering the tools used in collecting the data.

To analyse the substantial amount of data generated it was of value to utilise the benefits of a Computer Assisted Qualitative Data Analysis Software (CAQDAS) package which is discussed within the final section of Chapter Three. NVivo 8 was the preferred package at that time and had not been used by the researcher previously; therefore some debate is evident of using a CAQDAS package over manually preparing and analysing the data.

Chapter Four sets the scene for undertaking the study and discusses the practicalities of the chosen venues. The initial stage of the study comprised the demographic data collection by means of questionnaires distributed in the antenatal clinics of one Trust over two sites of an East Midlands city. The process of gaining ethical approval is discussed, including access to the study sites.

The pilot study was undertaken to assess the viability of the data collection tools and chosen venue of participants. The main data collection comprising

semi-structured interviews is discussed following on from the pilot study. The semi-structured interviews undertaken on three occasions and subsequent analysis are presented within this chapter.

The findings from the data collection are presented in Chapter Five, commencing with the demographic details of the participating women. However, the demographics are provided purely to provide background information of the women and to illustrate how the women were selected for interview. The main body of information contained within the chapter is concerned with the findings from the semi-structured interview transcripts and accompanying field notes. Drawn from these findings were a series of themes and concepts culminating in the three core-concepts illustrated in the table included in section 5.4 of Chapter Five. To demonstrate the findings, annotated extracts from the interview transcripts have been utilised.

The findings from the study are discussed in greater depth within Chapter Six concluding in a decision as to whether the chosen methodology achieved the aim of the study. The issues arising from the discussion of women's experiences of stopping smoking during pregnancy and relapsing postpartum will contribute in supporting the need for further research. In addition, it will aid the understanding of the complexities of smoking cessation for women during the transition to motherhood, for both health professionals and society as a whole. Furthermore, Chapter Six presents the strengths and limitations of the study in relation to achieving the aim. This will also include discussion on congruence on the theoretical perspectives and researcher reflexivity. The final Chapter will conclude the thesis and present recommendations that will contribute to improving the support given to women with the intention of increasing lifelong smoking abstinence and thus improving the health of their families.

Chapter Two: Literature Review.

2.1. Introduction.

A greater understanding of the problems associated with relapsing could aid the health professional in supporting women following the birth of their child in remaining a non-smoker. Some women do plan to quit only for the duration of the pregnancy and intentionally decide in returning to smoking postpartum. This illustrates an important area to be addressed, that of promoting the long-term health benefits to both mother and baby. Awareness of the harm caused by resuming smoking in the postpartum period may influence women to access support in remaining abstinent and open the window of opportunity in addressing other concerns they may be experiencing during the transition to motherhood.

A study by Gaffney and Henry (2007) examined factors associated with becoming a mother, prompted by the USA government report 'The Working Group Report on Women, Tobacco, and Cancer: An Agenda for the 21st Century' demonstrating a major increase in the reported deaths of women from smoking related diseases (U.S. Department of Health and Human Services, [USDHHS] 2004). The report also suggested that research should be focused on women at pertinent points in their lives such as pregnancy and the postpartum period.

The focus on reducing the incidence of women smoking during pregnancy was introduced in the UK by the publication in 1998 of 'Smoking Kills' a government White paper (DH 1998a). The aim was for the NHS to reduce the number of women smoking in pregnancy to 15% by 2010. Figures have shown a steady decline as statistics in 2011/12 recording 13% pregnant

women smoking at the time of birth, documented within the Health and Social Care Information Centre (HM Government [HSCIC] 2012). Nonetheless, the current government target is to aim for a greater reduction to at least 11% before 2016 (DH 2011). In the 1998 Department of Health White paper the impetus was placed upon stopping during pregnancy and little attention was given to maintaining smoking abstinence in the postpartum period. However, in a more recent study undertaken by the National Institute of Health and Clinical Excellence (NICE 2010) public health guidance has been produced not only on stopping smoking in pregnancy but furthermore has included guidance on stopping smoking following childbirth. This has been an important step in raising awareness of the continued support necessary in maintaining postpartum abstinence and in addition reducing the risk of postpartum relapse.

Several recommendations have been made as to how referrals would be initiated to smoking cessation services and it was acknowledged that for long term benefit the service should also be extended to include other close family members who may be smokers themselves (NICE 2010). Indicators for success suggested that supporting women to stop smoking involved multi-professional collaboration as has been proven in other areas of healthcare arising from government initiatives (DH 2003, DH 1999, DH 1998a). Gaps in the recommendations were also documented including lack of discussion with regards to types of intervention best suited to support different needs and hard to reach groups. Nevertheless, the greatest omission in the NICE (2010) guidance was lack of service user involvement, i.e. the views of women had not been sought in discussing how best to support women in stopping smoking during pregnancy and postpartum in the UK. van Teijlingen et al. (2003) support the use of service users in designing health care policies; however, it was observed

that caution be taken to ensure the service users are conversant with proposals prior to implementation. The study was examining maternity service user satisfaction and highlighted areas of concern where the user had no experience of the innovations proposed thus unable to contribute positively. Lack of service user involvement has also been noted in the contemporary literature surrounding such a pertinent issue as only a few studies have focused on the experiences of women when seeking to gain understanding of the phenomenon (Edwards and Sims-Jones 1998, Bottorff et al 2000, Nichter 2008). Furthermore, these studies were all undertaken in countries other than the UK and therefore the findings may not be generalisable elsewhere.

This chapter aims to explore the associated factors which may impact upon a woman's smoking behaviour during pregnancy and beyond. The review of current literature will provide help to build the background complexities faced by women at a pivotal point in their lives.

2.1.1. Searching the Literature.

When considering how best to explore the reasons why up to 90 per cent of women relapse to smoking postpartum within the first year following childbirth with reference to earlier literature, Letourneau et al. (2007), Solomon et al. (2007), Ratner (2000), Zimmer (2000), it was imperative that these experiences were captured in the most meaningful way to understand the true meaning of this phenomenon. In order for this to be accomplished the most pertinent method of data collection was chosen through careful selection of previous work undertaken within this field by means of a literature search. The original literature search to gain an insight into the phenomenon under scrutiny was conducted by searching recognised databases such as the Cumulative Index for Nursing and Allied

Health Literature (CINAHL), Medline and searches of appropriate journals such as *British Journal of Midwifery (BJM)*, *Midwifery and Tobacco Control*. Library searches were also undertaken to access textbooks relating to qualitative research. Registration for online updates of recently published articles with *Tobacco Control Online*, Medscape and *Qualitative Research* also contributed to the on-going search for literature. A wide-ranging amount of literature was initially produced and this was refined by a reduced number of key words which are listed in Table 2.1.

Table 2.1: Key search terms.
Smoking. Women's stories. Relapse. Smoking/ breastfeeding. Smoking/weight. Smoking/mood/depression.

From the articles accessed several themes emerged which formed the basis of this literature review, in the following section the historical perspective of how smoking evolved for women will be discussed to illustrate the association women had with tobacco over time.

2.2. A Historical Perspective.

It is the intention that the following information will add to the background information regarding the historical perspective of women and smoking,

with the intention of informing how cigarette smoking has emerged to become such an important component entwined in the lives of some women.

Although tobacco has been used sporadically by women since the 16th century in Britain when it was first introduced by Sir Walter Raleigh, it was once considered the domain of men. Smoking was gradually introduced to women in western civilisation towards the end of the 19th century. However, Tinkler (2006) purports that cigarette smoking was initially restricted to women in the middle and upper classes and then was purely consumed in private. In contrast, smoking among the 'working classes' was frowned upon at this time during the late 19th century; cigarette smoking for this group of women was associated with the lower classes including chorus girls and prostitutes. The older generation of poor women and travelling women were known to smoke tobacco simply in clay pipes or alternatively they used snuff.

Tinkler (2006) suggests that the advent of the First World War gave licence to women smoking and it gradually began to become more generally accepted in some circles of society. The justification for smoking was from the medical advice and public opinion that smoking was a form of relaxation that reduced feelings of stress for women coping with difficult life circumstances. Furthermore, Elliot (2011) agrees in that a suggestion for the increase in female smokers was that cigarettes were advised to calm the nerves when women became overwhelmed with domesticity and life in general. However, this tended to be restricted to the more affluent women in society as they had the leisure time and disposable income to support the habit. In today's society it is more usual for women of the lower socio-economic groups to cite smoking as a stress reliever in aiding the difficulties of day-to-day living in adverse situations.

The introduction of automated machines to manufacture cigarettes aimed specifically at women, added to the accessibility for many. In addition, Tinkler (2006) suggests that the lure of advertising, first emerging in around 1925, intimating that the lives of women would be greatly enhanced by taking up this habit was also considered a contributing factor in encouraging women to smoke. Although cigarette smoking for women has fluctuated in popularity, Elliott (2011) and Tinkler (2003) purport it was around this point in history that the female identity came under scrutiny when women no longer wished to be deemed subservient to men. Greaves (1996) reflects upon the American market and notes the conflict existing between women campaigning for freedom and the anti-cigarette lobby. To counter the issues of women's perceived emancipation and those of stopping the drive to smoke, marketing tactics focused on using feminism in an attempt to encourage more women to smoke and thus increase profits. Without overt evidence on the detrimental effects of smoking to health, cigarettes rose in popularity.

Cigarette advertising also played a huge part in normalising and glamorising smoking for women. Mixed messages were also implied within the advertisements; on the one hand, women were seen smoking to equate them with men, emancipation and equality whereas, on the other hand they were portrayed as an aid to remaining attractive to men. Some advertisements displayed undercurrents of continued male dominance; for example, men were pictured standing and the women would be portrayed sitting in a submissive pose. Furthermore, Goffman (1990) suggests that this was signified as a 'hallmark of subordination'. Cigarettes were depicted as an intimate connection between men and women, with the women as the passive partner with the male counterpart gazing upon either the woman or the cigarette packet. This illustration can be related to the

control cigarettes have in some relationships today with some women using cigarettes as a common link between herself and her partner (Bottorff 2005a, 2005b).

The advent of the Second World War impacted upon the smoking fraternity with the introduction of cigarette rations being provided to the armed forces as an accepted necessity. Women were left behind to take on the role of the absent men in the workplace resulting in more working-class women adopting the habit of smoking, initially as a coping mechanism and a social habit and then later, post war, as a shared interest between couples. Although the health risks of smoking had been known in the medical field for some time, it was not until the beginning of the 1950s that the research was first publicised (Doll 1950). Notwithstanding, Elliott (2011) reveals that the emphasis on health issues was mainly confined to the male population and thus female smoking continued at the same rate. This was in part due to clever advertising ploys, in the use of filters and the introduction of 'light, low tar' cigarettes, which it was claimed as less damaging to health. Advertising also promoted the popularity of cigarettes among the younger population around this time.

Historically, cigarettes have also been marketed as an aid to weight control for women for many years. Greaves (1996) quotes the cigarette manufacturer '*Lucky Strike*' as an example of advertising the qualities of cigarette smoking as a slimming aid as far back as 1928. In addition, testimonials from prominent women in society were also used as advertising ploys extolling the virtues of cigarettes for controlling weight (Marchand 1985). This concept is ingrained within the minds of many women and as such smoking is still used today as a means of reducing weight gain.

By the mid-1970s the health risks to pregnant women and the unborn fetus were widely discussed and advertising campaigns began in earnest to encourage women not to smoke. Nonetheless, evidence would suggest that the emphasis to stop smoking was for the duration of the pregnancy only, with only scant regard for the long term prospects. Elliot (2011 page 149) quotes from a memo to Action on Smoking and Health, in labelling pregnancy as '*the 9 month stopper*' in an attempt to encourage women to stop smoking during pregnancy (ASH, Scotland 1979).

Graham et al (2009) and Oakley (1989) both studied the issues of smoking, gender and disadvantage exploring the need for women to smoke in order to cope with the drudgery of their lives. However, when known health risks were highlighted for this group of women the opportunity to reassess their smoking habits became apparent. Elliott (2011) argues that reasons for smoking go deeper and form part of a woman's identity and to stop smoking would alter this known identity. History has illustrated the convoluted path of smoking for women from the unacceptable, the acceptable and once again returning to its non-acceptance in contemporary society. For some women cigarettes are still part of who they are and possibly want to be.

Before specifically highlighting the issues for women and smoking this review will discuss smoking cessation and relapse within the general population with the aim of providing an overview of the concerns associated with smoking and smoking cessation in the general population.

2.3. Smoking Cessation, Depression and Relapse in the General Population.

Smoking still remains a major Public Health concern as it was attributable for approximately 86,500 deaths in England alone between the years 1998 and 2002 (NICE 2006). Although these figures are slowly improving the

promotion of smoking cessation among the general population will further reduce the number of deaths and associated morbidity due primarily to lung disease, heart disease and cancer. Childhood illnesses exacerbated by passive smoking could also be eliminated by greater smoking cessation among the general population. The risk factors of continued smoking are particularly high in certain groups such as the younger population, women and some ethnic minority groups. The risk of premature death is also increased in the lower socio-economic members of society. It is therefore of value to examine the factors associated with smoking and smoking cessation in the general population as these issues may also have an impact on pregnant women with a history of smoking.

Work has been undertaken examining correlation between smoking, smoking cessation, depression and relapse in the general population. The Cochrane (protocol) review of 2008 (van der Meer et al. 2006) examined the literature on interventions for smoking cessation for smokers with a history of depression. This was undertaken to evaluate the effectiveness of interventions for smokers with a history of depression, past and present. The authors of the review, van der Meer et al. (2006) acknowledged a positive relationship between depression and smoking; moreover, those who quit smoking successfully were less likely to suffer from neuroses, anxiety and depression. In addition, lower levels of self-efficacy may be observed in depressed persons in attempting to stop smoking along with lack of social support and sub-optimal physical health. van der Meer et al. (2006) reviewed Randomised Controlled Trials (RCTs) and quasi-randomized trials with adult participants with a history of past or current depression. Depression was defined according to the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) criteria. Adult smokers were also included if they met the criteria of the Beck Depression

Inventory (BDI) or Center for Epidemiologic Studies Depression Scale (CES-DI).

Ranney et al. (2006) conducted a systematic review of intervention strategies for smoking cessation in adults and adults in special populations such as substance abusers or psychiatric disorders. The inclusion criteria for the review were studies in English, which involved adults of both sexes over the age of 13 who were from a range of ethnic and racial backgrounds. The literature review comprised 102 articles. Seven studies focused on interventions for nicotine dependence alongside co-existing conditions including psychiatric disorders and substance misuse and two studies examined pregnant and postpartum women (Lumley et al. 2004, Melvin and Gaffney 2004). The resulting information ascertained that adults in the populations with co-existing conditions may require more intensive smoking cessation interventions for example counselling and pharmacology. However, gaps in the literature highlighted a lack of research in the area of multiple interventions or of people with additional needs.

Berlin and Covey (2006) suggested that depression may predict a difficulty in quitting smoking, which may be attributed to a deficiency in the skills needed to cope with such a challenge. Their study used the BDI to examine whether the success of smoking cessation may be affected by a person's mood. Berlin and Covey (2006) incorporated assessment of coping skills as this has also been shown to affect mood and the ability to sustain smoking cessation. Six hundred smokers were recruited to the trial and interviews were initially conducted by telephone to select suitable participants to undertake further interview and medical examination. The results demonstrated that depressed mood does adversely affect the success of smoking cessation. Moreover, the study suggests that poor coping

strategies may also contribute to depressed mood and inability to quit smoking and remain a non-smoker.

A study undertaken by Haukkala et al. (2000) discovered no differences between depressed and non-depressed smokers when attempting to quit, but depressed smokers were found to have more withdrawal symptoms and that relapse was not a direct consequence of these symptoms but of depression occurring after smoking cessation. Both male and females, aged between 25-64 years took part. It was discovered that depressed females were more motivated to quit but this did not improve the cessation rates and that the more depressed population found it harder to stop smoking and stay stopped. On the other hand, Allgower et al. (2001) examined the association between unhealthy health behaviours in young men and women regarding smoking and depression, concluding that depressed mood is more associated with smoking in women. In demonstrating the gender differences in smoking cessation, Gritz et al. (1996) argue that women are not disadvantaged by mood differences, nevertheless suggested that further research examining cessation in relation to menstrual cycle and menopause is warranted. Fant et al. (1996) concur that relapse is more likely to occur in women during the premenstrual phase of their cycle and that they are more susceptible to relapse in stressful situations. Sensitivity to nicotine at this time may alter the effects of withdrawal during the quit attempt with the result of affecting negative mood. If hormonal changes do affect the success or otherwise of smoking cessation then this has the potential of impacting on relapsing postpartum, although to date there is no evidence to support or dismiss this theory. The following section will explore how depression and associated problems may impact upon women around the period of childbirth.

2.4. Depression and Associated Problems for Women around the Time of Childbirth.

Many women experience difficulty in acknowledging depression at such an emotional time in their lives, evidence to support the potential severity of depression following childbirth is well documented in the Confidential Enquiry into Maternal and Child Health, 2003-2005 (CEMACH/CMACE), (Lewis 2007,2011). Psychiatric illness was recorded as the second highest indirect cause of maternal death during this period with cardiac disease cited as the highest.

Mood in relation to weight gain (Levine and Marcus 2004), social/partner support and stress (Pollack and Dolan Mullen 1997) have all been studied as causes for relapse to smoking. Changes in mood or feelings of stress are concepts which can all be associated with adjusting to motherhood and classed as a normal progression during the transition and not necessarily precursors to either postpartum relapse or postpartum depression. Nevertheless, Gaffney (2006) considers that these feelings and mood changes are not demonstrated in current research findings and may have an effect on relapse studies incorporating intervention strategies. One potentially important factor that has received little consideration is the impact postnatal depression may have on relapse. In this situation there may be two opposing factors contributing to conflict. On the one hand, a woman may be struggling with forming a new identity, of being a mother, and on the other hand attempting to regain normality of her previous life, being independent without the responsibility a baby brings. Bottorff (2000) and Greaves (1996) are of the opinion that a return to smoking at this stage brings with it a nostalgia and confidence that can overcome the feelings of loss that a new baby has put into effect. Raynor (2003) supports

the notion that the postpartum is a time of great change for women adapting to a new stage in her life. This transformation affects '*emotions, thoughts and behaviours*' (Raynor 2003 page 4) adding to the conflicting demands that new motherhood brings that in turn may trigger feelings of depression.

A study undertaken by Psaros et al. (2012) suggested that when assessing women for the risk of postpartum relapse to smoking an association with either anxiety or depression was not wholly determined. Results of the study indicated that rather than depressive symptoms leading to postpartum relapse it may be in part due lack of coping mechanisms when faced by perceived stressful situations. Psaros et al. (2012) concluded that further studies are warranted to explore the phenomenon of postpartum relapse in respect of those women exhibiting factors which may be associated with either relapsing or abstaining from smoking postpartum.

Evidence suggests that the potential relationship between postpartum return to smoking and postnatal depression has not been fully explored from the woman's perspective. Although quantitative data is primarily concerned with collecting facts relating to a particular phenomenon it is limited in so much as being unable to deeply explore the lived experiences found within the qualitative paradigm that is necessary to build a more complete picture of this research.

Kahn et al. (2002) assert that regardless of the association between depression and smoking in the general population very little information is available regarding depression and smoking around pregnancy. However, Bottorff et al. (2000) maintained that with regard to pregnancy and childbirth, smoking and relapse cannot be compared in general as smoking cessation needs to be individualised for each woman. Ratner et al. (2000)

ascertained that relapse was connected with poor mental health in the twelve months following the birth and Kahn et al. (2002) suggested that further research is recommended as both depression and smoking relapse are areas of concern due to the high rates observed in the postpartum period.

Depression does not always begin in the postpartum period and for some women may have been present during the antenatal period, however, little is known as to whether these factors were evident during this period or whether they were addressed by midwives or other healthcare professionals. Postpartum, these factors may return or become apparent as the support is withdrawn and as a consequence the vulnerability to relapse is greatly increased (McBride et al. 1998, McBride et al. 1992). Thus, it would be of great value to explore this area to ascertain if there is any correlation between antenatal depression continuing into the postpartum period that may predispose a return to smoking. Mullen (2004) argues that depression is more apparent in women who smoked pre-pregnancy as women are more prone to depression and smoking especially in the lower socioeconomic population. Further study is warranted to examine the correlation between smoking and depression surrounding the debate as to whether smoking is a form of self-medication or that they share similar origins. Mullen (2004) recommends further research into this phenomenon stating that depression is already associated with smoking in the wider population and that it is a known adverse outcome for many new mothers. Kavanaugh et al. (2005) agree there is a relationship in the general population between smoking and depression, with little evidence studying a similar relationship in mothers.

Vander Weg et al. (2004) support the use of scoring tools for measuring levels of depression, but are of the opinion that this does not compensate

for face to face interviews. Moreover, Psaros et al. (2012) contend that these tools potentially do not collect the measures for relapse susceptibility. The existing literature does not demonstrate that the views of women have been taken into account when exploring the issues that may contribute to postpartum relapse and depression for a great number of women. The majority of studies has been researched in countries other than the UK which may not have comparable demographics to generalise the findings worldwide. Therefore, an in-depth exploration of the psychosocial issues that present in the lives of women in the UK around the time of childbirth will aid a wider understanding of the factors leading to postpartum relapse to smoking and depression. Relapse to smoking does not always occur exclusively in the postpartum period, with some women quitting and relapsing several times before the birth. These factors will be discussed in the following section to provide greater comprehension of the complexities of smoking and relapse during pregnancy before a review of the postpartum period.

2.5. Smoking and Relapse during Pregnancy.

To gain a deeper understanding of why women relapse to smoking postpartum it is of value to first investigate smoking and relapse during pregnancy. Support for remaining abstinent from smoking in the postpartum period cannot be fully understood without exploring the history of a woman's experience with smoking.

Pickett et al. (2005) believe that both stopping smoking and relapsing is a consequence of the very nature of pregnancy and the pressures placed upon the woman to quit, both physically and psychosocially. It is an expectation of society that women should not smoke during pregnancy to reduce the likelihood of harm to the fetus and this moral dilemma of

concern for the fetus can put additional pressure upon the women whose addiction to nicotine can be very strong, making quit attempts difficult (Benowitz 1999). Life events, such as inadequate social support, work and psychological difficulties can all contribute to the fluctuations in stopping smoking and relapsing during pregnancy (Ludman et al. 2000). Pickett et al. (2005) agree that the smoking patterns of pregnant women differ greatly to those of the general population. Once an 'established' smoker, most non-pregnant adults smoke in a regular set pattern and as such cotinine levels can be accurately assessed while attempting to quit. Furthermore, Pickett et al. (2005) argue that it is very difficult to use the same validation methods when assessing pregnant women during a quit attempt as some women quit and relapse several times during pregnancy. Although Pickett et al. (2005) established that measurement of cotinine levels in pregnant women is not an accurate measure of recording smoking status, the study did find that stopping smoking is a complex situation unique to pregnancy and that it cannot be compared to non-pregnant smokers. It also exposed the difficulties that may continue into the postpartum period, precipitating relapse.

Ludman et al. (2000) argue that it is of greater value to have a good understanding relationship between the women and interviewer/counsellor rather than to rely on inaccurate cotinine levels, an important point to consider when helping women to stop smoking and to elicit smoking status. However, Pickett et al. (2003) in undertaking studies examining fluctuations in pregnancy confirmed the complexities of stopping smoking in pregnancy and supported the need for a more varied approach in interventions across the pregnancy continuum to promote and sustain cessation. Although these studies do not relate directly to postpartum relapse, gaining a greater awareness of the difficulties encountered

antenatally will ultimately assist in developing strategies postpartum. These findings suggest that needs of pregnant women differ from that of the general population when attempting to quit smoking and health professionals need a greater understanding of the psychological complexities of smoking cessation in order to provide the most appropriate support. If timely and appropriate support is offered in the antenatal period then this may contribute to forming a firm foundation to support the long term goals of smoking cessation in the postpartum period (Heppner et al. 2011). In order to capture a perspective in relation to the problem of postpartum relapse the rates of relapse should be considered. The following section will discuss the evidence supporting the need for further research to be undertaken to encourage smoking abstinence postpartum.

2.6. Postpartum Relapse Rates.

There is well documented evidence to show high rates of relapse postpartum, with approximately 25% of women resuming smoking by the time the baby is a month old and 50% by four months, rising to 60-70% at six months (Phillips et al. 2011, Lopez et al. 2008, Nichter et al. 2008, Mullen et al. 2004, Ratner et al. 2000, Fingerhut et al. 1990). More recent figures suggest that these figures remain high with 46.5% relapsing at six weeks postpartum (Harmer and Memon 2012). It is, therefore, of benefit that smoking cessation should be encouraged in the antenatal period not only to protect the health of the fetus from the harmful effects of maternal smoking but also to promote long term abstinence and consequential health benefits for both mother and child. Furthermore, addressing the rates of smoking relapse should be prioritised in the postpartum period as debated by Najiman et al. (1998). Najiman et al. (1998) in study undertaken in Australia examined not only the smoking and cessation behaviours of pregnant women but also those women who relapsed to

smoking following the birth. The focus for this study was to investigate the impact of socioeconomic status on relapse rates. Data were collected between the years 1981-1984 from a sample of 8556 women attending for their first antenatal appointment at a public obstetric hospital. Questionnaires were completed with women which during the first visit, three to five days after the birth, at six months of age and finally at five years of age. Obstetric records were also used in conjunction with questionnaires to elicit information for analysis. The resulting information illustrated an association with loss of participants to the study and amount of cigarettes smoked. It was found that the women who dropped out of the study were not only heavier smokers but also came from lower socioeconomic and income groups. Adjusting for differentials it was found that women of higher economic status were more likely to stop smoking. However, about 50% of women who stopped smoking during pregnancy relapsed; additionally, the percentage of heavy smokers had returned to the same levels as during pregnancy by six months after birth. Najiman et al. (1998) acknowledge that self-reports may not always be valid when examining behaviours, but are when assessing smoking behaviours as also reported by others, (Brenner and Mielck 1993).

Although the relapse rates reported may not be completely accurate, they do indicate the high incidence of relapse postpartum as found in later studies (Polanska et al. 2011, Hannöver et al. 2008). Brenner and Mielck (1993) concur that the emphasis of the research centres on the results supporting the evidence that smoking in pregnancy and relapse is found to be greater in the lower socio-economic groups. Brenner and Mielck (1993) agree that relapse is related to social circumstances, history of previous heavy smoking and being subject to stress in the postpartum period, although depression was mentioned it has not been studied in depth. This

limits the findings inasmuch as depression cannot be cited as a direct reason for postpartum relapse in this particular research (Brenner and Mielck 1993). The findings of Brenner and Mielck (1993) were the result of a retrospective study in Germany to examine the impact that childbirth had on the smoking behaviours/relapse of parents. Brenner and Mielck (1993) conducted the cohort study analysis on both men (1494) and women (925) between 1984 and 1986. The main findings concluded that childbirth has very little long- term effect on relapse rates and that both men and women relapse at similar rates. Brenner and Mielck (1993) support the notion for further studies into the relapse process to be undertaken.

For although some studies concentrate on developing successful relapse prevention strategies (Chalmers 2004, Fang et al. 2004, Johnson et al. 2000), few focus on the reasons why women do relapse (Nichter 2008, Gaffney and Henry 2007, Gaffney 2006, Levine and Marcus 2004, Khan et al. 2002, Zimmer 2000, Ratner et al. 1999, Pollack and Dolan Mullen 1997). The evidence in this section has established the unacceptable high rates of postpartum relapse, the following section will go on to discuss the predictors that can precipitate relapse in the postpartum period.

2.7. Predictors of Relapse.

Zimmer (2000) in reviewing the literature pertaining to postpartum relapse and smoking in the first year after birth concluded that continued or resuming smoking has poor outcomes for both mother and child. It is, therefore, imperative that current research-based evidence is used in contributing to the success of interventions to aid women in remaining abstinent from smoking. Of the literature reviewed, Zimmer (2000) opines that the cessation of breastfeeding or choosing not to breastfeed is a contributing factor for resuming smoking. This evidence is also supported

by Edwards and Sims-Jones (1998), Ko and Schulken (1998) and O'Campo et al. (1992). However, Ko and Schulken (1998) purport that relapse is not prevented by breastfeeding but that it only delays the resumption to smoking. Moreover, Nichter et al. (2008) agree in that the decision not to breast feed cannot be determined as a predictor for relapse. Zimmer (2000) established that the resulting evidence in the literature review was varied but demonstrated that further research needed to be carried out to inform practice, in order to be able to provide the best support for women and families.

McBride et al. (1992) established that relapse often occurred within six weeks and the incidence was up to three times more likely than in families where the partner smoked. Later studies suggest in addition to the partner being a smoker as a predictor in ascertaining why women relapse postpartum also include socioeconomic status as a further factor (Khan et al. 2002). In contrast, Röske et al. (2006) contend that relapse can be predicted in women who view stopping smoking as a suspended state for the duration of pregnancy only.

Following an extensive literature review undertaken by McBride et al. (1992) indicating that there were eight main categories of possible predictors for postpartum relapse, McBride et al. (1992) further defined these into four categories. The four categories have been illustrated in Table 2.2.

Table 2.2: Predictions of relapse in postpartum relapse to smoking.
<ol style="list-style-type: none"> 1. Smoking status of spouse. 2. Social support. 3. Decrease in self-efficacy. 4. Types of coping strategies. <p style="text-align: right;">(McBride et al. 1992)</p>

The literature review prompted McBride et al. (1992) to conduct further studies into postpartum relapse of women who stopped smoking while pregnant. The data collection included focus groups with women antenatally followed by telephone surveys at 28 weeks gestation, six weeks postpartum and six months postpartum, backed up with biochemical validation. The longitudinal data indicated that relapse was gradual, peaking around four months thus giving opportunity for supporting and promoting smoking abstinence during this period. The results of this research concluded that women who were heavier smokers pre-pregnancy and those with a partner or a close family member who smoked, were more likely to relapse in the postpartum period. Although 'mood state and postpartum adjustment' were measured in the investigation the results were not presented in the results section of the paper or evident in the discussion. It was noted that the sample was not large (116 women) and the majority of participants had been recruited through posters, therefore were volunteers, white, middle class, motivated and residing in the USA. This had the potential to bias the study as results cannot be generalised or guarantee equity as the recruits were self-selected. McBride et al. (1992)

recommended further studies were undertaken with wider participation in order to reinforce validity of these findings owing to the small sample size in the original study.

Lelong et al. (2001) discuss data from two surveys of new mothers, undertaken in France, to determine the factors associated with risk of postpartum relapse. The data collection was by means of survey, the first examined factors associated with women's health (survey A) and, the second child rearing practices (survey B). Women were asked to complete postal questionnaires when the baby reached six months of age and, out of 1162 eligible to participate 937 agreed to take part with a 794 return of questionnaires. Data included tobacco use postpartum and although the timing of smoking rates varied from survey A to B, the social and demographic information remained the same. The study found that there was a high rate of relapse in the postpartum period and that the findings correlated with similar literature on the subject (Bottorff et al. 2005). The resulting information, in contrast to the studies by McBride et al. (1992), did indicate that relapse bore no relation to the amount smoked before pregnancy but increased if the partner smoked. Lelong et al. (2000) suggested this to be the most significant factor in determining risk of relapse within their study. Furthermore, Merzel et al. (2010) concur with earlier findings in that women are often unaware of the triggers postpartum for relapse in particular the influence of significant others within their social networks including partners. No mention was made of psychosocial issues such as mood disorders, transition to motherhood, or depression, the studies concluded that the inclusion of partners in preventative strategies will aid the duration of smoking abstinence in the postpartum.

The following sections will examine other dimensions of women's lives that may influence these decisions including breastfeeding, weight concerns, partner influence and social networks.

2.7.1. The Influence of Breastfeeding on Relapse.

The decision to breastfeed is often made during the antenatal period and in addition many women are motivated to stop smoking at this pivotal point in their lives. Several studies have suggested that women who intend to bottle feed their babies are more inclined to resume postpartum smoking having stopped in the antenatal period (Ratner et al. 2000, McBride and Pirie 1990). Moreover, the decision to breastfeed is often determined by smoking behaviours both antenatally and postnatally (Edwards and Sims-Jones 1998, O'Campo et al. 1992, McBride and McPirie 1990). However, Severson et al. (1995) and Stotts et al. (2000) found no correlation between breastfeeding cessation and smoking relapse. On the other hand, Giglia et al. (2007) examined the association between the duration of breastfeeding and stopping smoking in pregnancy to ascertain if smoking cessation during the current pregnancy increases the duration of breastfeeding. The results of the study reported that quitting smoking during pregnancy was associated with breastfeeding for longer than six months; nevertheless, the evidence cannot conclusively attribute prolonged breastfeeding with smoking cessation during pregnancy. Giglia et al. (2007) failed to report if this group of women also abstained from smoking for this length of time.

Notwithstanding, Edwards and Sims-Jones (1998) concluded that women reported that the decision to breastfeed encouraged them to abstain from smoking during this period as they did not want the baby to be subject to the harmful effects of smoking. In contrast, Nichter et al. (2008) reported

that some women perceived the benefit of breastfeeding was greater than the risk of smoking and as a result continued to smoke while breastfeeding.

It has been suggested that the decision to wean the baby often coincides with a return to smoking. Studies examining this relationship found that a relapse to regular smoking during the first six months postpartum correlated with weaning. Debate is generated when discussing whether stopping breastfeeding and relapse to smoking are associated. Amir et al. (2002) suggested that the psychosocial factors associated with smoking and breastfeeding may have more impact on relapse than the belief that the cause may be physiological. The assumption being that smoking has a detrimental effect on the mechanism of lactation. Conversely, Ratner et al. (1999) concluded that relapse to smoking and cessation of breastfeeding may be a combination of both physiological and psychological effects when discounting other variables such as return to work, partner influence and emotional wellbeing.

Ratner et al. (1999) exposed that of the women who had relapsed, 61% had weaned their babies early (breastfed for less than 26 weeks) thus intimating that the probability of early weaning was four times as likely to occur in women who relapsed to smoking postpartum. It could be argued that women who weaned their babies early were more likely to relapse to smoking at this point. Nevertheless, Nichter et al. (2008) found no discernible difference between women who breast fed and those who chose not to in relation to smoking status. Nichter et al. (2008) go further in suggesting that a reason cited for not breastfeeding was a sense of being inhibited in public places, as opposed to choosing not to breastfeed in order to resume smoking. It is noted, however, that the participants in the study were of a low socio-economic background and spent considerable time in

public venues, for example, social services and public transport. A small percentage of women do continue to both breast feed and smoke in the postpartum period despite the known health risks (Nichter et al. 2008)

It can be assumed from the existing literature that the correlation between the decision to breastfeed and not smoke or the decision to stop breastfeeding in order to smoke cannot be confirmed. Weight gain has also been cited as a concern for postpartum women for smokers and non-smokers, the following section will discuss these issues in relation to postpartum relapse to smoking.

2.7.2. Fear of Weight Gain.

The media has contributed to the concerns of weight gain for women following childbirth in portraying celebrities back to pre-pregnancy shapes and weight within days of giving birth. This added to the well documented evidence that there is a risk of weight gain after stopping smoking causes anxiety for many women when attempting to remain abstinent (Levine and Marcus 2004, Hudmon et al. 1999, McBride et al. 1996). Moreover, Secker-Walker et al. (1995) conclude that as many women may retain extra weight following childbirth this will only serve to compound their anxieties when attempting to remain abstinent from smoking postpartum. Levine and Marcus (2004) concur with this notion and further suggest that relapse to smoking could be initiated by concerns for regaining pre-pregnancy weight. Post-birth eating habits may be altered, increasing anxiety regarding weight gain and so women may decide to replace snacking or erratic eating with cigarettes to counteract these perceived problems. There is evidence to suggest that women who remain more confident with regards to fluctuations in weight pre and post birth are less likely to relapse (Levine et al. 2012, Levine and Marcus 2004).

Levine and Marcus (2004) in deliberating the possible causes for postpartum relapse infer that a connection between weight gain and mood changes may account for this. Furthermore, Levine and Marcus (2004) suggest that this may be due in part to negative mood exacerbating underlying eating disorders, leading to over eating at a time when weight awareness is of particular significance. As a result, the combined effect of the two factors increases the likelihood of resuming smoking. In the following section the influence of partners and social networks will be discussed as a further risk factor in the return to smoking for some women in the postpartum period.

2.7.3. Partner Influence and Social Networks.

Of the many studies that have investigated reasons why women relapse to smoking postpartum, it has emerged that having a partner who smokes increases this risk (Koshy et al. 2010, Merzel et al. 2009, Mullen et al. 1997, Pollack and Mullen 1997, McBride et al. 1992). Furthermore, Koshy et al. (2010), Mullen et al. (1997) and Cnattingius et al. (1992) suggested that networks of friends who smoke are also indicative of a risk of relapse. With regard to this observation, lack of perceived social support may also have an impact on returning to smoking (Havassy et al. 1991). Pollack and Mullen (1997) found that the perceived support gained from partners was not necessarily directed at the maintenance of abstinence of smoking, but rather to the support for caring with the baby. However, these findings cannot be generalised as the sample size was small (72 women), arguably there was significant evidence to support the effect of interaction of a smoking partner on general social support owing to method of analysis. Park et al. (2009) on the other hand, found that perceived levels of support declined postpartum, particularly in respect of health professionals which led to an increased risk of relapse to smoking at this time. However,

partner support was variable and did not differentiate between smokers and non-smokers. Accordingly, Park et al. (2009) suggested that encouraging both professional and social support in the postpartum period will have a positive effect on the decision to smoke or remain abstinent.

Conversely, Severson et al. (1995) found that of the women who relapsed postpartum after quitting antenatally most were influenced by a partner who smoked. The study comprised mothers of two week old infants attending their first paediatric clinic and included 13,495 mothers spanning 49 paediatric practices in the USA. The data collected over 16 months, by a brief health habits questionnaire, gave a retrospective view to ascertain the predictive indicators that may lead to a return to smoking. Severson et al. (1995) suggested other predictors including age, alcohol consumption and socioeconomic status may have been factors in women relapsing to smoking. However, a study by McBride and Pirie (1990) conducted in comparable areas raised several limitations as the historical data did not determine the quit date during pregnancy or whether relapse occurred before or after the baby's birth and no biochemical validation was used to confirm smoking status. Nevertheless, in support of the study, Severson et al. (1995) claim that the questionnaire was designed as such that the women were not stigmatised or made to feel guilty by their decisions to continue or resume smoking. Reference was made to alcohol consumption and some correlation was suggested between alcohol consumption and smoking, but no similar evidence was sought to suggest links with breastfeeding or postnatal depression and smoking. Being a younger mother can also be a predictor of relapse in those women who smoked and gave up during pregnancy as the following subsection illustrates.

2.7.4. Younger Mothers.

Research suggests that the younger population are at more risk of taking part in unacceptable behaviours such as smoking and unprotected sex as perceived by the wider population (Albrecht et al. 1999). Figures show that 80% of smokers began smoking during adolescence (Coleman 2004) and teenage pregnancies account for 17.8% per 1,000 births (Office of National Statistics, [ONS] 2012). Therefore smoking is of concern when considering the health and wellbeing of young pregnant women. Similar to other groups of pregnant women the younger women are more motivated to stop smoking at this time for the health of the fetus (Albrecht et al. 1999). However, relapse postpartum is also a concern as these young women are often living in difficult circumstances and lack social support. Furthermore, McBride et al. (1992) agree that lack of social support may contribute to postpartum relapse. Notwithstanding, Barnet et al. (1995) raise a further concern in respect of younger mothers, the issue of depression, and would argue that depression in the postpartum period is not confined by age and social status. Barnet et al. (1995), in a study of 125 teenagers attending an adolescent parenting course examined the incidence of substance abuse following childbirth discovered that young people are at greater risk of developing depression and more likely to engage in risk-taking behaviours such as smoking. This study argues that the incidence of smoking, substance abuse and alcohol consumption is greater after birth suggesting that this is in part due to stress and depressive symptoms that may develop when caring for a new baby. However, studies to date have been conducted in countries other than the United Kingdom (UK) and as such have not explored why many teenage mothers in the UK smoke in the postpartum period and whether there may be an association with postpartum depression. Similar difficulties are also faced by women who

have migrated to another country and struggle in less than ideal circumstances. This aspect will be explored in greater detail in the following subsection.

2.7.5. Migrant Women.

A compounding factor that may contribute to smoking in the postpartum for women who stopped smoking during pregnancy is that of being a new mother living in another country. Women moving to another country for whatever reason whether for personal choice in the hope of a better life or out of desperation, fleeing danger and seeking asylum is not easy. The women (and partner) may have left all close family and friends and as a consequence suffer a raft of emotions. Fraktman (1998) argues that these emotions of great highs and lows can be experienced by all new mothers but are exacerbated by living in a different country where they cannot speak or understand the language fluently.

Recent studies exploring the health behaviours of immigrant women compared with those of British/Irish women, primarily undertaken to compare smoking and alcohol consumption in the antenatal period and the initiation of breastfeeding postpartum concluded that the health behaviour of these women deteriorates the longer they reside in the UK (Hawkins et al. 2008). One reason suggested for these changes is that this group of women become acculturated, during which they begin to accept and change their health behaviours to those of the new culture in which they are living. Hawkins et al. (2008) suggest that immigrant women will be more likely to smoke the longer they live in another country. This notion is supported by previous studies undertaken in the United States of America (USA), (Perreira et al. 2006). However, Perreira (2008) argues that smoking initiation may be as a consequence of improved socioeconomic

wellbeing, as such women can now afford to smoke. Perreira (2008) recommends that further research should be carried out to explore the reasons why immigrant women smoke in the postpartum period as there is evidence to suggest that smoking postpartum is associated with depression and anxiety which may be even higher in immigrant women. Whitaker et al (2007) purport that of the total number of women smoking postpartum (and/or using illegal drugs and alcohol) in the USA, twenty percent were also symptomatic for depression and anxiety.

Self-efficacy also has a part to play in how women adapt to the role of motherhood and may have an impact on whether a woman abstains or relapses to smoking in the postpartum period. The following section will review the literature pertaining to the concept of self-efficacy.

2.8. Self-Efficacy.

Gaffney and Henry (2007) argue that associated factors in becoming a mother have a great impact on the self-efficacy demonstrated in staying abstinent or relapsing to smoking in the early postpartum period. People who are confident demonstrate positive self-efficacy in the ability to refrain from smoking, however, if confidence is diminished then low self-esteem along with feelings of guilt and failure impede upon the self-efficacy to remain smoke free.

Self-efficacy underpins the perceived success of both smoking cessation and the transition to parenthood. Bandura (1997) studied in-depth the notion and concluded that self-efficacy is the way people assess their capabilities of performing a task or to carry out a particular role. Bandura (1997a, 1989) also determined that self-efficacy is influenced by the effort made by individuals and the difficulty of the task to be surmounted. Combining the ability to remain abstinent from smoking and to cope with

the transition to motherhood, alongside other external influences has the potential to diminish positive self-efficacy in a woman. People who struggle with a low sense of self-efficacy tend to give up more easily in turn, raising the doubts of their own capabilities in achieving goals and are more prone to the effects of stress and depression. Conversely, Bandura and Locke (2003) argue that a high sense of self-efficacy can increase goal achievement and promote well-being. Therefore for some women becoming a mother could be an empowering experience and increase self-efficacy. However, self-efficacy is multifactorial and dependent on the cognitive processing of several strands of human behaviour and thought processes, but ultimately can affect both the *'level and quality of human functioning'*. (Bandura 1999, page 11). Bandura (1997, 2004) claims that a robust sense of self-efficacy can be developed in four significant ways:-

- Mastery experience.
- Social modelling.
- Social persuasion.
- Physical and emotional state.

Table 2.3 illustrates the sources of self-efficacy can all be related to the experiences that postpartum women face coping with a new baby, abstaining from smoking and all the associated influences that may contribute in either a positive or negative way to her (the women) perceived self-efficacy. In developing strategies to assist women in preventing postpartum relapse, raising the perceived self-efficacy could have the potential of not only preventing relapse but may contribute in reducing the incidence of postpartum depression.

Table 2.3: Development of self-efficacy

1. Mastery experience refers to confidence gained through achieving a particular success, perceived self-efficacy is thus raised and subsequent encounters with the same problem will be 'mastered' using the same techniques and confidence is maintained.
2. Social modelling relates to a person's observation of another, again self-efficacy in undergoing a similar experience can be determined by success or otherwise of the person under observation.
3. Nelson-Jones (2006) describes social persuasion as verbal persuasion where the person(s) can verbally suggest a course of action to another and if successful has the desired effect of raising self-efficacy and promoting success. However, if the goal is unrealistic and cannot be achieved then the reverse may occur and be harmful to the recipient.
4. Self- efficacy can be affected by physical and emotional states, as states of anxiety and tension can adversely affect the belief and expectations of a person. Similarly, an altered mood state can affect perceived efficacy of achieving a task or goal. Tiredness and discomfort may affect people as perceived as signs of weakness.

(Bandura 1997,2004)

Although no interventions to date can support this notion, Gaffney and Henry (2007) do agree that self-efficacy plays a part in postpartum relapse and is most influenced by factors that occur during the transition to motherhood. Furthermore, Jerusalem and Mittag (1999) when investigating the effect of migrants and refugees during stressful life transitions, concluded that having a strong belief of self-efficacy improves the coping strategies faced in difficult life changing situations, thus improving emotional well-being and health.

Marlatt et al (1999) state that self-efficacy can effectively have a part to play in the start of addictive behaviours, such as smoking as well as aiding

relapse prevention. The pattern of addictive behaviour and the importance of self-efficacy have been included by DiClemente et al (1985) as demonstrated in Table 2.4. These patterns of addictive behaviour could also be interpreted as how people with addictions respond to their behaviours in an attempt to overcome the problem.

Table 2.4: DiClemente's pattern of addictive behaviour refined by Marlatt et al (1999)

These have been categorised into five types:

1. Avoiding the behaviour (resistance).
2. Regulating (harm reduction risk).
3. Belief in one's self to be able to stop or control behaviour (action self-efficacy).
4. Belief in self-efficacy in preventing relapse (coping self-efficacy).
5. The ability to return to the non-smoking stage if relapse has occurred (recovery self-efficacy).

These stages may be considered by women in the postpartum period, the first stage will be similar to someone who has also given up an addictive habit and is subsequently tempted to resume that same habit. The level of self-efficacy will determine the ability to resist that first cigarette and may be influenced by other changes occurring concurrently.

'Self-efficacy beliefs regulate human functioning through cognitive, motivational, affective, and decisional processes' (Bandura 1997 page 87).

Bandura and Locke (2003) expand upon this statement in so much as contrasting the cognitive processes as a positive or a negative experience, influencing motivation and the emotional wellbeing that in turn affects

important decisions/choices that are made. This is significant when taking into account postpartum women. If women are in optimal health, their perceived self-efficacy is raised which will have an impact on both their parenting confidence and the ability not to relapse. However, other influences such as low mood, depression, partner support and poverty may all impact on efficacy beliefs. Therefore, women who feel positive during the transition to parenting may have less depressive feelings and higher feelings of self-efficacy, which will ultimately assist in remaining smoke free.

Bandura and Locke (2003) argue that human behaviour is highly complex and is influenced by other factors in their lives and therefore perceived high efficacy can have a positive or a negative effect on the decisions women make. For example, setting high ideals that are unachievable will have a negative affect with the potential of reducing a person's self-efficacy. Relating this theory to women postpartum, feelings of low mood may lead to depression and feelings of inadequacy, which in turn may precipitate a relapse to smoking. The idealisation of being the perfect mother and to be a non-smoker, or the anxieties of not being able to cope or remain smoke free begins in the antenatal period. Interventions to prevent relapse and promote self-efficacy should begin at this time to enable women to successfully cope with the changes and challenges that motherhood brings.

2.9. Encouraging Abstinence: Strategies to Prevent Relapse.

Of the research assessing the intervention strategies aimed at maintaining smoking cessation postnatally, Secker-Walker et al. (1995) alluded to the belief that relapse prevention counselling does not maintain long term quit rates, but that there is a deficit of successful intervention trials to support

or reject this notion. The research undertaken by Secker-Walker et al. (1995) was inconclusive in so much as not establishing whether increasing interventions would reduce the rate of relapse or if further strategies need developing. Notwithstanding, Kahn et al. (2002) found that interventions to aid long term smoking cessation cannot be successful without a greater understanding of the factors which influence a return to smoking during pregnancy and in the postpartum period. Therefore, it would be of benefit for the future of such intervention strategies to gain a wider insight into factors which may predispose to postpartum relapse.

Studies undertaken by Gaffney and Henry (2007) examining the factors associated with becoming a mother were based on the earlier work of Mercer (2004) and Marlatt (1996) combining two existing models: those of relapse prevention and becoming a mother. The study used a descriptive, correlational design comprising 133 subjects who were mothers with babies less than twelve weeks of age. The mothers were English-speaking women of low-income status as they were selected from supplementary nutrition programmes in Northern Virginia, USA. The results demonstrated that infant crying had an impact on a mothers' ability to maintain the self-efficacy deemed necessary to refrain from relapse, as her coping mechanisms and confidence in being a competent mother were challenged. Self-efficacy in relapse prevention may be altered by the women's perceived ability of caregiving when adjusting to the new role of becoming a mother. Gennaro et al. (2001) discuss the fact that smoking may provide a coping mechanism for women who are finding the transition to motherhood particularly difficult. Gaffney and Henry (2007) on discussing their findings suggest that the interview-survey format may have been skewed due to social bias; although the mothers' practices and expectations may not have been fairly evaluated. It did however

demonstrate that a greater number of women relapse very soon after birth and that the pattern of relapse differs greatly to that of the general population, reinforcing the belief that relapse prevention interventions for postpartum women must be designed to meet the requirements of this particular group. The study indicated that more research should be undertaken to gain a greater understanding of the difficulties of combining new motherhood with remaining abstinent from smoking. The research also suggested that an exploration of postnatal depression and fatigue and relapse prevention is needed, adding to the body of knowledge surrounding this interwoven phenomena of relapse and motherhood.

A further study that followed up smoking relapse intervention undertaken by Ratner et al. (2000) took place in Vancouver, Canada on 238 participants twelve months after birth who had previously contributed to a randomized clinical control trial of relapse prevention intervention. The purpose of the study was to elicit common denominators evident in women who had relapsed a year after the birth of their child and to ascertain whether the intervention strategy employed in the study had demonstrated any long term effects. The participants were divided into two groups, one receiving no counselling the other intervention treatment using Marlatt's relapse model (Marlatt 1980, 1985, 1996) Initial contact was made by telephone followed by face-to-face interviews at a venue of choice. Data collection comprised smoking status, smoking cessation self-efficacy, mental health, alcohol use, breastfeeding patterns, social support, smoking in a social environment and socio-demographic information. Carbon monoxide levels were also recorded by a CO₂ monitor*. Mental health was determined by the use of items taken from Canada's Health Promotion Survey.

Following data analysis the resulting evidence acknowledged that although the problem of nicotine addiction had resolved through abstinence there were other factors within the lives of these women that may precipitate a return to smoking.

Ratner et al. (2000) achieved their aim of examining the long-term effects of smoking intervention therapies and surmising that for interventions to be more successful other aspects of women's lives must be taken into account. For example, women experiencing mental health problems were more at risk of being regular smokers at one year postpartum. A weakness of this study was an inability to differentiate a difference in relapse rates between the intervention and control groups at twelve months; this was attributed to insufficient power in the calculations. However, it was noted that the rate of relapse accelerated in the intervention group during the second half of the year, the consequence of this finding could demonstrate that interventions may only suspend relapse not prevent it.

Gadomski et al. (2011) purport that addressing the problem of relapse postpartum is not enough and that interventions should combine both antenatal and postpartum issues. The study focused on lower income and younger parents, supporting them through the pregnancy continuum and providing incentives to remain smoke free postpartum for a year. However, the study acknowledges bias in the selection of participants and that the outcomes demonstrated the effectiveness and not the efficacy of the intervention.

*A CO₂ monitor is an instrument for estimating the level of carbon monoxide in a person. It is used in smoking cessation work by smoking cessation advisors, as a motivational tool during the smoking cessation programme it can be used at each appointment, to assess progress in attempt to stop smoking.

Nonetheless, the results were encouraging and warrant further research in continuing support after birth.

A systematic review of the literature examining research surrounding smoking relapse and relapse prevention during pregnancy and the postpartum was undertaken by Fang et al. (2004) using a MEDLINE/PubMed search. Of the 500 articles that were retrieved only 146 pertained to postpartum relapse of which 14 articles discussed prevention strategies for pregnant women. The authors did not state whether any included specific postpartum prevention. The results of this review suggested that health professionals are instrumental in supporting women to remain abstinent. Fang et al. (2004) highlighted that further research is essential to reduce the high rates of relapse observed in the postpartum period and that support should be continued beyond pregnancy into this window of opportunity. Nonetheless, research suggests that if successful interventions are tailored to meet the needs of pregnant women then this may have an impact of reducing the incidence of relapse postpartum (McBride et al. 1999). As postpartum relapse is an individual experience for each woman interventions should be tailored accordingly, paying special attention to the emotional upheaval that may present itself, during the transition to motherhood. McBride et al. (1999) suggest that high-risk circumstances encountered during pregnancy if addressed at opportune times in the early postpartum period may help to reduce the high rates of relapse following the birth.

Jimenez-Munro et al. (2012) and Thyrian et al. (2010) suggest strategies for preventing postpartum relapse ranging from motivational interviewing in the early postpartum period through to social support by peers as illustrated in work by Hennrikus et al. (2010) all of which have met with varying degrees of success. These recommendations would support the

work of McBride et al. (1999) in suggesting that a single intervention will not fit the diverse needs and life circumstances of the postpartum woman. In order to develop interventions that are appropriate in aiding smoking cessation and maintaining smoking abstinence the factors affecting these decisions must be considered.

2.10. Experiences of Relapse.

The experiences of postpartum relapse to smoking have been discussed in the literature but few have actively sought these experiences from the woman's perspective. Of those that have explored the phenomenon were undertaken in countries other than the UK. Bottorff et al. (2000) utilised narratives of women to explore the experiences of postpartum relapse to smoking after the birth of a child. In this study 27 women were recruited in Vancouver, Canada, aged between 18-39 years to participate in telephone or face to face interviews describing their journey to relapse. Following transcription of the taped interviews five themes or storylines were revealed:-

- Unplanned relapse while socialising or when stressed.
- Vulnerability to smoking.
- Nostalgia for former self.
- Smoking for relief.
- Never having really stopped.

This qualitative study is significant in that the authors using the experiences of women have added to the understanding of women's experiences at the potentially challenging time during the transition to motherhood. Irwin et al. (2005) examined the work of Bottorff et al. (2000) and Secord (2000) in exploring the impact of social discourse on smoking and children. The analysed data found that women attempted to

justify their reasons for smoking, on the one hand, but, on the other hand also claimed to be protecting children from second-hand smoke. Irwin et al. (2005) argue that although relapse was not discussed a greater understanding of the reasons why women smoke was established as illustrated in the emerging themes of the study- vulnerable to smoking, nostalgia for former self, smoking for relief, having never really quit. The findings of which have provided health professionals with more valid information to aid the development of intervention strategies in supporting the prevention of postpartum relapse.

Edwards and Sims-Jones (1998) in an earlier study also discuss women's experience of relapsing during pregnancy and the postpartum and concluded that social events appeared to be the main catalyst for relapse, whereas breastfeeding and health of the baby were protective factors in preventing relapse. In addition to previous literature, Nichter et al. (2008) in a later study exploring smoking and harm reduction efforts of women in the postpartum period discovered similarities to the findings of Bottorff et al. (2000) and Edwards and Sims-Jones (1998). The main findings indicated that for many women in high-risk situations i.e. environments dominated by smokers the incidence of relapse was greater, however, the women were conscious of 'harm reduction' and on the whole smoked less than before pregnancy. Notwithstanding the fact that these studies were all undertaken in countries other than the UK they have provided the framework for this study which will be undertaken in the UK.

It is envisaged that the proposed study will contribute to and build upon contemporary research with the aim to aid the development of tailored interventions that will improve the lives of women during the postpartum period and beyond.

2.9. Summary and Aims of the Study.

This chapter has examined the literature encompassing the factors associated with smoking, pregnancy and postpartum relapse and has identified that both the transition to motherhood is a time of great change and altered identity that can affect the decision to stop smoking. Although there is a wealth of research examining smoking and smoking cessation during pregnancy with some studies focusing on intervention strategies for preventing postpartum relapse, little evidence demonstrates long-term success. Furthermore, the evidence found that explored the psychosocial wellbeing and experiences of women in the postpartum period have only been undertaken in countries other than the UK and so the findings may differ. Therefore this research seeks to explore the smoking experiences of women in the UK who stopped smoking during pregnancy in order to gain greater insight into why relapse occurs in the postpartum period. Perceived reasons for relapse have been explored as demonstrated within this chapter with arguments presented both for and against such assumptions. However, it is clear from the evidence presented that very few studies have scrutinised the experiences of women in respect of postpartum relapse.

McBride and Pirie (1990) indicated that some women may not be motivated to remain a non-smoker postpartum and do not consider the wider picture of visualising the situation after birth. Their concerns are centred around the welfare of the unborn child and less associated with their own health after pregnancy and that of the family. Bottorff et al. (2000) further this assumption in suggesting that it is the very factors associated with pregnancy that provide the triggers to stop smoking, such as nausea or public opinion of smoking in pregnancy. These situations may help the woman develop coping strategies to aid stopping and maintaining smoking cessation during pregnancy, once these opportunities are no longer

relevant then the barriers to remaining abstinent are lifted and the temptation to smoke becomes stronger especially with the added burden that motherhood may bring. The dimensions that help or hinder smoking cessation need to be fully explored before successful relapse prevention strategies can be implemented.

Therefore the purpose of this study is to explore women's experiences with smoking from the initiation of smoking, during pregnancy and the postpartum period and who risk relapsing to smoking after the birth of their baby. Greaves (1996 page 102) states:

'without asking smokers to describe their own experiences and to interpret their own smoking, past and present, there is no solid foundation on which to build.'

It is anticipated that gaining a greater perception of postpartum relapse will add to the body of knowledge, aiding both women and health professionals to plan interventions to reduce the risk of resuming smoking and to prepare for the challenges of transition to motherhood.

Comprehending these difficulties will assist future developments in relapse prevention and interventions, with the ultimate goal of reducing the present high rate of relapse within this unique section of the population.

As a result of the literature reviewed, the following aim was developed with the objective of gaining a greater understanding of the phenomena:

- To explore the experiences of women's relationship with smoking influencing the relapse or abstinence during the childbirth continuum.

With the objectives to:

- Examine the barriers and facilitators affecting women's decisions to stop smoking during pregnancy and remain smokefree postpartum.
- Contribute to the body of knowledge of postpartum relapse to aid the future development of effective interventions.

In Chapter three, the qualitative methods utilised to fulfil these aims will be discussed and debated demonstrating the decision to choose such methods. Previous studies undertaken on this subject will be introduced to support this study.

Chapter Four: Undertaking the Study.

4.1. The Study Setting.

The main body of research for this study was undertaken in the community setting within the homes of the women participating in the interviews. However, the initial data collection encompassing the completion of questionnaires was conducted in the antenatal clinics of the two maternity units situated within one NHS Trust that include obstetric units serving the local population in the East Midlands and adjacent towns. It is of value therefore to provide some background information pertaining to the study setting to gain an understanding of the wider demographics affecting the study. The majority of women residing within this catchment area access the maternity services and attend antenatally for at least one ultrasound scan appointment, at one of the maternity unit sites within the area.

Overall, the Trust provides care for approximately 12,000 women per year with almost 13,000 births recorded in 2009, the year the research was undertaken. Of this number 25% were under the age of 18 years and approximately 10% were from countries other than the UK. Between the years 2008 and 2009, statistics collated within the Trust highlighted that a total of 2959 women reported that they were smokers at the time of their first appointment, reducing to 1640 who were still smoking 24 hours before their baby's birth. This corresponds with the wider national statistics (Health of the Population Indicator 2009/10, The Infant Feeding Survey, NHS 2005) that reported almost a third of women, equating to 32% of mothers in England, are still smoking at the beginning of pregnancy and in the previous 12 months before becoming pregnant. In addition, almost half (49%) do stop at some point during pregnancy and one in six women (17%) are recorded as smoking for the duration of the pregnancy, which includes the period

around the time of birth (British Market Research Bureau, [BMRB] 2007, 2010). Due to the combined total number of births across the Trust it was decided to undertake the first part of the study on both hospital sites to capitalise on the diversity of women attending and to maximise the potential for a justifiable response to the questionnaires. As the catchment area for the study included a diverse population it was decided to recruit women of different age groups and ethnicity. This was to ensure that a unbiased sample was selected from the wider population of pregnant women who had smoked during pregnancy.

4.2. Local Screening for Smoking in Pregnancy.

All women are asked about their smoking status at the first booking appointment, with NICE (2010) recommending that the question should also be raised at each subsequent appointment, whether this is undertaken in the community or the hospital setting (NICE, 2010). During the time of this study the Trust held an 'opt in' policy for women wishing to access the specialist smoking cessation services for pregnant women and their families. Women were offered the specialist service but were free to decline the offer. The policy of 'opt out' is now being encouraged with women automatically being referred to the specialist smoking cessation services. Routine Carbon Monoxide testing was also not universally available at the time of this study, but has now been introduced as per Government guidelines (DH, 2010).

Although, there was a specialist smoking cessation service to support women to stop smoking during pregnancy there were no formal mechanisms in place to support women in the postpartum period during the time of this study. In 2010, NICE produced guidance for health professionals on the issues of smoking in pregnancy and following childbirth. The Public Health Advisory Committee (PHIAC 2010) developed recommendations for NICE following

review of the evidence from economic modelling, expert advice, stakeholder feedback and fieldwork. The recommendations support the interventions already in place, but do not make any specific recommendations for women planning a pregnancy or women who have recently become new mothers. NICE (2010) offer the explanation for this anomaly in that to date there is a lack of evidence supporting effective interventions for this particular group of women.

In summary, the women within the study setting do have access to referral and support in helping them to stop smoking during pregnancy, but there are no indicators that the consideration to long term abstinence is widely recognised. However, the problem does not appear unique to the Trust in which this study took place as illustrated in the NICE (2010) guidance document, thus reinforcing the demand for further study into the area of postpartum relapse to smoking.

4.3. Gaining Access.

The data collection for the first part of the study was to be undertaken in the antenatal clinics of the two Maternity units within the Trust with the second part predominantly taking place in women's homes. In order to gain access to these settings certain procedures had to be undertaken and permissions granted. These considerations will be discussed in the following sections.

4.3.1. Access to the Study Setting.

Before undertaking the study it was essential to gain the written permission of the Midwifery Manager of the Trust, as the researcher was not an employee of the Trust, in order to gain access to the study setting. Following permission to undertake the study a formal application to the local Research Ethics Committee was submitted in August 2009. This involved submitting a

proposal detailing all the steps of the project. Cresswell (2007) accepts that regardless of the chosen approach to the study permission still has to be gained from the appropriate bodies. Approval from the Trust Research and Development (R and D) Department also had to be obtained before allowing access to commence.

As there were no large trials being undertaken in the Trust it was not possible to recruit participants via the methods used by Edwards and Sims-Jones (1998) or Bottorff et al. (2000). Therefore, after taking advice from supervision and examining the literature from earlier studies (Edwards and Sims-Jones, 1998 and Bottorff et al. 2000) it was decided that the study would be conducted in two parts with the initial part of the study comprising questionnaires to gain demographic indicators of the population under scrutiny and secondly to gain access to women willing to be interviewed about their experiences of smoking. Using phenomenology allowed women to recount their lived experiences during this period which could be collected over time and in surroundings suited to the woman i.e. in their own homes. The process of gaining ethical and R and D approval can be quite a protracted and anxious time for the researcher and this process is discussed in the next section.

4.3.2. The Ethical Approval Process.

Before undertaking any study approval has to be sought from the Research Ethics Committee along with the local Trust R and D department. In order to safeguard the wellbeing of all research participants from harm ensuring that strategies are in place to deal with any issues that may arise directly or indirectly from the study. A detailed research proposal was submitted to the committee along with copies of the Consent Form (appendix 1), Participants' Letter (appendix 2) and Participant Information Sheet (PIS) (appendix 3) and

an Interview Schedule (appendix 4). When planning this study the researcher had to carefully consider the different social classes and ethnicity of the potential participants when composing the information sheets and associated documentation that would be read. It was therefore of significance to ensure that any written information could be read and understood by the majority of the women involved without causing distress or offence.

Written approval for access to participants in the antenatal clinics was obtained from the Midwifery Manager and submitted with the ethics application and verbal discussion with heads of departments (antenatal clinic co-ordinators) was acknowledged.

The Research Ethics Committee agreed to the proposal in principal on 21st September 2009 (appendix 5), although did raise a few queries insomuch as concern regarding the input from midwives during the questionnaire stage. Assurance was given that midwives input would be minimal so as not to increase their already busy workload. Queries were also raised regarding the disclosure of any criminal activities such as safeguarding concerns made by the women during the interviews and it was stipulated that the researcher should make clear that any disclosures would have to be reported. The final issue voiced by the Research Ethics Committee was in respect of safety during the time in which the researcher carried out home visits and recommended that a colleague was informed before and again after each visit. The researcher confirmed that this would be adhered to as stipulated within the University of Nottingham (UoN) lone workers policy (UoN 2009). The aspect of safety when working alone is also requirement of the University to protect the safety of researchers when collecting data in the community. Not only the aspect of personal safety must be considered, but also the risk of accidents occurring, such as slips and falls or road traffic accidents either going to or from places during the data collection stage. The response to the

all the queries was made by letter and following correspondence with the Research Ethics Committee including the revised participant information sheet full ethical approval was granted on 9th November 2009 (appendix 6). Final approval was obtained from the local Trust R and D Department on 22nd December 2009 (appendix 7). Both Antenatal Clinics granted permission to display posters (appendix 8) to advertise the study and the questionnaires which reduced the onus on the midwives in discussing the study with the women at the time of their antenatal appointments.

Women who had left contact details but were not selected for the interviews were sent a letter thanking them for volunteering (appendix 9) or were contacted by telephone, if they had left such details. In addition to the PIS the researcher discussed the study in detail and answered any questions that arose regarding any aspect of the study and what was expected of each participant. Consent for the questionnaire was assumed in the fact that the women chose to complete the questionnaire of their own volition. For the second part of the data collection, the women gave written consent prior to the interview being conducted by the researcher. At each stage of the data collection women were informed that they were free to withdraw from the study at any point without detriment to any other care or support they were accessing elsewhere. They could also decline to answer any questions that were asked by the researcher and the researcher would answer any questions raised by the woman. The role of the midwife and researcher in accessing participants will be discussed more fully in the next section.

4.3.3. Collecting the Data.

The initial data collection was undertaken in the two antenatal clinics of the Trust. All the antenatal clinic staff, including midwives, health care assistants (HCA) and receptionists were informed of the study in advance and were

reassured that this should not unduly add to their work load. It was imperative for the success of this first stage of data collection that each member of staff were given supportive information in order for them to feel involved but not made to feel that this was an excessive task to undertake. It was explained that the completion of the questionnaires was voluntary and as such they should not coerce women into taking a questionnaire but to be able to answer any queries that may arise. Despite given the same information on both sites it was evident by the return of completed questionnaires that staff in one clinic engaged more readily in the recruitment to the study than the other. This anomaly is deliberated upon in greater depth within the discussion chapter. It was noted by the researcher that several other studies were also being undertaken at this time in one clinic and as such staff may have felt a little overwhelmed and less enthusiastic in prominently displaying the study material. The researcher was also less known on this site, being more visible in the other clinic which may also have contributed to reminding staff to recruit to the study.

It was anticipated that the first stage of data collection would take approximately two months to gather sufficient demographic data and contacts for the next stage of interviews. However, due to the lack of response at one site, the time was extended by a month to recruit more women to the study. The questionnaires were made available in several different languages to aid a more inclusive sample comprising English (appendix 10a), Mandarin (appendix 10b) and Cantonese (appendix 10c), (also referred to as simplified and traditional Chinese), Polish (appendix 10d), Russian (appendix 10e) and Punjabi (appendix 10f). It was acknowledged that not all languages could be accommodated and as a consequence some women may have been unable to participate. Nevertheless, it was intended

that the use of questionnaires in languages other than English would widen the entry criteria and the potential to reach a greater number of women.

4.3.4. Access to the Participants.

A number of visits were made to the antenatal clinics in both hospitals prior to the study commencing. The purpose of these meetings was to discuss the study with the Clinic co-ordinators, midwives, HCAs and receptionists in order to inform them of the study and to answer any questions they may have had. The researcher hoped to gain the support of the staff in order to gain the maximum response from the women via the questionnaires. This proved a difficult but not unexpected process on several counts; initially the clinic co-ordinators were protective of their staff and understandably did not wish to add to their workload.

The disinclination to participate by the staff was in part due to the fact the researcher was not known by the persons involved. Cresswell (2007) revealed similar observations, agreeing that trust and credibility has to be gained from the field site and can be a challenge in access to participants. On the other hand, Weis and Fine (2000) in discussing suitable sites suggest by having a particular interest in the area, the researcher may be at a disadvantage in respect of personal bias or familiarity with the other parties involved. The researcher had to be reflexive during this process in considering the potential bias ensuring that this did not have an influence on the data collection (Marshall et al. 2010, Cresswell 2005). During subsequent visits to the clinic areas the researcher was able to reassure the members of staff that they would only be required to answer any practical questions the women may have in completing the questionnaire and would not be expected to persuade women to participate and it was reiterated that participation was entirely voluntary. This gave some reassurance, although staff in one clinic

suggested that due to other research activities taking place there were too many questionnaires within the department and that women may feel overwhelmed by receiving too many. The co-ordinator in the other clinic directed the researcher to the receptionist of the scan department and suggested she acted as the liaison, which appeared to be more productive in generating interest to participants in the study.

On a practical level, purposes made wooden boxes were used to contain the questionnaires and pens with a post box section for returning the completed forms. The design and appearance of the boxes was intentional to give the study a professional impression with the aim of encouraging both the staff and participants to take notice. It made clear that the researcher would not be able to be part of the process in making women aware of the questionnaires as stipulated in the ethical approval as this may have been misinterpreted as coercion. However, it was agreed that the researcher would visit at least twice a week to collect completed questionnaires and replenish the forms and pens as required, giving opportunity to answer any queries that may have arisen.

The entry criteria to the study were that the women had attended for the 20 week anomaly scan, this was not only initially intended to access a large cross-section of the population but also to decrease the distress and anxiety that may have arisen through early pregnancy loss. Early access to women who later suffered a loss may have precipitated negative thoughts associated with smoking and loss prompted by the very nature of the study topic, thus giving rise to potential ethical issues in research and participant recruitment. The 20 week scan period proved to be the most appropriate time to recruit women in an environment that would not cause unnecessary stress for either the women or clinic staff. It was designed so that the women would not feel pressured into participating if they did not wish to do so and as the

questionnaires were on display this did not unduly impinge on the midwives' busy workload.

The entry criteria to the study were identified as follows in Table 4.1:

Table 4.1: Entry Criteria.
<p>Women who:</p> <ul style="list-style-type: none">• Were over the age of 16 years.• Had smoked at the onset of pregnancy.• Were a minimum of 20 weeks gestation.• Planned to give up smoking during pregnancy.• Had given up smoking during pregnancy.• Had no known fetal complications.

The following section will discuss the pilot study undertaken prior to the main data collection to ensure validity and reliability of the instrument design.

4.4. The Pilot Study.

A pilot study was undertaken prior to each of the two stages of the study: the questionnaire and the main study involving the semi-structured interviews. Review of the pilot questionnaires will be reflected upon followed by a discussion pertaining to the pilot interviews. Pilot studies are considered instrumental in clarifying and refining the main components of the study. Figure 4.2 illustrates the purpose of undertaking a pilot study prior to commencing the main study. It was decided to leave the pilot questionnaires in the clinics for a week to ascertain initial interest in the study and to test the appropriateness of the questions. The pilot study took place in one of the antenatal clinics as permission had not been granted to utilise a different site

outside of the Trust. In addition it gave the researcher the opportunity to become a more familiar presence with the antenatal clinic staff. A further consideration was that it was highly unlikely the same women would be accessing the questionnaires in the main study as they usually only attend once for the 20 week ultrasound anomaly scan.

Table 4.2. The Reasons for conducting Pilot Studies.

(Adapted from van Teijlingen and Hundley (2001)).

- **Developing and testing adequacy of research instruments.**
- **Assessing the feasibility of a (full-scale) study/survey.**
- **Designing a research protocol.**
- **Assessing whether the research protocol is realistic and workable.**
- **Establishing whether sampling frame and technique are effective.**
- **Assessing the likely success of proposed recruitment approaches.**
- **Identifying logistical problems that might occur using proposed methods.**
- **Estimating variability in outcomes to help determining sample size.**
- **Establishing initial contact with potential research participants.**
- **Collecting preliminary data.**
- **Determining what resources (finance/staff) are needed for planned study/survey.**
- **Assessing the proposed data analysis techniques to uncover potential problems.**
- **Developing a research question and/or research plan.**
- **Training a researcher in as many elements of the research process as possible.**
- **Training students as part of education in research methods.**
- **Convincing funding bodies that research team is competent and knowledgeable.**
- **Convincing funding bodies that the main study is feasible and worth funding.**
- **Convincing other stakeholders that the main study is worth supporting.**

Table 4.2 adapted from van Teijlingen and Hundley (2001) sets out the purposes for undertaking a pilot study and with the exception of referral to

funding bodies corresponds with the reasons given by the researcher for undertaking this study as discussed within this section.

4.4.1. Piloting the Questionnaires.

A total of fifteen questionnaires were completed and returned during the pilot study. Prior to undertaking the pilot study the questionnaires had been shown to colleagues in the researcher's usual place of work within the University and also to the local smoking cessation advisor for pregnancy in order to gain feedback on the relevance of the questions. During the pilot study only English speaking women had completed the questionnaires, so the translated questionnaires were not piloted. Ethical approval for the pilot study had been granted as part of the original application with the proviso that any major changes that became evident would require going back to the Research Ethics Committee for further approval. However, this was not required as the pilot questionnaires were not subject to any major alteration.

What did prove advantageous to piloting the study was in discovering practical issues that had an impact upon the accessing of questionnaires by the women. Placing of the poster advertising the study was relocated to allow for wider access by women while waiting for appointments, which generated greater interest in participating. Also repositioning of the questionnaire boxes proved helpful as they were more prominently displayed serving as a reminder to clinic staff that the study was taking place. The researcher made daily visits to the clinic areas during the pilot study to ensure that any issues were addressed promptly, this was considered helpful in building up a good relationship and cooperation with the staff.

The pilot questionnaires were collated and analysed after a week, a total of fifteen were collected which was initially disappointing but allowed the researcher to gain some experience in using the Statistical Package for the

Social Sciences (SPSS) software that had been decided on to analyse the data and confirm that the questionnaire was fit for purpose. Once the questionnaires had been analysed and the researcher considered that they were appropriate for the main study and that confidence had been achieved in the use of SPSS the pilot study data was no longer required. The data was then deleted from the computer and the questionnaires were destroyed.

4.4.2. Pilot Study of the Semi-Structured Interview Schedule.

Although the researcher had gained previous experience in undertaking semi-structured interviews it was felt that due to the nature of this study it would be prudent to conduct at least two interviews with women to ensure that the design was appropriate for this type of study. It also gave a further opportunity to ascertain the value of the questionnaire. The points raised in Figure 4.2 were considered when undertaking the pilot study of the interviews.

Furthermore, on a practical level the pilot study gave the researcher opportunity to plan a strategy for accessing the women to arrange the interviews. The questionnaire gave the opportunity for women to choose the preferred method of contact, either by post, email or telephone. The two women selected for the pilot interview elected to be contacted by phone as neither women were working at this time so contact was relatively simple. Nonetheless it did raise some issues for the researcher such as deciding when would be the best time to ring women considering many women are working during pregnancy and may prefer an evening call. Women with young families may not be available early evening as this is a busy time with feeding, bathing and bed time. It was envisaged that contacting the younger participants could also prove even more challenging as previous experience of the researcher found that many move house and change their contact

telephone numbers during pregnancy. Consideration had to be given to how many times it was deemed appropriate to ring and leave an answerphone message without causing undue stress for the women. It was decided that after three failed attempts at contact it should be abandoned. The same applied to emails and letters, the two women who were still happy to participate got in touch promptly after contact therefore it was assumed that those who did not respond no longer felt able to participate.

The interview with each of the two women was only undertaken on one occasion to gain an insight into the interview process only as oppose to exploring the outcomes of the smoking experiences of the individual woman. Time constraints of the study were also considerations for not undertaking three interviews on the two women in the pilot study.

The first pilot interview was extremely successful. The woman was very talkative and keen to discuss her experiences and although at the time of the interview it was easy to keep the conversation flowing, large volumes of recordings were amassed which made transcribing a challenge. Following discussion with supervisors and the researcher it was suggested that not all interviews would flow so easily or produce such large amounts of data. This was excellent advice in respect of the second pilot interview, which was far more restrained. However, it was agreed that the overall semi-structured interview schedule with prompts was suitable for this study and so was not altered in any way. To assess for clarity, understanding and relevance the women who participated in the initial pilot study were invited to comment on the process and review their input.

Originally the researcher had considered having the interviews professionally transcribed. On reflection, it was decided against this course of action as personally transcribing the interviews would allow the researcher to read and

re-read the transcripts and become more immersed in the data enabling the emergence of a deeper understanding of the experiences recalled by women. Patience was tested but typing skills improved and memories of each woman could be retained through the transcribing process.

4.4.3. Issues Relating to the Data Analysis.

Large amounts of data were collected from the taped interviews and also field notes including personal memos which needed to be transcribed and then explored for themes that could be coded into some semblance of order. However, the main purpose of the pilot study was to test out the tools that would be used for the main study. For analysis of the pilot interviews the researcher transcribed the interviews into word documents and then cut and pasted by hand to search for emerging themes and ideas. The researcher did not feel competent at this point in utilising the advantages of the available computer software and previous experience had not encouraged the researcher to embrace the technology that CAQDAS could offer to aid analysis of data. Nonetheless, this experience prompted the researcher to be proactive in accessing further tutorial support and guidance into the use of CAQDAS.

Following transcribing of the pilot data it was decided that the use of CAQDAS would be advantageous for the researcher in interviews stages of the study, whereas SPSS would aid the analysis of the questionnaires. It was considered that the amount of data generated would be too large to manage manually and that the use of software packages, such as NVivo, would also have the advantage of the safe storage of data and retrieval would be much quicker with less potential to lose vital pieces of information. Additionally, The University was using NVivo packages at the time of undertaking the study

and as such was deemed appropriate to use this as additional support was available and was readily accessible for both staff and students to use.

Notwithstanding the issues encountered during the pilot study with the lack of knowledge regarding CAQDAS, this proved to be a valuable use of time in preparing for undertaking the interviews in main study. This period of time enabled the researcher to explore and access greater support and training in the use of NVivo. Moreover, it also helped plan a more defined time scale for the data transcription and analysis as it was found to take far longer than initially contemplated. In so much as familiarising with the skills in data analysis, the pilot study also raised valuable issues in the practicalities of collecting the data. Some of these issues have been discussed earlier, for clarity they have been listed in Figure 4.3. The data from the pilot study were subsequently destroyed when it was considered that the purpose of experiencing the interview and transcribing process had been fulfilled.

Table 4.3: Issues to Consider in the Main Study.

- **Regular visibility in the clinic areas:**
To check information is readily accessible to women and the midwives are reminded of the study.
- **When arranging the interview visits:**
Ensure the woman understands the purpose of the visit.
- **Allocating time for contacting women:**
Consider appropriate time and opportunity to respond.
- **Time management of interview days:**
To consider distance between venues when arranging the interview visits.
- **When discussing subsequent visits:**
Whether the woman is willing to take part in further interviews.

4.5. The Main Study.

Following the pilot study which had been undertaken to assess the appropriateness of both the questionnaires and choice of the data analysis packages the main data collection commenced.

The main study commenced with the collection of demographic data by means of the questionnaires. The second part of the main study comprised undertaking semi-structured interviews with women on three separate occasions, at around 28 weeks gestation, six weeks and three months postpartum respectively. This was in order to explore their experiences of smoking, stopping smoking during pregnancy, remaining a non-smoker or

relapsing during pregnancy and the transition to motherhood. It was on this premise that the questionnaire was designed and implemented, the particulars of this first stage of the study are discussed within the following section which will then be followed by detailed discussion of the interviews that were conducted.

4.5.1. The Questionnaires.

The study comprising the questionnaires began on January 21st 2010 following completion of the pilot study. The demographic data collected in the questionnaires included age, parity ethnic origin and information regarding the smoking history and intentions of the participating women. The original intention was to collect this information over a two-month period on both sites. The period of two months was based on the estimated number of women who smoked at the beginning of pregnancy and would attend for an ultrasound scan appointment. Approximately 80-100 women attend for a scan appointment every week at each site and of this number around 25% would have smoked or would still be smoking at this point in their pregnancy. These figures were based upon the statistics furnished by the local Trust for the year 2007-2008. Estimating that the questionnaires could be completed by up to 400 women with a history of smoking during pregnancy, allowing for those women who chose not to participate in the study, it was estimated that 200 questionnaires could be collected during the two-month period. This figure would aim to represent the whole population of pregnant women attending the local Trust who smoked at the beginning of pregnancy. The object of the questionnaires served a dual purpose, firstly in generating demographic detail to inform the subsequent stages of the study and secondly, to access women who were willing to participate in the interviews. However, caution was observed in that the participants were not purely chosen for convenience as previously discussed the research question must

direct the selection. Ultimately, the women came forward of their own volition by completing the questionnaire and including contact details. From these, purposive sampling was employed to select the appropriate participants fulfilling the criteria for the study.

During the collection period of the questionnaires the researcher visited the two sites on a regular basis to collect the completed questionnaires and replenish the stocks of questionnaires, pens and information sheets (a laminated information sheet was also attached to the collection box thus ensuring the information was visible and accessible at all times). A supply of stamped addressed envelopes were also left with the boxes so that women who chose to take the questionnaires away to complete elsewhere were not financially inconvenienced in returning them via the post. Although a small percentage of questionnaires were taken away from the clinic areas only two in total were returned through the post.

Notwithstanding, the wide variation in literature of the response rate using questionnaires did not dampen the enthusiasm of the researcher. However, the estimation of a 50% return of completed questionnaires within the two-month period may have been over optimistic in part, due to the positive outlook of the researcher, achieving 30% on one site and 40% on the second site. As a consequence it was decided to continue the collection for a further month rather than have a suboptimal representation of the population. The data resulting from the completed questionnaires was entered into SPSS and analysed to assess that the women included in the study were representative of the total local childbearing population who were current smokers or who had been smokers at the beginning of the pregnancy. As the questionnaires were self-completed by the women it was not possible to ascertain the social class of this group of women and as such no evidence was collected on the prevalence of smoking in the range of individual social classes that exist in

this population. In retrospect, this may have been an additional factor to have contributed to the quantitative data, insomuch as discovering whether the questionnaires captured data from women of different social classes. However, the questionnaires did inform the study as to whether the women were currently in employment or not. Similarly, no questions were asked in relation to household income as it was considered that this information would not add any value to the findings in respect of the overall aim of the study in exploring the smoking experiences of women around childbirth. Due to the relatively small numbers overall, this information may not have been reliable or transferable.

In total 216 questionnaires were returned, however, nineteen had been incorrectly completed so were excluded. Of the remaining 197 questionnaires 75 had been completed by women who had not smoked at the beginning of pregnancy and as such were excluded from the final analysis. This was a factor that had not presented itself during the pilot study and as such was an unexpected finding. It was also noted that the questionnaires completed by women who did not smoke had all been submitted at one site and may have been attributed to the receptionist, in her eagerness to help had offered the questionnaire to all women attending for the scan appointment. This could be in part attributable to the relatively small waiting room and as such considered ethically equitable to offer the questionnaire to all women as opposed to targeting only the women who smoked. On the other site, although the numbers of completed returned questionnaires were lower the women had the option to take a questionnaire from the box in a less obtrusive environment. At the end of the period of three months it was considered that an adequate number of completed questionnaires had been collected to represent a cross section of the population under exploration and as such the boxes were removed from the clinics on April 18th 2010.

The second phase of the study was the semi-structured interviews in which the women who had previously volunteered to be interviewed were contacted prior to reaching the 28th week of pregnancy. This allowed adequate time for contacting and arranging a suitable date with the woman which was mutually convenient, to her and the researcher.

As the questionnaire collection took place over a three-month period it was necessary for the two phases to overlap to coincide with the interview time frame. If this stage had been left until the completion of the questionnaire collection the earlier respondents would have either gone beyond the 36 week cut-off point or forgotten about the study altogether with a loss of interest in participating further. Arranging and undertaking the interviews was a time-consuming process where time management and meticulous record keeping was of paramount importance for the researcher. The process of contacting the participants to take part in the interviews is discussed in greater detail in the next section.

4.5.2. Contacting Participants for the Interviews.

Contacting women to arrange dates for interviews was quite a protracted time, for although women had volunteered their details some had changed their minds when contacted and others had changed address and telephone number, particularly the younger women. This had been factored into the time schedule as the problem had been anticipated through previous personal experience and advice from supervisors. Once arranged the visits were received well by all the women and held some interest from partners and parents. Hostility was only met on one occasion and that was from the mother of a young girl with significant social issues. The majority of women was eager to talk about their experiences of smoking and pregnancy and did not appear at all disconcerted by the conversations being recorded. The younger women were inclined to be the most enthusiastic and keen to talk

about their experiences to the researcher as a captive and non-judgemental audience. All but one woman were interviewed within their own home for the first interview during the antenatal period. One woman chose to be interviewed at the hospital as it was more convenient for her. In subsequent interviews one young woman was interviewed by telephone as she had moved a considerable distance away since the birth of her baby thus making it impractical to meet face-to-face with the researcher. One non-English speaking woman also chose to be interviewed by telephone for the second and third interviews due to interpretation facilities. It was important for the women to make the choice with regard to where the interviews took place in order to feel comfortable and relaxed, enabling them to fully participate. All the women who agreed to participate in the first interview were also happy to continue with the second and third interview. For women whose first language was not English the use of an interpreter was employed to assist with translation where required.

4.5.3. Arranging and Undertaking the Interviews.

Arranging and undertaking the interviews were a strategically planned procedure. This phase had to commence prior to the completion of the questionnaire collection due to the time lapse between the first and last volunteers to enable interviews to take place at a timely point in the pregnancy. To interview women before 28 weeks had the potential problems of a) the women having not successfully stopped smoking at that point and b) the time lapse between the first interview and the second may be too long and impact on the telling of the story and risk memory loss.

4.5.3.1. Contacting the Participants.

The women were initially sent a letter about the study (PIS) (appendix 3) and a written consent form (appendix 1) as approved by the regional NHS

Research Ethics Committee, and the Research and Development Department of the researcher's local Trust. The women had all consented to participating in a semi-structured taped interview at a venue of their choice before the interview took place. The women were free to withdraw at any time during the study and were asked when each subsequent interview was made to ensure they were still happy to participate.

The interviews spanned eleven months during which time the women were interviewed on three occasions, between 28 and 36 weeks of pregnancy, at around six weeks postpartum and finally between three and six months postpartum. The initial interview reflected the pilot interview schedule as amendments were not deemed necessary. The period between 36 weeks and term was avoided as it was considered to be too intrusive to interview women at this point as they were busy preparing for the birth. Furthermore, the first six weeks after the birth may have again been too intrusive during the initial time of transition to motherhood. It was very important to keep detailed accounts of the arrangements for each visit, for example documenting the dates and number of times contact was made before an appointment for interview was secured. This avoided duplicating telephone calls and was helpful in removing women from the contact list if they did not respond to messages left. Sometimes it was fortunate and contact was made on the first telephone call, which happened more often when a mobile phone number was given. The majority of contacts were not problematic, however, on occasions potential issues were highlighted as discussed in the following section.

4.5.3.2. Issues Encountered when Contacting Participants.

Attention was paid to the issue of confidentiality in cases where the woman did not answer the phone. On occasions it had been the woman's partner or parent who was not aware of the woman's smoking habits. A further problem

which had not been addressed during the pilot interviews was the difficulty with a language barrier if the person answering the telephone did not speak fluent English. However, this issue had been addressed by the women themselves. Without exception they all had a method of either making themselves understood either through a limited vocabulary or by passing the phone to a person in the home who could speak English.

Another issue for the researcher that had not been identified during the pilot study was the appropriate time to call women. In future studies it would be prudent to ascertain such details on the initial questionnaire the women completed. Some women were happy to be contacted at work, but others preferred later in the evening after the children were in bed. If a contact time had been stipulated a lot of time and abortive telephone calls could have been averted. After three unsuccessful attempts were made the woman was not contacted again as it was assumed that she had either changed her mind and no longer wished to participate or had changed the telephone number.

A further dilemma on the part of the researcher was the question of translation. Although funding was available for employing the services of a translator and was utilised on occasion, most women preferred to have a relative or friend to translate for them. Translation by a family member is not encouraged, particularly in suspected instance of domestic abuse or safeguarding issues as the person translating may not be truthful in their interpretation of events (Ribera 2008, Lewis 2007, Ali 2004). However, in relation to this study it was not expected that this type of information would be exchanged and as the women had participated of their own volition the researcher respected the personal choice of translator in this instance.

The number of women who supplied contact details and volunteered to be interviewed far exceeded the requirements of the study. This number was

further reduced to an extent by the inability to make contact and arrange the initial interview. The final number of women selected for interview comprised ten women born in the UK over the age of twenty, 12 women aged between 16 and under 20 years of age and ten women who had been born outside of the UK. Two of the younger women could not be contacted and so did not participate. Three of the migrant women subsequently withdrew before the first interview for personal reasons, one due to a preterm birth at 24 weeks and the other two had a change of mind regarding their smoking behaviour. Women who had volunteered to participate but were not required were sent a letter thanking them for volunteering as recommended by the regional Research Ethics Committee (appendix 9).

4.5.3.3. Timing of the Appointments for Interviews.

The appointments for the initial interviews were staggered to coincide with the expected dates of the babies' birth. The contact telephone number and email address of the researcher was provided to the women in the eventuality that the appointment was not convenient or they wished to cancel, which was factored in to the arrangements to try and reduce any inconvenience for either the woman or researcher. Owing to the staggered appointments the visits involved considerable travelling on occasions as it was not possible to group all the appointments in one area on the same day. Therefore careful planning was required to capitalise on the time available.

The initial interviews were generally the longest, lasting approximately an hour as there was a large amount of background information to cover, such as the smoking history of the women. All but one woman chose to be interviewed in their own homes as this was their preferred setting as being convenient for their needs at that time. The woman who chose not to be interviewed at home requested to attend the researcher's office as she was still working and this was closer and more convenient to attend than her own

home. The interview was arranged to coincide with a routine antenatal visit to the hospital thus avoiding the woman taking extra time out of work.

4.5.3.4. The Subsequent Interviews.

At the end of the first interview the women were thanked for their time and at that point were all happy to continue with the second and third interviews. The researcher arranged to telephone them one to two weeks prior to the anticipated interview date to confirm a suitable date and time. On this occasion all interviews were held in the individual homes, although one of the women over the age of twenty had moved house following the previous interview, all but one of the migrant women remained at the same address and only three of the younger women were at the same address as before. On reflection, interviewing women in their own homes was most appropriate as the women all appeared relaxed and comfortable in their own surroundings. The majority had arranged a suitable time so that distractions were kept to a minimum when visitors or other children would not be expected to be present. However, on one occasion, an interview had to be temporarily stopped as the participant's cat was causing considerable distraction. The ambience of the situation had become disjointed through the interruption, causing some difficulty in continuing with the interview.

When telephoning to arrange the first appointment some of the women required prompting to remind them of the study as it had been some time since the initial completion of the questionnaire. However, all the women remembered on the second occasion and on the final call to arrange the third interview the women who had not relapsed to smoking had greater difficulty recalling the arrangements. The second and final interviews did not all last as long as the first. During the second interview the women were attentive and keen to discuss the last weeks of pregnancy, their birth experience and how

they were coping with their lives as mothers. The women were also eager to discuss the issue of smoking whether they had relapsed or abstained during this period.

4.5.3.5. Recording the Interviews.

All the interviews with the exception of two women were recorded by a digital recorder; one Turkish woman, Zelda, did not wish to have the interview recorded but was happy for hand-written notes to be taken. The notes were then read back to her and translated by her friend to confirm that she was happy with what had been written, on the second and third occasions her husband assisted with the translation at her request. The other woman, Amy, aged 16, had been interviewed on the first occasion in person and this had been audio recorded, however, due to difficult home circumstances she had moved to another town, over 200 miles away and this was unviable for the researcher to undertake. Consequently the second and third interviews took place by telephone and hand-written notes were taken. With the exception of the hand-written interview the women were informed that they could listen to the recording again or read the transcription but none of them took up the offer. The researcher did not stress this point as in reality it would have proved difficult to arrange to visit each woman again to discuss the transcription for accuracy. Therefore in this study accurate interpretation of the participant's story was not carried out in a formal manner but informal member checking was prompted through informal discussion following each interview as the data was collected. As the interviews were undertaken on three separate occasions with each individual participant, once during the pregnancy and twice postpartum, it was possible during the second and final interview to recap on the previous occasion thereby allowing any additional information to be recorded. This also provided a prompt or reminder to the

participant of the previous discussion which supported the continuation of the woman's experiences.

During the interview stage of the study the audio recordings were downloaded onto the computer and transcribed, before being uploaded to NVivo where the preliminary analysis began. The following section will discuss the analysis of data to demonstrate how an understanding developed with regards to the value of using NVivo in this study.

4.6. Analysing the Data.

Prior to the main study comprising the interviews the data analysis arising from the questionnaires was undertaken allowing time to study the demographic data that was subsequently produced. As mentioned earlier in an earlier chapter the software of choice for this phase of the study was SPSS. This enabled the researcher to make sense of the data and to gain some notion of the demographics of the women within the area selected for the study. For example, not only could the data inform the study on certain aspects such as how many women were primigravida or how old they were, but could also give an indication of the support they received in helping to stop smoking. These results helped to build a picture of associated factors in the lives of women which may impact upon their decision to smoke or not during the pregnancy continuum. The following subsection will discuss the qualitative analysis in greater depth as this formed the greater part of the study.

During previous discussions within this chapter the researcher expressed personal reservations with regards to the use of computer software to analyse the qualitative data collected during the interview stage of the study have been alluded to. However, it became apparent fairly early into the collection that this barrier needed to be broken down in order to manage and

analyse the large amount of data that was amassing. A random selection of interview recordings were then checked by an experienced research colleague against the data that had been inputted into NVivo alongside any memo/field notes that had been written by the researcher during the data collection. Parahoo (2006) recommends member checks are included in the analysis to confirm validity and ensure objectivity on the part of the researcher. On this occasion, the member check was made by the aforementioned colleague, although a time consuming task it proved to be a valuable exercise to ensure that the data had been accurately transposed into NVivo and that any additional notes could be added to aid the analysis.

Alongside the data stored within NVivo all the additional notes, transcripts and memos were retained as hard copies with the original data. Due to the issues of confidentiality, the demographic details of the participating women were stored separately to preserve their identity. The women had all been given pseudonyms which were implemented in the transcriptions and subsequently within NVivo. The hard copies were essential in case of computer failure or researcher error when inputting data potentially due to inexperience in using the software. The researcher also found reassurance in the hard copies as comments were hand written on the documents and highlighter pens used to denote particular emerging themes, similarities or differences in the data.

The final analysis culminated with saturation of the complete data collection. Although data were entered as the interviews were undertaken and were read during each stage the final analysis required the researcher to be able to explore the individual stories that were told in their entirety. The experiences of this particular group of women were told over time and collected on three different occasions. To become fully immersed in the data, each 'story' was be analysed individually before examining at the wider perspective. This

method of analysis followed a similar pattern known as the three dimensional space approach as used by Clandinin and Connelly (2000). This method enabled themes to be drawn out of the stories based upon three main elements as illustrated in Table 4.4. This approach allows for flexibility in structuring the emerging themes, whereas other phenomenological researchers advocate a more structured approach when analysing data (Moustakas, 1994).

Table 4.4: Data Analysis - The Three-Dimensional Space Approach.(Clandinin and Connelly, 2000)

- **ACTION- Personal and social**
- **CONTINUITY- Past, present and future**
- **SITUATION- Physical places or the storyteller's places**

A more flexible approach fitted well with the aim of this study in exploring the experiences of women to gain an understanding of the life course of smoking and the transition to motherhood. By becoming immersed in the data and becoming familiar with the content themes could then begin to emerge that resonated with the other interviews. Codes were then assigned to particular features within the text that were in common to individual stories. This resulted in 70 different codes (or nodes) that were then grouped into themes (trees) using NVivo to store the information in a logical format. This information could then be readily accessed and to aid the development of connections between the different categories of data. Initially, it had been envisaged that the themes would be individually pertinent to the data collected at the first, second and final interview. However, this resulted in an

element of repetition and as such it was decided to analyse each woman's three interviews as one continuous narrative. Equally, the same decision was made regarding the three different variants of women as many similar themes were running through so they were also analysed within the whole. The findings emerging from the interviews could not be neatly categorised according to age or ethnicity, although some had different needs in life, the reasons for smoking or abstaining were often noted to be the same in each group. Table 4.5 illustrates the final order of analysis that was decided upon.

Once the decision had been made to analyse all three groups of women and the three interviews as a whole analysis as opposed to separately analysing the nine different elements, the process became a lot simpler to manage and produced more meaningful themes from the codes. The resulting fifteen sub-themes, six themes and three core concepts were subsequently sorted from the 13 categories that were determined as illustrated in Table 4.6.

Table 4.5: Order of Analysis.			
Women over 20 years of age	Women born outside of the UK over 20 years of age	Young women aged between 16 and 19 years of age	
1 st Interview between 28 and 36 weeks of pregnancy	1 st Interview between 28 and 36 weeks of pregnancy	1 st Interview between 28 and 36 weeks of pregnancy	ANALYSIS
2 nd Interview at approximately six weeks postpartum	2 nd Interview at approximately six weeks postpartum	2 nd Interview at approximately six weeks postpartum	ANALYSIS
3 rd Interview between three and six months postpartum	3 rd Interview between three and six months postpartum	3 rd Interview between three and six months postpartum	ANALYSIS
ANALYSIS	ANALYSIS	ANALYSIS	FINAL ANALYSIS

The categories found in Table 4.6 fall under the umbrella of three main core concepts namely social influences, barriers and facilitators and pregnancy, the start of a new life or just an interval. This method of analysis bridges two typologies in which the narratives, in this case the women's stories, are analysed as a whole concentrating on the content rather than the form of narrative and moving across the smoking continuum. Elliott (2005) contends that this preserves the narrative in its entirety which fits well with the purpose of the study in exploring the experiences of women over a specified period in their lives. However, this theory would be well suited if focusing on only one particular experience, whereas, in this study as several experiences had been captured and recorded it was significant to draw out recurring themes.

Table 4.6: Emerging Categories from Data Analysis.

- **Smoking history.**
- **Quitting during pregnancy.**
- **Feelings surrounding pregnancy.**
- **Thoughts around the birth.**
- **Thoughts on motherhood.**
- **Thoughts around smoking postpartum.**
- **Relapse.**
- **Resisting relapse.**
- **Thoughts for the future.**
- **Thoughts on future smoking.**
- **Mental health.**
- **Return to work.**
- **Final thoughts.**

Earlier in the analysis, during the process of categorising the themes it was discovered that despite merging the original groupings there were still a number of themes that would sit comfortably within more than one category and others that did not appear to fit with any. Following further discussion with a Research Associate from the Academic Division of Midwifery, it was decided to cross-check the original criteria for coding and assigning to categories alongside revisiting the original focus and aim of the study (Silverman, 2000). Initially, only two core concepts had been established and it was during the discussions that it emerged that some of the themes related to the background information with the early history of smoking initiation and habits recalled by the women interviewed. As a result a third key concept was introduced to capture the circumstances by which women began smoking. This helped to begin building a picture of what smoking actually meant to these women, before moving on to the experiences during pregnancy. A table

(5.1) illustrating the core concepts, themes and sub themes are to be found in the following chapter discussing the findings from the study.

4.7. SUMMARY.

This chapter has provided a detailed account of the data collection and analysis relating to the study in which the smoking experiences of women during the pregnancy continuum have been explored. The two elements of the study, namely the questionnaires and semi-structured interviews have been discussed independently and how they relate to one another with the intention to give a more rounded understanding of the women affected by smoking at this pivotal period in their lives.

The complexities of undertaking a study of this nature have been critically debated including the practicalities including time considerations in collecting phenomenological data and using a narrative approach in the subsequent analysis. With regard to the demographic data collection by questionnaires, the logistical issues of the collection of these data have also been discussed within this chapter.

The use of NVivo as the choice of CAQDAS has been explored in supporting the analysis of the qualitative data collected, detailing the complex elements associated with this software. Discussion has been incorporated within this chapter highlighting the principles of narrative analysis as an appropriate option for developing an understanding of the essence of the topic explored. (Cresswell 2007, Elliott, 2005). Through the use of narrative analysis the phenomenon as a whole has been explored drawing from it pertinent themes relative to the aim of the study. An emerging picture has developed on the differing perspectives, both positive and negative in relation to remaining a non-smoker or relapsing postpartum from which the three core concepts ultimately emerged from the data. The detail presented in this chapter has

discussed the processes involved when undertaking a study of this nature and the following chapter will proceed with the findings from the study when exploring the experiences of women and smoking through the transition to motherhood.

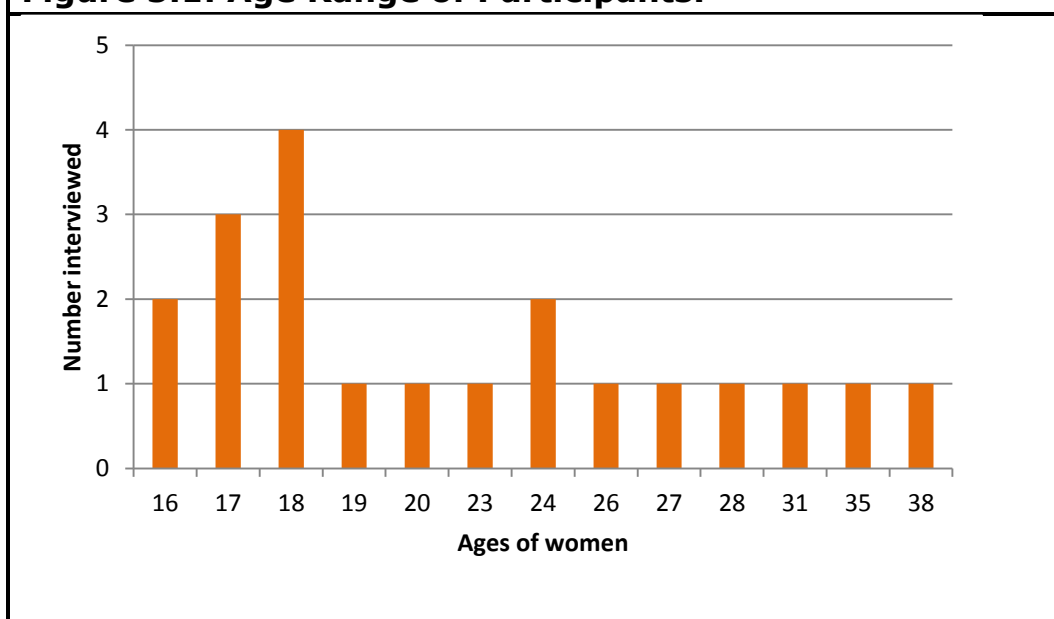
Chapter Five: Findings from the Study - Telling the Story.

5.1. Introduction.

This chapter will first present the demographic detail resulting from the questionnaires before presenting the main themes arising from the interviews undertaken to explore the women's experiences of stopping smoking and relapsing during the transition to motherhood.

The themes that emerged during the qualitative data analysis were aided by Computer Assisted Qualitative Data Analysis Software (CAQDAS). The latest software package has been used (NVivo-9) which has been developed and refined from the earlier NUD*IST package. Narrative analysis was the method utilised as it enabled the complex and diverse phenomena of women to be explored holistically (Daiute and Lightfoot, 2004). The purpose of this study was to explore the smoking experiences of women during pregnancy and the transition to motherhood. The ultimate aim of this study was to gain a greater understanding of the reasons why some women remain abstinent while others relapse to smoking in the postnatal period. Women were interviewed on three separate occasions during their childbirth experience once within the antenatal period, then on two postnatal occasions around six weeks postnatal and three and six months postnatal. The interviews were undertaken with three distinct groups of women – those aged between 16 and 19 years of age, women age 20 years and over and women of any age who were not born in England. The age range of participants is illustrated in Figure 5.1. Greater detail including individual profiles of the women participating in the study can be found in appendices (11, 12 and 13).

Figure 5.1: Age Range of Participants.



From the emerging data, themes were identified and then presented using verbatim quotes from the interviews and annotated notes from the observational field notes taken at the time of the interview. The themes and sub-themes emerging from the data were finally consolidated into three core categories. The emergent core concepts represented three significant aspects along the smoking continuum relevant in the lives of the women interviewed. From this analysis it was envisaged that relevant findings would be highlighted supporting appropriate conclusions to be drawn from the study. Each case has been given a pseudonym to preserve confidentiality and anonymity to confirm with ethical requirements and the Nursing and Midwifery Council (NMC) Code (NMC, 2008). A summary of chapter 5 concludes this chapter.

5.2. Findings from the Questionnaires.

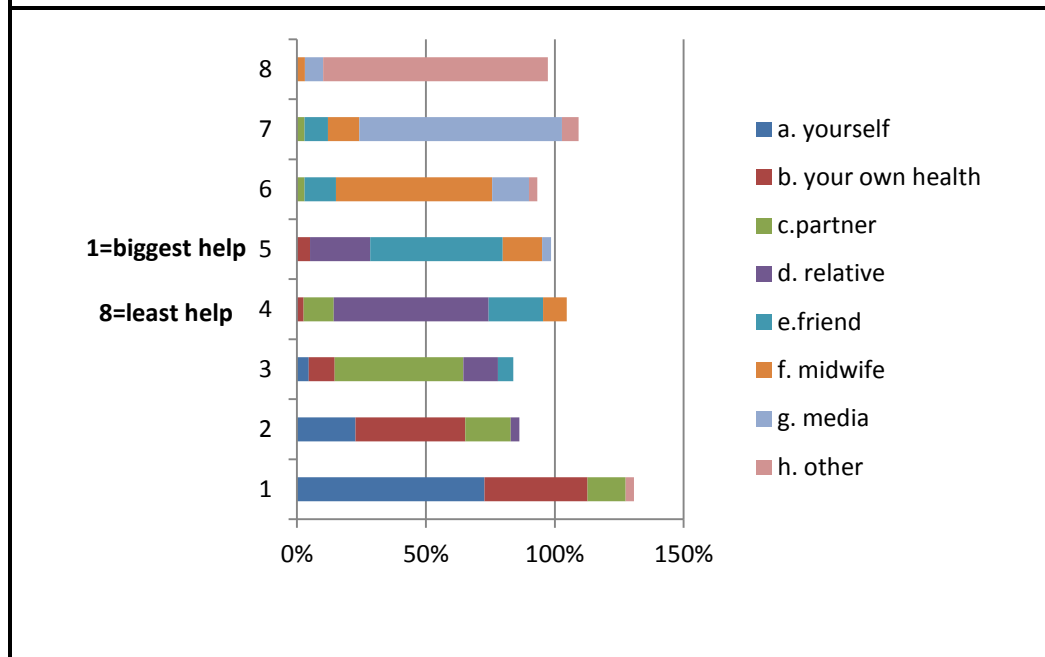
In order to gain an overview of the demographics of the local population of pregnant women who had given up smoking during pregnancy questionnaires were utilised in the antenatal clinics of the local Trust. From the

questionnaires the women were then able to volunteer in taking part with the more depth interviews. Using questionnaires to gain information gave access to a wide and varied cross-section of women which enabled a representative sample to be selected of the population under scrutiny. This factor contributed to the validity and credibility of the study and reducing the risk of bias in selection.

The resulting information from collating the questionnaires demonstrated that the age range of the women was between sixteen to 38 years of age 53.2% were primigravida and the multigravida women had between one and five children. Half the women were employed and 19.7% were married, 51.5% lived with a partner and the remainder classed themselves as single. The majority of women had been born in the UK with only 4.5% migrating to the UK before the current pregnancy. 57.6% had close contact with a family member who was also a smoker. (Appendix 14).

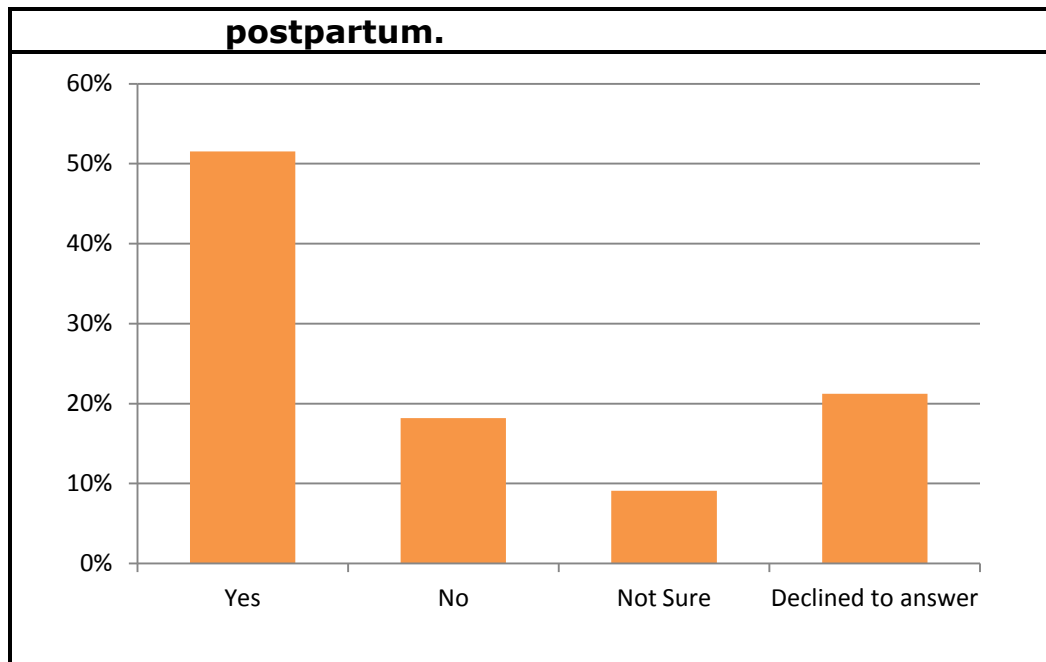
When asked about help with stopping smoking 21.2% said they had help and only 10.6% were supported by smoking cessation services. The following Figure (5.2) illustrates the women's perception of who they considered to be the most help when stopping smoking.

Figure 5.2: Most help when Stopping Smoking.

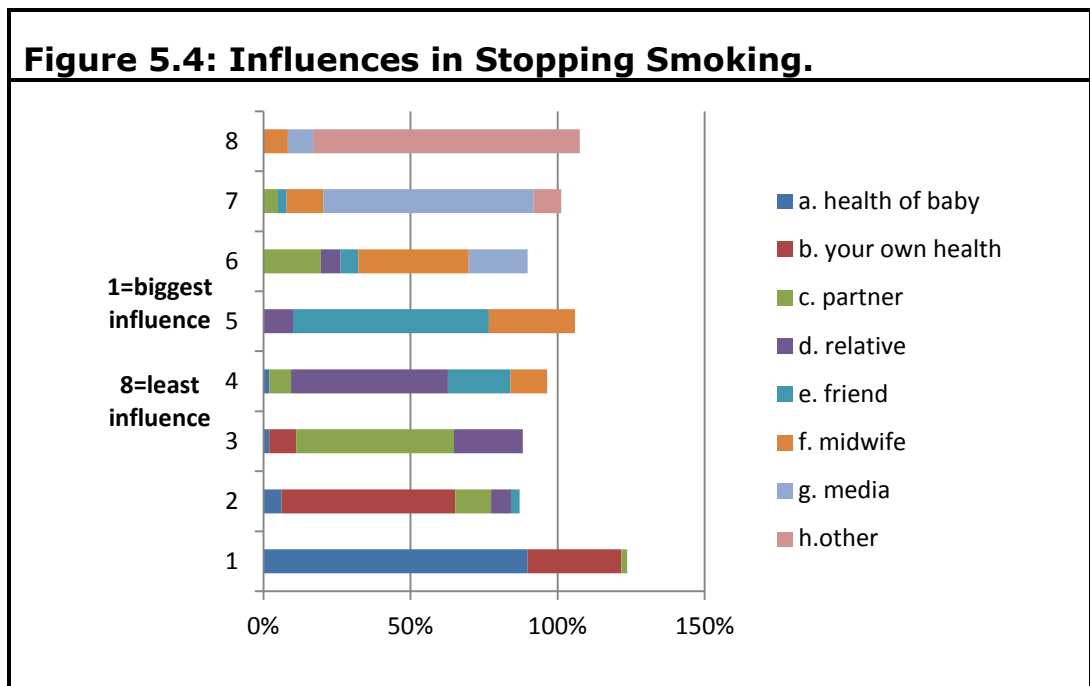


Before becoming pregnant 43.9% of women smoked less than 10 cigarettes per day. The following Figure (5.3) illustrates the intentions of not smoking for women following the birth.

Figure 5.3: Intention to remain a non-smoker



A further area of particular interest were the reasons why women decided to stop smoking, the majority cited the health of the baby as the biggest influence in this decision and their own health less so. This is highlighted within Figure 5.4.



Women were also questioned about their perceived levels of stress with the resulting information that 86.4% considered that they could generally cope well with life and that only a small minority (39.4%) felt that they had become more stressed since becoming pregnant.

The responses to the questionnaire frame the background and give a little insight into the lives of the women who later took part in the interviews. The table of the results of the questionnaires can be found in Appendix 14 contributing to the detail found within this section aiding in the understanding of demographics of these women. The following section will discuss the findings of the women who took part in the subsequent interviews.

5.3. Demographic Findings of the Women Participating in the Interviews.

The women invited for interview were accessed from those who gave contact details with the earlier questionnaires completed at the twenty-week scan appointment. This may not have been a true representation of the population under scrutiny as it is acknowledged this group of women may have been more enthusiastic in participating by virtue of leaving contact details. However, it was considered that for a qualitative study of this nature there was an appropriate cross section of participants to gain an in depth insight into the phenomenon being explored.

The demographic details captured through the completion of the questionnaires included age, marital status, employment status, parity, smoking details and are demonstrated in Appendices 11, 12 and 13. Twenty-seven women in total were interviewed on three occasions once during their pregnancy and on two occasions in the postnatal period. The women were

contacted following completion of questionnaire and comprised women between 16 and 38 years of age, including seven women who had not been born in England. The demographic detail of the women interviewed is illustrated in Table 1. (Appendix 11). This sample was representative of the total number of women who completed the questionnaires. The majority of women were primigravida and were in some form of employment or education as illustrated in the Table 2. (Appendix 12). Marital status was varied with only four participants married; twelve in stable relationships and living together, five had partners/boyfriends but did not co-habit and four with no partner. Smoking history between women differed in both the age smoking commenced and the actual amount smoked per day as documented in Table 1. (Appendix 11).

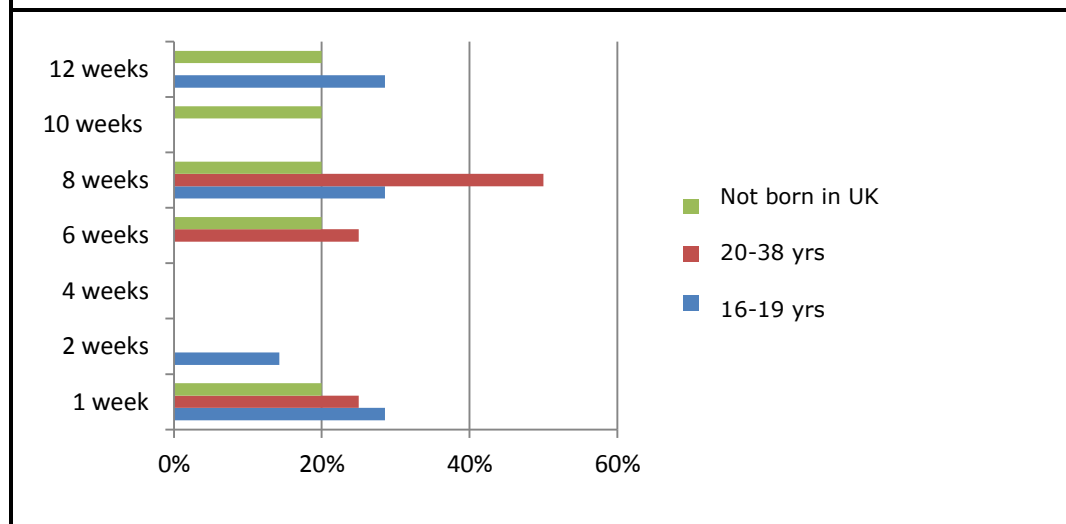
5.3.1. Relapse.

For some women the intention to remain abstinent from smoking was achieved during the transition to motherhood, whereas for others this was not the outcome and relapse occurred.

At the time of the six-week interview eight women had relapsed to smoking, four women aged twenty or over (two of whom had migrated to the UK before the pregnancy) and four women under the age of twenty. When the final interview took place a further four women had resumed smoking. During the first two interviews the women were very enthusiastic to participate in the study; during the antenatal period their pride was evident when discussing their achievements in stopping smoking and the progression of the pregnancy. The participants were aware that the researcher was a midwife and had history of supporting women in stopping smoking as such they appeared relaxed in talking honestly about their experiences. However, at the time of the final interview the women were still keen to discuss the baby but

not so enthusiastic in discussing their smoking experiences. Interestingly, this response was not confined to those women who had relapsed. The women who confidently considered their selves to no longer be classed as smokers did not wish to be reminded of the fact they were once smokers themselves. In reality, the women who did return to smoking were actually still willing to discuss the issues surrounding the relapse. The following figure illustrates the stage at which relapse occurred in the weeks following birth.

Figure 5.5. Postpartum Relapse Figures of the Women Interviewed.



The next section will incorporate the key concepts, themes and sub-themes that evolved during the interviews with the women during their participation in the study.

5.4. KEY CONCEPTS, THEMES AND SUB-THEMES.

The following section will discuss the key concepts, themes and sub- themes arising from the analysis of the semi-structured interviews undertaken by the women participating in the study.

Table 5.1 (page 134) illustrates the three core concepts that were identified as affecting the women in this study as they traversed on their journey from the initiation of smoking, stopping smoking during pregnancy and finally emerging into motherhood, either relapsing or abstaining in the postpartum period. These three concepts were then broken down into further themes and sub-themes by means of an inductive process pertaining to the particular association with their relationship to smoking and adaptation to pregnancy and motherhood. Pertinent themes arising from the concepts were then utilised in organising the findings from the cases to enable a logical sequence of events to be documented for analysis.

The overarching aim of the study was to gain a more holistic view of why smoking features so predominantly in the lives of some women in order to understand more fully the difficulties surrounding stopping smoking and relapsing during the period of child bearing. The first concept emerging from the data comprised the effect of social influences on women's relationship with smoking. Subsequently, the barriers and facilitators implicated during the transition to motherhood in stopping smoking, relapsing or abstaining gave rise to the second concept. Finally, and most significantly the emergence of pregnancy as the start of a new life as a mother or just an interval became the third concept.

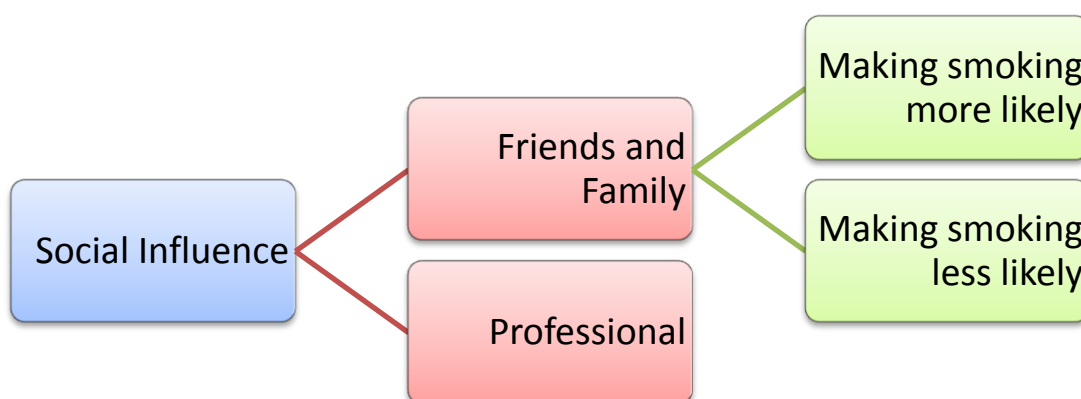
The influence of friends and family in making smoking more or less likely for this group of women was explored. Health professionals also play a part in influencing and supporting women when stopping smoking, to a greater or lesser degree, as illustrated within the excerpts from the women. Furthermore, relapse and abstinence was explored in relation to the influence of social support as this area has received relatively little attention from the views of women's experiences.

For many of the women in the study the discovery of finding themselves pregnant came as a surprise, as pregnancy had not been in their immediate life plans. Very few of the participants admitted to planning the pregnancy, out of the total number of women interviewed only six disclosed that this was the case. Five of the women disclosing that the pregnancy was planned were over the age of twenty, of which two were not born in England and only one woman was under the age of twenty. However, for the majority it was not unwelcome news but nonetheless required some adjustment to their usual way of life. This included sharing the news with significant others in their circle of family and friends, which ultimately had an impact on their relationship with smoking and those with whom they shared the habit. To gain a greater understanding of the deep rooted habit of smoking and the significance for this group of women it was of value to explore their smoking history and what smoking meant to them. The next section will discuss the smoking patterns and influences from the initiation of smoking, during pregnancy and into the postpartum period. The following themes which emerged from the data analysis were developed from the initial core concept examining the effects of social influence on their smoking habits.

Table 5.1. Key Concepts, Themes and Sub-themes.

CORE CONCEPT	THEME	SUB-THEME
Social Influence	Friends and Family	Making smoking more likely
		Making smoking less likely
	Professional	
Barriers and Facilitators	Generally facilitative	Health of the baby
		Breastfeeding
		Self-efficacy/self-belief
		Nausea
		Smell and taste
		Policy changes
	Generally making relapse more likely	Difficulty breaking habits
		Guilt
		Stress
Pregnancy the start of a new life or just an interval	Start of new life	Planning to stop
		Talk of new identity
		Challenge by return to work
	Interval, suspension of normal life	Talk about lifestyle changes

5.5. Social Influence.



Women were encouraged to talk about the history of their smoking during the first interview to help gain an understanding of how smoking became an integral part of their lives and the challenges they experienced on becoming pregnant and being a smoker. The findings resulted from women disclosing their feelings regarding their introduction to smoking and consequent smoking pathway. The input of professional advice and support was broached during the interviews and the impact health professionals had in supporting the women both antenatally and postpartum with smoking cessation. These issues are presented below using the direct quotes from the women interviewed to demonstrate the emerging themes.

5.5.1. Family and Friends.

For the majority of women participating in the study smoking appeared to be the norm and part of a natural progression in life, in the main influenced by family and friends. Moreover, family and friends were not only involved at the inception of smoking for women but were influential throughout all stages of the woman's journey. This influence was found to be not only a positive support in smoking cessation and continued abstinence but in some cases the

reverse was observed in that family and friends had a part to play in relapse for women. In addition, becoming a habitual smoker was often cited as a result of sharing smoking as a common interest with a boyfriend or partner as illustrated in the following quote.

'I was with a guy that smoked and were living together and when he had a cigarette we stood together in the kitchen and I thought' well what do I do now' so it was like..... I'll have one and then it went to two and then when I was on a night out it was just constant. So it built up over time.'

(Claire, age 20, born in UK, 1st interview, not smoking)

Moira recalls falling into the habit of smoking as an association with her boyfriend and encouraged by friends who were already smokers, she subconsciously 'drifted' into smoking without much thought until realising it had become a regular situation.

'I was sixteen and I was at school and my boyfriend at the time, who turned out to be my first husband, smoked and all my friends smoked, we tried it and that was it. It wasn't regular at first and then all of a sudden it became fifteen to twenty a day habit by the end.'

(Moira, age 35, born in UK, 1st interview, not smoking)

Most of the women in the study were influenced and encouraged by friends and family which usually commenced with the occasional experimental cigarette soon becoming a regular habit, more quickly for some than others, with the actual number of cigarettes smoked increased over time. The maximum smoked at one time was predominantly while socialising in evenings and at weekends, usually with friends. The amount smoked ranged from 5-10 cigarettes per day to a maximum of 30-40 per day for one person, the average amount of cigarettes consumed in one day varied between 15 and 20. The following sub-theme recounts how the smoking was initiated for

this group of women and as a consequence made the habit of smoking more likely for them.

5.5.1.1. Making Smoking More Likely.

Before examining how and why women chose to stop smoking during pregnancy it is of interest to look at the start of their smoking history. From the women across all three groups participating in this study it was evident that the majority began smoking during their teenage years with the exception of two women who had migrated to England. One of these women had commenced smoking at the age of twenty-one, influenced by her sister and friends, which followed a similar trend to those who began smoking in their teens. The second of these women did not begin to smoke until the age of twenty-nine following her move to England and had been influenced by her English partner.

This initiation into the smoking habit appeared to be predominantly influenced by family and friends. The following quote illustrates how the woman in particular responded to such influences.

'Yes, well my dad used to smoke roll ups and he actually taught me how to roll a cigarette.'

(Ruth, age 27, born in UK, 1st interview, not smoking)

Moreover, a substantial number of women had lived in an environment surrounded by other smokers and for one in particular this had been a contributory factor in her personal smoking habits. Nicole, age 16, (born in UK, 1st interview, not smoking) offered to roll cigarettes for friends and family to practise the skill:

'Yer, I did, I got my mum's rizla and started rolling and my mum said 'what are you doing?' and I said 'jus' rolling a fag!' So if someone else was smoking I'd say 'jus' let us roll you a fag'.

Nicole also stated that this was also used as a diversion tactic while giving up as she missed the associated routine with smoking 'roll ups'.

Once the initiation of smoking had commenced it soon became a habitual occupation for many before becoming an addictive situation, as was aptly described by the women during the first interviews. School friends appeared to be the main influence in encouraging the initiation of smoking with the earliest starting at eight years of age. This began experimentally, sometimes stealing cigarettes from parents to try. The following quotes illustrate the notion of the social influence encouraged by the availability of cigarettes.

For some women the influence of peer pressure had a great part to play in the initiation into a new life of becoming a smoker. Both the women quoted below rose to the challenge when the opportunity presented itself and were equally encouraged by a peer.

'I think I first tried a cigarette when I was thirteen, mum and dad were out and my friend dared me to try one that had been left in the house. We both tried one and I thought it was horrible! And my mate felt sick!!'

(Marie, age 18, born in UK, 1st interview, not smoking)

Daring each other was just part of the fun without understanding the potential long term implications of that first cigarette; additionally a desire to be part of the peer culture encouraged some women to persist.

'Erm, it's hard to remember when I first started properly, I think I first tried one when I was about twelve with my cousin (of the same age), we dared each other to try one, he took one out of my uncle's pack and we sneaked off to the park to try it. We felt sick and dizzy at first and I

didn't like it.....but soon forgot when the chance came to try again. I didn't want to look stupid in front of my friendsso had another one and it just went on from there.'

(Angie, age 16, born in UK, 1st interview, not smoking)

Although the reality of smoking was not pleasant the compulsion to 'fit in' with peers encouraged the continuation of smoking. Rena either consciously or subconsciously '*dared*' herself to smoke by buying a packet of cigarettes.

'The first time ever I tried one I was twelve, they were the menthol and they were gross. Then when I was in boarding school, some of the other girls smoked and stuff and I thought 'oh hey, that looks cool, I'll try it'. Then I thought to myself, 'I'll buy myself a pack of cigarettes' and they lasted me a whole week!'

(Rena, age 32, Bermuda, not born in UK, 1st interview, not smoking)

Another woman suggested that although she did not feel under direct pressure from peers there was still a sense of wanting to belong, be part of the group.

'Yes, although I wouldn't necessarily say that it was peer 'pressure' nobody forced me to do it, it was more of everyone's doing it, let's have a go' And I am sure that my first cigarette wasn't pleasant, so I don't know what an earth decided me and made me carry on doing it. But I think, yer, not necessarily pressure, but definitely peers, we all had a go at it, go down the park, get a packet.'

(Jacqui, age 31, born in UK, 1st interview, not smoking)

For some women the reason for smoking was a form of rebellion but not always a conscious decision in trying to impress others.

'Yes, but I was always quite good and I didn't skive off school or anything, so smoking was about the only

annoying thing that I did. So I think that was the only reason I did it.'

(Lucy, age 24, born in UK, 1st interview, not smoking)

Additionally, Paula considered this to be a form of response to adolescence with some degree of the 'shock factor' to initiate a reaction from parents, to gain attention as illustrated in the following quote:

'Yes, when my mum found out I was smoking she was so surprised because before at school when they used to do those little no smoking things I used to be so against smoking and all that. So my mum was very surprised, she was like 'I can't believe that you are smoking when you were so against it.'

(Paula, age 26, Portuguese, not born in UK, 1st interview, not smoking)

Paula had initially resisted the influence of others, but eventually was swept into the smoking circle at school.

The influence of peers continued beyond schooldays and into the working environment. However, smoking for some women was seen purely has a social habit, something to do in a group setting, when going out or break times at work.

'Yes, yes, I think there is a sort of social aspect at work; you get all the gossip when you go out to the smoking bit, I don't know, I think they used to think that the others were a bit boring!'

(Jacqui, age 31, born in UK, 1st interview, not smoking)

The previous quote intimated that the effect of peer pressure/influence can persist beyond schooldays was described by Jacqui when commenting that colleagues who did not form part of the smoking clique were considered less interesting than those who smoked.

Additionally, the habit forms part of the regular routine and this can be prove as difficult as addiction when trying to stop smoking, for some it was very difficult to separate the two as Claire discovered during break times at work.

'Yes, when I was smoking we had a set break me and my mate I worked with, we went for our break at a set time and once I thought I don't need my break now, but I did and it messed my whole system up!'

(Claire, age 20, born in UK, 1st interview, not smoking)

Habits go hand in hand with socialising as illustrated in the following quote from one participant who considered smoking as part of daily life before moving to England.

'And obviously in Portugal it is a lot easier to smoke as well, because you were always outside and you always go out with your friends at night time to the café and you have a coffee and a cigarette. It was normal, yes, normal and all of my friends there smoked and so I smoked and I had almost a pack a day sometimes, depending upon the day.'

(Paula, age 26, Portuguese, not born in UK, 1st interview, not smoking)

The influence of peers when socialising appeared to perpetuate the smoking habit as it was considered the norm to share cigarettes during such occasions.

However, not all social influences are negative as the following sub-theme demonstrates.

5.5.1.2. Making Smoking Less Likely.

Family and friends also played a part in making smoking less likely for women and supported them in resisting relapse. For some women the fact that their

partners did not smoke or had given up themselves proved to be a protective factor against relapsing.

'No, not at all! I have thought about it and wondered whether I would still be a non-smoker if Chris had not given up, but no, I do not want to go down that path again!'

(Denise, age 38, born in UK, final interview, not smoking)

The quote in the following theme highlights the influence a partner had on a woman's decision.

'It was 'cos when I had a drink, that's when I always wanted one, wanted a cigarette and as I say because Steve is here with me it just doesn't occur to me, because if he was here always going off for a cigarette every so often, I would sort of sit there going 'oh, I could really do with a cigarette'. And because she was such a grumpy irritable thing after she was born for the first couple of weeks, I think I would have been back smoking again within a couple of days! I think because Steve wasn't smoking. I think I can sit here and honestly say that if Steve was still smoking I would probably be a smoker again now, because she was quite hard work.'

(Tracey, age 23, born in UK, final interview, not smoking)

In addition to partners, work colleagues and friends were also viewed as reducing the likelihood of smoking by supporting and encouraging the women.

This is illustrated in the following quotes.

'Oh, from my partner, definitely. He's like 'oh, it's really good you're not smoking' and people when you're at work 'oh, it's dead good that you're not smoking' Especially other smokers, saying things like 'I wish I could do that' that sort of attitude. I think the support initially was there, and then every so often you will get someone at work go 'I think it's really good how you have stopped smoking and drinking' 'cos there are a couple of people at work who are pregnant who still are smoking.'

(Jacqui, age 31, born in UK, 1st interview, not smoking)

'S'pose my mates did a bit, they kept telling me it was for the baby and that helped. I didn't want to at first but I am glad I have because I know it is bad for babies- cot deaths and all that....'

(Amelia, age 17, born in UK, 1st interview, not smoking)

Cost and reliance on others has also contributed to making smoking less likely once given up as Megan refers to.

'Only that another reason I would not smoke is the cost, I am not working so would have to ask Kev (partner) for money to buy them with and that just isn't fair, especially as he does not smoke himself. That would be selfish.'

(Megan, age 18, born in UK, 2nd interview, not smoking)

For Claire sustained support came from her parents and encouraged her quit attempt with the added financial incentive, additionally Claire did not want to disappoint them.

'Yes, my dad was a smoker for twenty years and then he quit, like I did. When he found out I was pregnant and my mum, they were both very disappointed, but then when I quit they were both very supportive, in fact they said that if I don't smoke from now until Christmas they will give me fifty quid! And I said right ok.'

(Claire, age 20, born in UK, 1st interview, not smoking)

Pre-pregnancy, social influences not only had a great part to play in initiating and maintaining the smoking culture for women but did also encourage and support smoking cessation making smoking less likely. The following theme illustrates the influence of professional support for women who stopped smoking during pregnancy and the postpartum period. Examples of the perceived professional support are highlighted in the following sub-theme.

5.5.2. Professional Support.

The excerpts from the interviews in the previous sub-themes would indicate that women were to an extent influenced by their family and friends with regard to whether they were likely to smoke or not. During the interviews the role of the midwife/health professional was discussed in relation to influencing and supporting women in stopping smoking and maintaining abstinence. Although the women did not always view this support as paramount to their success in stopping smoking, there were some examples of good practice with providing support in achieving smoking cessation as illustrated.

The thoughts and decisions regarding smoking cessation for some of the women interviewed were internal and had not been raised with health professionals. The influence of professional advice was mentioned sporadically during the interviews with the women in the study. Generally the participants could not recall being given advice from health professionals until prompted by the researcher. The advice given ranged from information leaflets detailing the dangers of smoking, brief discussion by the midwife or a doctor and on occasion offers of referral to specialist smoking cessation services. Only three women mentioned actively seeking support from specialist services, one woman sent for an NHS (National Health Service) pack, another had accessed the NHS local smoking cessation service prior to pregnancy and the third woman was referred to the service by her community midwife. However, one woman tried Nicotine Replacement Therapy (NRT) patches without the aid of professional support. The examples of professional input are demonstrated in the following interview excerpts:

'Well, yeah on my own, but my midwife like, she did encourage me, like, spoke to me about it all the risks and that....'

(Louise, age 18, born in UK, 1st interview, not smoking)

Louise as quoted above listened to the advice of the midwife, which was reinforced at each antenatal visit with no additional support, whereas Carina felt she required greater support and accepted the services of a specialist smoking cessation midwife.

'I had to have help, the midwife sent the smoking person round and she helped. I had patches to start with.'

(Carina, age 17, born in UK, 1st interview, not smoking)

In other situations, advice from the midwife was followed up with an information leaflet:

'Well, I went home and thought about it and read a leaflet the midwife gave me. At first I tried for a day without cigarettes, but I just thought about them even more, so decided to just cut down then stop.'

(Megan, age 18, born in UK, 1st interview, not smoking)

One woman was given factual information with accompanying 'tips' for stopping smoking by a doctor and the woman did stop smoking after five months gestation:

'Yes, I became pregnant with my daughter and the doctor asked me if I would be able to stop and I was honest and told him that I wouldn't be able to stop right away. So he suggested that I gradually break it down, to one in the evening one in the morning, break it down to half in the morning and half in the evening and eventually I would stop altogether- which I done. He also discussed with me all the problems, such as birth defects and other

problems. He also explained that babies born to mothers who smoke are more likely to have poor motor skills. I didn't find it easy but I did stop, in my fifth month I stopped.'

(Rena, age 32, Bermuda, not born in UK, 1st interview, not smoking)

The remaining participants all stopped smoking independently of professional advice instead had varying levels of support from partners and other family members referred to in earlier sections. One woman did actually request a cigarette from a doctor in the labour suite during the birth, however, this request was deflected as illustrated.

*'I was a bit stressed out really and a man (doctor) came and I said 'can I go for a fag?' and he said 'Oh no, I don't think so!' and I said' **I just need a fag!**' and he said 'I'll just go and ask somebody' but I couldn't even walk to go and have a fag!'*

(Carrie, age 19, born in UK, 2nd interview, not smoking)

Nevertheless, once home and without the support of family or friends Carrie did lapse initially but support was provided by the midwife and later the SCPHN. Carrie was referred to the local smoking cessation services and with the aid of telephone support and Nicotine Replacement Therapy she successfully overcame her initial difficulties and became abstinent from smoking once again.

'A health visitor came to see me and she asked if I wanted to stop smoking and I said yes but also said that I didn't want to go to a group and sit and talk 'cos I don't really take it in and that and I've got phone help. She phoned me two week after the midwife had bin-health visitor I mean. Then a new leaf lady started phoning me and she sends me nicotine patches, two weeks' worth and then she phones me the following Friday and she speaks to me and asks if everything is going ok and I tell her it is fine. I have gone on to a lower dose of nicotine patch because it

was giving me a headache, but I think I am just going to stay on nicotine patches.'

(Carrie, age 19, born in UK, 2nd interview, not smoking)

A small number of women experienced difficulties coping with motherhood during this period but remained stoical in their decision to not smoke and accepted that these were normal events and were able to cope due to the support they had. However, for other women lack of professional support put them at a greater risk of relapsing and for both of the women quoted below this was the outcome.

'No, I haven't got any support as I am now living in a bed and breakfast while waiting to go into a mother and baby unit. Things didn't work out with my adoptive mother and I need somewhere to live and some support.'

(Nicole, age 16, born in UK, 2nd interview, relapsed)

Carina did have a partner, unfortunately he was struggling with mental health issues and as such Carina felt unable to add to his difficulties with her own concerns:

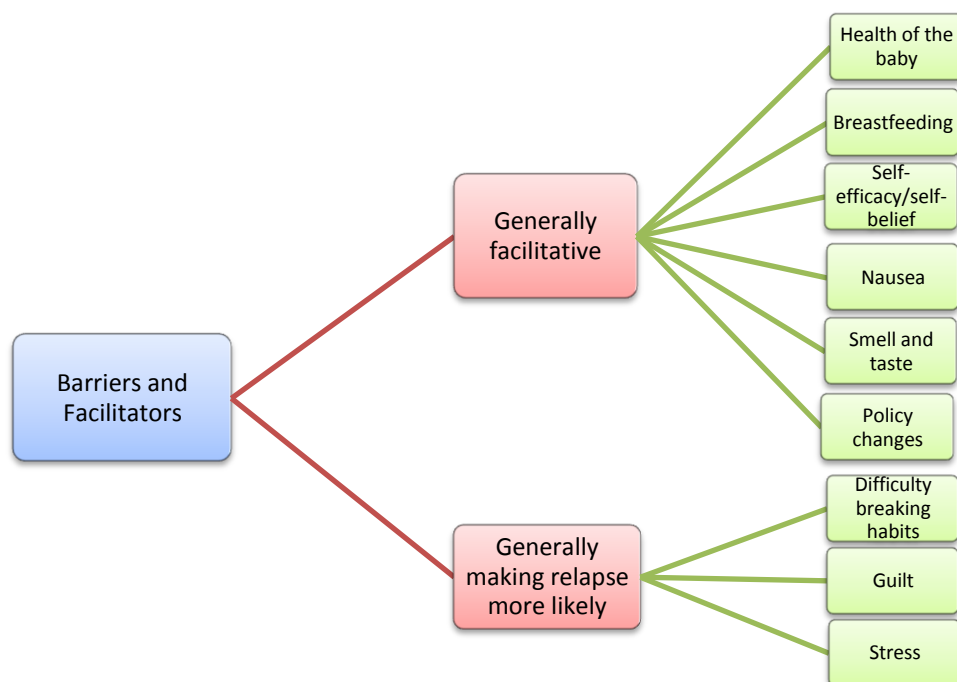
'I am ok, physically I am less tired now, some days I feel a bit down, but not depressed, I have talked to the Health Visitor, she is a good support, I can't talk to my partner about how I feel, because he has his own problems to deal with.'

(Carina, age 18, born in UK, 2nd interview, relapsed)

For these women their coping mechanisms did not appear as strong as some new mothers, however, the social circumstances they were living in were far from ideal, living in temporary accommodation with very little financial stability.

Although social influences and professional support did have a significant part to play in the lives of women and their affinity with smoking, other factors were taken into consideration. The following section investigates the contributory factors along the pregnancy continuum that affected the established smoking habits of women during the period of smoking cessation.

5.6. Barriers and Facilitators.



The transition to motherhood is not always an easy path to travel and the added burden of smoking for some women increases the difficulties to a greater or lesser extent. This section highlights the barriers and facilitators that again contribute to the success or otherwise of smoking cessation and abstinence during pregnancy and the postpartum.

5.6.1. Generally Facilitative.

An interesting factor that emerged was in the fact that the same triggers presented were perceived generally as facilitators to smoking abstinence for most women and yet barriers to others. When talking about what helped quitting or relapsing they mentioned the health of the baby, breastfeeding, self-efficacy/ self-belief, nausea, the smell and the taste. Furthermore, during the interviews women cited policy changes implementing the ban on smoking in public places as a facilitator in supporting and maintaining smoking abstinence for some women.

The health of the baby was one of the main concerns voiced as the reason for stopping smoking during pregnancy and to some extent in maintaining abstinence in the postpartum period. Incidentally, few women cited their own health as the reason for stopping or for continuing not to smoke after the birth.

5.6.1.1. Health of Baby.

As discussed earlier the health of the woman was not taken into great consideration during the pregnancy whereas the health of the baby was one of the main motivations for stopping smoking during pregnancy. Carrie found the concept of stopping smoking particularly difficult, until seeing the baby on the scan she had carried on with her usual smoking habits and not considered the risk to the baby of continuing to smoke. Here she contemplates the dilemma as if thinking aloud:

*'I **WANTED** to do it (pauses and sighs) It was when I saw my scan it made it all real and I didn't want to smoke 'cos of the baby and everything (more sighs).'*

(Carrie, age 19, born in UK, 1st interview, not smoking)

The baby also provided an incentive not to smoke after the birth as one woman stated, the baby cannot choose whether to be in a smoky environment or not, but as a mother she could protect the baby from the effects of smoking.

'Yes, I hadn't been smoking while I've been pregnant, so she is my main priority,' cos she has not asked to be put on this planet, she has not asked to be here so it should be her choice, not me imposing it on her. Yes, she is still my main motivation.'

(Ruth, age 27, born in UK, 2nd interview, not smoking)

For some women priorities altered where smoking was concerned once the baby was born. When discussing a return to smoking the women were aware of the continuing harm to the baby, however, the health of the baby was not a strong enough deterrent to remain abstinent as shown:

'I think it is a bit of everything to be honest with you, more because of him because you are obviously smoking around him you have to think of his health and having to go outside to have one that puts me off. So it does cut me down a lot.'

(Tania, age 28, born in UK, 2nd interview, relapsed)

Although Tania did relapse postpartum she did still consider the health of the baby and avoided smoking around him however this did have the added benefit of reducing the number of cigarettes smoked.

Anna reconciled her smoking habit with the health of the baby in stating that she only smoked when the baby was asleep.

'Oh no, sometimes I have five a day, but never when Tomas is awake. I know it is wrong and I shouldn't but it is too late now.'

(Anna, age 28, Polish, not born in UK, 2nd interview, relapsed)

Concerns for the health and safety of the baby reinforced the desire not to smoke for some women.

'No, I am not smoking; I do not even think about smoking, I don't want to. I don't even have time to think about it and I couldn't leave the baby to go downstairs to smoke, even if I did want to!'

(Paula, age 26, Portuguese, not born in UK, 2nd interview)

Moirira considered that although smoking still held fond memories for her it is something she has left behind for the wellbeing of the baby.

'Only that if I did not have Edward (the baby) I think I would still be a smoker, walking back up that hill made me think, so I cannot say that if I did not have him I would still be a non-smoker- I enjoyed it then- but I am different now, this is a new life- a different life. Also, if I was still married to my first husband I don't think I would have considered stopping while he was smoking'

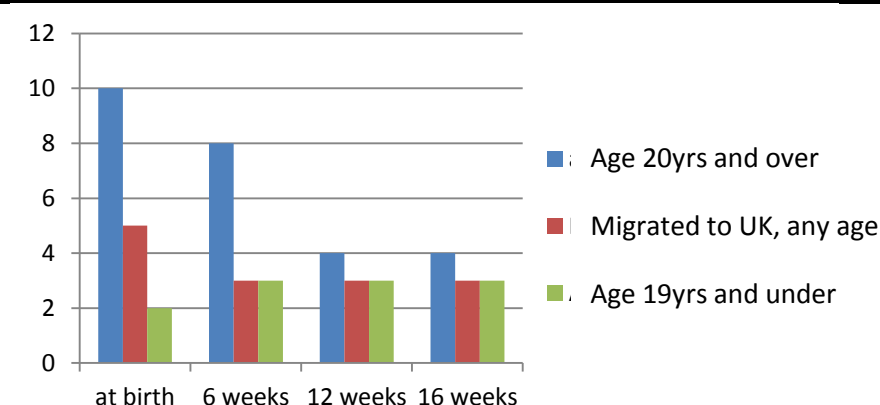
(Moirira, age 35, born in UK, 3rd interview, not smoking)

In the following sub-theme the topic of breastfeeding is discussed, firstly giving an overview of the prevalence and duration of breastfeeding in this group of women and how the duration of breastfeeding delayed or protected against relapse.

5.6.1.2. Breastfeeding.

Of the total number of women interviewed, seventeen commenced breastfeeding, twelve aged twenty and above, five of whom were women who had migrated to the UK prior to becoming pregnant and five under the age of twenty. At the six week interview this figure had reduced to thirteen between the groups overall. (Figure 5.6).

Figure 5.6: Duration of Breast Feeding.



At this stage in the postpartum period none of the women cited stopping breastfeeding as a reason for relapsing to smoking. However, for some the issues of no longer breastfeeding did cause some internal conflict as illustrated in the following quote when discussing triggers and reminders of smoking.

'...but now I have finished breastfeeding, it's like, well, like a trigger in your head and all of a sudden she is not needing it anymore and so it doesn't matter as much, erm so it was after, but I have managed to keep off it.'

(Ruth, age 27, born in UK, 2nd interview, not smoking)

The end of breastfeeding for one woman was linked in her mind to the time of having the first cigarette postpartum.

'Yes, I remember it as clear as day; I had stopped breastfeeding as I say because it was sore and it was hurting and do you know the district nurse (midwife) didn't even come and see me, I thought I was on my own. But anyway, it was a Saturday night and there was a party and I sat outside and had a beer and I felt like a cigarette and yes that was the first one, I think she was about three months of age.'

(Rena, age 32, Bermuda, not born in UK, 3rd interview, relapsed)

Breastfeeding raised further interesting discussion insomuch as it was viewed by some women as a protective factor in prolonging smoking abstinence, whereas the cessation of breastfeeding removes the barrier and '*gives the permission and freedom*' again to make that choice.

'I breastfed so I didn't smoke again until she was three or four months and then I didn't smoke anywhere near her'

(Rena, age 32, Bermuda, not born in UK, 3rd interview, relapsed)

Rena was confident in her ability to not smoke whilst breastfeeding, however, when given the chance to continue breastfeeding, she chose not to in favour of having a cigarette as demonstrated in the following excerpt.

'I do, I do! And I knew then I would start up again and even when the doctor told me I could breastfeed again because the milk hadn't dried up, but I knew I was going to have another one (cigarette) and I knew I was not going to breast feed. I know some smoke and breast feed but not me it is not ok, you can't breast feed your kids and have a cigarette and alcohol and stuff, you just can't do that!'

(Rena, age 32, Bermuda, not born in UK, 3rd interview, relapsed)

Rena was unable to adapt to the new lifestyle changes and reverted to her previous identity where smoking and drinking was an accepted lifestyle choice whilst on the other hand, had acknowledged that smoking was harmful to babies.

Jacqui claimed that time was a protective factor in preventing relapse to smoking as whatever method of feeding was chosen; there were just not enough hours in the day to smoke.

'but even if I was not breastfeeding and was bottle feeding I don't know where you would fit a fag in during the day anyway! It is just not part of my....well because I managed to remove it from part of my daily routine, it's not included in anything. I know some people say it becomes just a habit, it's not a habit anymore it is not part of what I do, so I don't know where I would fit it in.'

(Jacqui, age 31, born in UK, 3rd interview, not smoking)

The excerpts from the interviews have highlighted the mainly facilitative effect of breastfeeding for women when considering the choice to smoke or abstain for smoking during this period in their lives. In enabling women to make such positive choices a degree of self-efficacy and self-belief is demanded. To expand upon these qualities the following quotes illustrate the women's thoughts on their own self-efficacy in facilitating the ability to stop smoking during pregnancy and their adaptation to motherhood.

5.6.1.3. Self-efficacy/Self-belief.

Within this sub-theme is included the thoughts and feelings the women experienced in the early weeks after the birth, taking into account the challenges of adapting to motherhood and protecting the baby from the dangers of cigarette smoke. This was viewed from different perspectives for example not relapsing to smoking themselves or striking a balance in having visitors who smoked but not allowing them contact with the baby if they had been smoking.

Although many of the women still harboured fleeting thoughts about cigarettes and smoking they were determined and confident enough not to break their resolve and smoke. These women had decided that motherhood marked the start of a new way of life for them and had been strengthened by a sense of self-efficacy and belief in one's self. This notion has been an underlying theme running through some of the stories told by women who

had not relapsed to smoking. This has been shown in the following excerpt from an interview with an older first time mother.

'I've always had that (strong sense of self-efficacy) since I stopped, especially if you are out with friends or when we had people round for a barbeque and the football was on, 'cos one of the girls had gone out here to have a cigarette and I just thought.....just for a split second really...I just thought.... Then I kept going back to thinking it is not good for Edward, (the baby) so that is just an extra thing that stopped me doing it.

(Moir, age 35, born in UK, 2nd interview, not smoking)

A strong sense of self-efficacy was evident from the quote above, although Moira found the whole experience of birth quite a revelation. Others found the whole experience more difficult to adjust to as illustrated in the next quote.

'Yes, usually I know what I am doing and where I am going and er, and be confident in who I am and where I am going but this has totally knocked me for six really just....made me evaluate every single area of my life.'

(Jade, age 24, born in UK, 2nd interview, not smoking)

Women with a perceived sense of self-efficacy tended to be more positive in life and found ways to cope with situations as they arose. The following sub-themes recall the comments made by women on this subject.

Self-efficacy for some women was perceived as 'coping' with life situations. Coping with motherhood and smoking affected women in varying ways, for some it made the resolve not to smoke stronger. For example, Moira considered that it did not leave her with a sense of helplessness, admitting that it was a challenge, but one that she could cope with independent of smoking.

'I think I have always been a strong type of person and can usually cope with most things in life; this was just so

different to anything I had experienced before. Looking back, I think I was just determined to cope.'

(Moir, age 35, born in UK, 3rd interview, not smoking)

However, this again did not prevent her from debating the alternative of smoking, had cigarettes been readily available:

'No, not once, for one thing I was too exhausted most of the time, (paused in thought) perhaps if they had been in the house.....no, I know I would not have given in!'

(Moir, age 35, born in UK, 3rd interview, not smoking)

Another participant expressed feelings of strong will in her decision not to consider smoking as part of her life again. Claire had embraced the lifestyle changes that becoming a mother encompassed including that of not returning to smoking.

*'Maybe, you don't think about it, if it is not around you, but the main reason is that I decided I didn't **want** to smoke anymore.'*

(Claire, age 20, born in UK, 3rd interview, not smoking)

The woman in the following quote was given the opportunity to smoke but again resisted relapsing as was determined not to.

'It was just in the caravan, we didn't go out. We waited until he (the baby) went to sleep and then we had a drink, Dan said just go on have one, but I didn't. The people we were with went out for a cigarette, but I didn't, so it was there if I wanted it.'

(Jacqui, age 31, born in UK, 3rd interview, not smoking)

The woman in the following excerpt demonstrates her resolve in the decision not to smoke, although the pregnancy was unexpected, Paula had the self-belief that it was what she wanted to do.

'Erm, at the time I felt a little bit confused with all the pregnancy and that.....but I did know that it was the right choice. So it felt good in the fact that I felt strong, strong, that my willpower made me throw it (cigarettes and smoking) away and I had decided that I would never touch it again and I didn't even feel the temptation of going and buying more which I was really, really surprised. And if someone passed by that was smoking, I would think 'oh, I don't need it!' Even some of my colleagues at work smoke and I never even had the thought of 'oh, I will go with you for a quick one, even though I am pregnant, just one.' I never had that.'

(Paula, age 26, Portuguese, born in UK, 1st interview, not smoking)

The following quote indicates the sense of self-belief in that the risk of smoking is no longer a concern in day-to-day living.

'Only that I am really happy that I am not smoking, that I don't think about it, that it doesn't even enter my head now and it not part of my daily routine anymore.'

(Jacqui, age 31, born in UK, 3rd interview, not smoking)

Self-efficacy and self-belief are would appear to be strong determinants in a woman's decision to stop smoking and remain abstinent. However, the factors supporting the quit attempts were varied and at times beyond the woman's control as illustrated below in discussing the problem of nausea during pregnancy.

5.6.1.4. Nausea.

Many of the women interviewed stated that they stopped smoking because of nausea and sickness resulting in an inability to tolerate smoking whether the

intention had been to stop or not. As a consequence, for some the decision to smoke or not to smoke was denied them as the sickness took over.

'.....with the first I had two afternoons where I felt really bad and that was it, whereas with this one I've had everything sickness, heartburn, indigestion, everything going, all of it and I just couldn't cope with it all or smoking,.....'

(Tracey, age 23, born in UK, 1st interview, not smoking)

Tracey had actually stopped smoking when pregnant with her first child without great difficulty but relapsed when breastfeeding ceased. This time she felt that the choice had been denied her because of the sickness. On the other hand, Lucy, despite suffering from nausea, associated her demise in smoking with other events happening in her life as she was not expecting to be pregnant at that time.

'Yes, I stopped smoking before I knew I was pregnant, yes 'cos it was all a bit dodgy, because my grandfather had just died and he died at the end of January and I had stopped smoking a couple of days before his funeral just because the taste for some reason was making me feel ill (sick).'

(Lucy, age 24, born in UK, 1st interview, not smoking)

Lucy believed that her sickness was attributable to the altered taste of cigarettes which she thought must be somehow caused by grieving in the absence of any other logical explanation as her pregnancy had not been confirmed at this point.

Most women were more accepting of the fact that pregnancy and sickness go hand in hand and that causing cessation of smoking was an acceptable side effect.

'Yes apart from some sickness at the beginning, I think that is what made me stop smoking....the sickness..... it was early into the pregnancy, probably eight to nine weeks as I was feeling so sick.'

(Denise, age 38, born in UK, 1st interview, not smoking)

'Very early, I think at about seven weeks, I was really sick, I didn't realise I was pregnant and thought I had a bug, but even the thought of smoking made me feel sick.'

(Angie, age 16, born in UK, 1st interview, not smoking)

Angie had also attributed the sickness to other causes as similar to Lucy quoted earlier and other women she had not been planning a pregnancy at this point in time. Sickness was also occasionally attributed to the smell of cigarettes; the following theme exemplifies this notion.

5.6.1.5. Smell and Taste.

The smell and the taste of cigarettes proved to a protective factor in not smoking during pregnancy. Furthermore, for some women associations with the smell of cigarettes and thoughts of the taste remained a preventative factor long after the initial sickness had subsided. This appeared to be a major contributory factor for some women in remaining abstinent from smoking during pregnancy and into the postpartum period.

'Apart from the sickness, I can't stand the smell or the taste, I know now it is bad for the baby, I was lucky with Callum (previous child), he was born early but he is ok now.'

(Caitlin, age 18, born in UK, 1st interview, not smoking)

The smell was also seen as a protective factor when associated with other smokers beside the woman herself, for Lucy, the smell was even offensive when her partner had been smoking.

'Well it was only a couple of days before I found out and I realised that was why they tasted bad.....So I don't really smell it until he comes in and it is on his clothes and I ask him to just take his jacket and that off and wash his hands, the smell, it's the smell.'

(Lucy, age 24, born in UK, 1st interview, not smoking)

The abhorrence of the thought of smelling like a smoker was also a great incentive and as such was mentioned by several of the women interviewed.

'And it was just the thought that if I hadn't smoked for a while and somebody walked past that had had a cigarette and I could smell them and that kept me going as well. I thought I don't want to smell like that.'

(Moir, age 35, born in UK, 2nd interview, not smoking)

The smell and the taste continued to be a protective factor for some of the women following the birth as illustrated in the following excerpts from the interviews. The smell of cigarettes that aided smoking cessation in the antenatal period appeared to extend into the postnatal period, again providing incentive to remain abstinent from smoking along with detaching themselves from the smoking environment.

'Yes, obviously not the taste as I haven't had one but the smell, I still cannot bear the smell..... When I was still pregnant and John smoked, he smoked in the kitchen with this door closed and the back door open, but now that she is here he is not allowed to smoke in the house, so he is outside. I'm really hoping not to smoke again because I really don't like the smell. Even if people aren't smoking around you, you can tell they are a smoker. I can't believe I used to smell like that and I didn't know. On their hair and on their clothes, so I am really hoping not to smoke again.'

(Lucy, age 24, born in UK, 2nd interview, not smoking)

The smell of cigarettes had also been associated with continued feelings of nausea and that in itself provided adequate incentive not to smoke.

'Yes, definitely. I have always had firm views anyway, when I used to smoke and had my niece and nephew round I never used to smoke when they were here, never had a fag then. People are more aware of these things now and because I used to smoke they don't just think I am being difficult. The smell of it and things like that still make me feel sick, so that is a good thing.'

(Jacqui, age 31, born in UK, 2nd interview, not smoking)

In addition to the aversion to the smell themselves, some women considered protecting the baby from the smell was a major consideration as Marie described in the following quote.

'No, I have not even had a drag! It still smells horrible to me and dirty, I don't want Lacey (the baby) smelling bad or being ill.'

(Marie, age 16, born in UK, 2nd interview, not smoking)

Tracey, while reminiscing on smoking before pregnancy also considered the smell and as a result dismissed smoking to the point where the smell of cigarettes no longer held the appeal it once had.

'But I think the appeal was more of sitting in a pub and then having a cigarette. But we have not actually....well I think it was more the idea.....I have no desire, no desire at all to have a cigarette, or the smell. The smell of it doesn't do anything for me or anything so that is quite nice. I have quit before, but never to that point, you know, when the smell doesn't do anything for me.'

(Tracey, age 23, born in UK, 2nd interview, not smoking)

Interestingly, whereas the smell of cigarettes protected some women from smoking the lure of the smell remained a temptation for others however, the health of the baby still remained paramount.

'I think about it sometimes, especially when my partner is smoking outside and I can smell them (cigarettes) I sometimes think I would like to do that again, but I won't I have baby to care for. I don't want to have smoke all over me or her to see me smoke.'

(Petra, age 25, Polish, not born in UK, 3rd interview, not smoking)

The smell may have been enjoyable for some women, nevertheless the desire to remain abstinent took control.

'And now when I smell my friends, well sometimes you get the odd whiff and think 'mmm, that smells sort of nice' and then you just think sometimes er no that is just disgusting!'

(Jacqui, age 31, born in UK, 3rd interview, not smoking)

On the flip side, the smell of cigarette smoke was a trigger for one women and it was an almost automatic reaction to have a cigarette in response to the smell.

'It was just automatic, really. Well, actually, to be honest with you, I think it was when I went out to get him a dummy actually and when I went outside I could smell smoke so I just went and got one and smoked it.'

(Tania, age 28, born in UK, 2nd interview, relapsed)

The dislike for the smell also contributed and reinforced the decision not to smoke for Angie with the memory of the sickness experienced during pregnancy still very dominant in her mind.

'Well it just isn't an issue, I hate the smell now and the thought of smoking reminds me how sick it made me feel. Nobody around me smokes, it is pointless, it costs money, smells and is so harmful, I think everyone should stop, I never ever want to smoke again and that's it!'

(Angie, age 16, born in UK, 3rd interview, not smoking)

The smell of smoke appeared to be a strong influence in the thoughts of women when considering the reasons for not smoking. The wider societal influences also impacted upon the smoking habits for women who were used to socialising as demonstrated in the following sub-theme.

5.6.1.6. Policy Change.

The ban on smoking in public places aided the facilitation of smoking cessation for the women interviewed. Prior to the ban women had enjoyed the association of having a cigarette with a drink while out in company. Smoking had begun to lose its appeal due to only being allowed to smoke in designated outdoor areas. The views of the women interviewed indicate that the ban did impact on their smoking behaviour as a result of not being able to smoke while socialising in Public Houses.

'It was 'cos when I had a drink, that's when I always wanted one, wanted a cigarette'

(Jacqui, age 31, born in UK, 3rd interview, not smoking)

..... It was difficult you know...the idea of not smoking and having a drink, you know, the two go hand in hand, don't they?'

(Ruth, age 27, born in UK, 3rd interview, relapsed)

Paula also added:

'It is better for my pocket, it is better for my health, so even socially, you can't smoke in pubs, you can't smoke in restaurants and you have to go outside, so you are not actually socialising when you smoke because you have to go away and have a cigarette, so I think that helps a lot.'

(Paula, age 26, Portuguese, not born in UK, 3rd interview, not smoking)

For these women the allure of smoking had diminished as going outside alienated them from others and smoking alone no longer held the same attraction for them. This section has mainly considered the factors

expressed by women that helped facilitate the move away from smoking and towards maintaining abstinence. In the following section the issues that impacted upon the ability not to relapse are explored.

5.6.2. Generally Making Relapse More Likely.

The intention to remain a non-smoker was of importance for the majority of the participating women; however, the reality of not relapsing was not always achievable. For a few of the women the habits associated with smoking were deeply ingrained and as such were too difficult to resist, however, some women did consider this and were able to overcome their thoughts and not succumb to temptation. Feelings of guilt and stress were also cited as barriers to successfully achieving the initial aim of remaining non-smokers.

The following sub-themes expand upon the barriers faced by women which may have made relapse more likely for them.

5.6.2.1. Habit.

Once again the association between alcohol and smoking was raised. One woman discussed the risk of relapse and considered as this had been such an ingrained habit that it potentially posed a risk when having a drink.

'Yes, I feel really well and we have been on our first holiday to Wales. We had a really good time as the weather was nice for the first couple of days then it got really cold and I did have a drink then 'cos remember I said to you that drinking would be the thing that.... And I didn't have a cigarette!'

(Jacqui, age 31, born in UK, 3rd interview, not smoking)

In the following quote Louise considered the difference between the urge to smoke and the unconscious decision to actually have a cigarette, triggered by past associations:

'I wouldn't even really say I need one, it is just habit, just something to do really. Sometimes I think it is when I have a drink or something like that and I think, 'oh, I'll have a fag' but it is much as before really. It is not as if I sit here and say 'oh I really need a fag' or anything like that'.

(Louise, age 18, mother of twins, born in UK, 3rd

interview, relapsed)

Tracey also considered that although the memories of old habits remained, relapse was prevented and made possible by the support of her partner as discussed in the following excerpt.

'It was 'cos when I had a drink, that's when I always wanted one, wanted a cigarette and as I say because Steve is here with me it just doesn't occur to me, because if he was here always going off for a cigarette every so often, I would sort of sit there going 'oh, I could really do with a cigarette'. And because she was such a grumpy irritable thing after she was born for the first couple of weeks, I think I would have been back smoking again within a couple of days! I think because Steve wasn't smoking. I think I can sit here and honestly say that if Steve was still smoking I would probably be a smoker again now, because she was quite hard work.'

(Tracey, age 23, born in UK, 3rd interview, not smoking)

A return to old habits was a risk for the return to smoking in the postpartum period as illustrated in the following excerpt.

'Well, I don't really know how it happened, I did not think 'I am going to smoke' it just seemed natural at the time, I think my guard was down, I was relaxed, my family had gone, the baby was asleep and I went outside to talk to my partner when he went out to have a cigarette and I just did. I thought I am not doing anyone any harm.'

(Anna, age 28, Polish, not born in UK, 2nd

interview, relapsed)

The knowledge that smoking is no longer considered an acceptable habit within society and in addition, is harmful to the health of the baby contributed to feelings of guilt for the women interviewed. These feelings were strong enough to deter some women, but not all from relapse. These thoughts and feelings are expressed in the following sub-theme.

5.6.2.2. Guilt.

All the women in the study without exception acknowledged the dislike of smoking since giving birth, even those who had relapsed. Those who had relapsed still harboured thoughts of guilt regarding their smoking habits, but that was not a strong enough emotion to remain abstinent.

Guilt featured quite strongly when women were discussing either actually relapsing or imagining the result of relapsing, the following excerpts demonstrate the feelings these women experienced. The first woman had not relapsed but felt that her feelings of guilt somehow protected her from the risk of relapse.

'You can't know how let down I would feel if I had one, all that years' hard work gone in an instant.'

(Moir, age 35, born in UK, 3rd interview, not smoking)

Another view was that the baby itself was not only a protective factor but a cause for the guilt as illustrated:

'It was just one little puff that's all! And guilty, I felt really guilty, because of the baby, I thought, if he had been here I would never had done it.'

(Claire, age 20, born in UK, 2nd interview, not smoking)

Once again the baby is the cause or excuse for guilt:

'Felt a bit rough actually, on my chest. Yes, but I did feel guilty, the first time....but then I thought – I gave up for her and as long as it is not affecting her, it's my choice and if it's not bothering her, so that's how I feel about it. Well, if she was awake I wouldn't even contemplate it; it doesn't even cross my mind. I can cross somebody in the street with a cigarette on and it doesn't bother me at all.

(Ruth, age 27, born in UK, 3rd interview, relapsed)

For one woman, Anna, returning home from hospital was quite an ordeal for her and to smoke with her partner relieved the anxiety and helped regain a sense of normality. However, this was not without some repercussions of guilt emerging.

'Afterwards I felt bad, guilty, I should not have done that....but I did.'

(Anna, age 28, Polish, not born in UK, 2nd interview, relapsed)

Her dilemma remained as follows:

'I am happy when I am smoking, but I am not happy to smoke'.

(Anna, age 28, Polish, not born in UK, 3rd interview, relapsed)

Alongside guilt, some women also considered stress as a factor in the relapse process and this is illustrated in the following sub-theme.

5.6.2.3. Stress.

In this study, stress was cited as a reason to smoke for some women, particularly in the younger age group. However, one of the older women, Tania, age 28, who had suffered bouts of depression since the birth of her stillborn baby four years prior to this pregnancy, also cited stress as a trigger for her smoking habits. On further investigation, despite her age, her

demographics matched many of those in the younger population interviewed, having lived a somewhat chaotic lifestyle.

'So as soon as I found out I cut down to one a day, but then it crept up to three a day, so I stopped and then I just recently started again, because I was stressed.....And as I said that was quite stressful as well. I was having problems with my partner and that and I had to get out' (fleeing domestic abuse).'

(Tania, age 28, born in UK, 1st interview, relapsed)

In some of the interview excerpts the women mentioned stress but did not always describe it as being linked to smoking.

Despite citing stress as the reason for needing to smoke, the younger women could not clarify their understanding of the meaning of stress; it was a word used collectively to describe issues happening in their lives of which they considered they had little control over. The two following excerpts are from young women who smoked as a distraction from their perceived stress however, they were unable to identify any benefit from smoking as the stress continued.

'Oh...just full of stress, 'cos loads of stuff has been kicking off between all my mates and that, falling out and everything, I don't know what it was..... '

(Nicole, age 16, born in UK, 1st interview, relapsed)

It would appear as illustrated in the quote below that stress was an umbrella term to put onto life events that they either did not understand or could cope with at that point in their lives.

'I don't know why (I smoked). Everything was trying to get together, packing everything to move from that house to this, cleaning, everything just stressed me out.'

(Carrie, age 19, born in UK, 2nd interview, brief lapse)

In contrast, Marie does link smoking to an extremely stressful incident. For this young woman 'stress' from her boyfriend caused her to smoke more heavily as he did not feel ready for fatherhood and wanted the baby aborted:

'Yes, 'cos I kinda knew I was pregnant, but I was going through a lot of stress at the time where like his dad, he knows all about him (scan revealed the baby was a boy) but does not want to have anything to do with him. So I was going through a lot of stress and that and he was telling me to kill (abort) him and all that but I can't face doing stuff like that. So I don't feel like sticking around the mad one and all those mad ones. So I quit smoking for that reason but when he started again telling me to kill it I couldn't handle it and started smoking heavily again'.

(Marie, age 16, born in UK, 1st interview, not smoking)

However, during the interview, Marie could not assimilate the fact that her smoking more heavily would increase the risk of the baby dying in utero despite deciding against undergoing a termination of the pregnancy, because she could not contemplate 'killing' the baby.

Stress was also quoted when discussing relationship difficulties postpartum and given as a cause for relapse.

'But you know what the reason I got started again, was the father he used to stress me out a lot, he would stress me out and I thought I just need to go and have a cigarette. 'If I don't put something in my mouth I am going to say the wrong thing to him.' And that is basically what it was he would get me upset and I had to have a cigarette.'

(Rena, age 32, Bermuda, not born in UK, 3rd interview, relapsed)

For one young woman, Louise, mother of twins, stress was precipitated by a lack of communication with the midwives when in early labour.

'Yes, I did, until like I say I was in slow labour (sounded disappointed) they said no pain....I was in pain and they wouldn't give me nothing for the pain. I couldn't walk, I couldn't do anything, I couldn't sleep and I was getting stressed....so I did have a few cigarettes then... I did have a few.'

(Louise, age 18, mother of twins, born in UK, 2nd interview, relapsed)

Alternatively for others it was considered that smoking was their coping mechanism for daily living and as such relapsed to smoking in the postpartum period.

'I suppose so; perhaps I was not coping as well as I thought, just trying to get through the day.'

(Carina, age 17, born in UK, 2nd interview, relapsed)

Similar feelings were expressed by the young women in the following quote when discussing smoking as a coping mechanism.

'No, I have been smoking 'cos I am really stressed. Things were bad at home so I had to smoke and now it is still bad and smoking helps me take my mind off things. I know smoking is bad for you and the baby, but I can't help it. It helps me cope.'

(Nicole, age 16, born in UK, 3rd interview, relapsed)

On the other hand, one of the older women had actually debated the meaning of stress relief in relation to smoking and concluded:

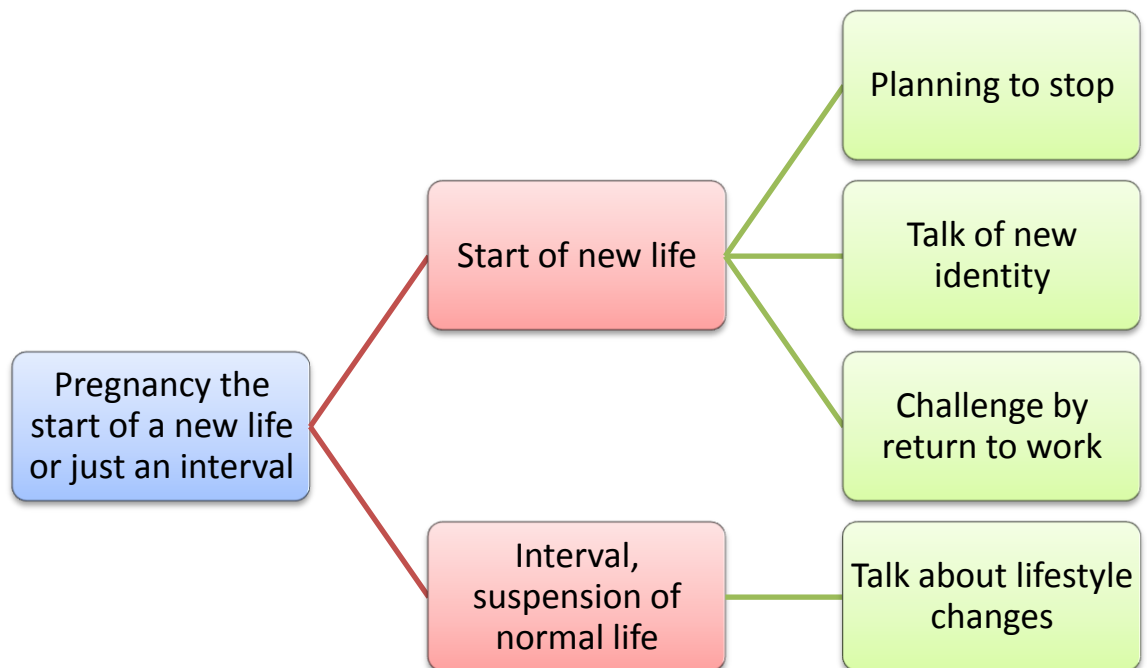
'Yes, I can remember if anything went wrong that you classed as stress you reached for a cigarette straightaway and you think that makes you feel better. I don't know why I didn't think of it before but there are hundreds and thousands of people dealing with stress who don't have to reach out for a cigarette to deal with it'.

(Moir, age 35, born in UK, 3rd interview, not smoking)

Moir used this argument in rationalising with herself as to the merits of smoking not being a stress reliever. However, the younger women when discussing stress and the need to smoke considered this to be an acceptable situation at that point in their lives.

The factors documented in the earlier sections surrounding the reasons for stopping smoking during pregnancy and remaining abstinent in the postpartum period have been influenced mainly by external forces in the lives of women. The final section of the findings explores a major issue for these women, the internal considerations that signified meeting a crossroad in their lives.

5.7. Pregnancy, the Start of a New Life or Just an Interval.



On first discovering that a woman is pregnant a myriad of thought processes begin to form, the decision to stop smoking is one of these thoughts as discussed by Jacqui (page 176) Pregnancy presented the ideal time for stopping smoking for reasons discussed in earlier chapters of this work. This decision may have been welcomed as the start of a new life for others it presented just an interval in which to pause usual activities such as smoking. The views expressed by the women interviewed regarding the changes affecting their lives are illustrated in the following sub-themes.

5.7.1. Start of a New Life.

One of the most significant and exciting findings emerging during the interviews was the concept of a new life. The women who successfully stopped smoking during pregnancy and had remained abstinent during the postpartum period all alluded to pregnancy being the beginning of a new life.

They considered that becoming pregnant and the transition to motherhood was the start of a new phase in their lives and the persona of the woman who smoked was fading out of existence.

The woman in the following quote was so determined in her belief in starting a new life tried to erase any memories of ever having been a smoker. This was highlighted during the final interview visit.

'Yes, in terms of smoking, yes, I really don't think of it. If I had to I don't even think of myself as a smoker anymore I even have to think.....did I smoke....did I ever smoke?'

(Paula, age 26, Portuguese, not born in UK, 3rd interview,
not smoking)

Some of the women interviewed had already noticed a change in their smoking habits prior to becoming pregnant. The following sub-theme expands upon this illustrated by the excerpts from the women.

5.7.1.1. Planning to Stop.

Regardless of the length of time a women had smoked or the amount smoked it is of interest to note that almost all had noticed a decrease in the number of cigarettes smoked per day prior to the pregnancy being confirmed. For some this had been an intentional decision to reduce the number of cigarettes smoked per day purely because they did not wish to continue smoking in the same fashion long term. It was not explicitly expressed that this was for the benefit of their own health, but that *'they had just had enough of smoking'* (Jacqui, age 31).

For example, one woman who did plan to become pregnant had decided that smoking was no longer to be part of her life, but was unable to stop completely until 16 weeks gestation:

'Well, before I became pregnant, I started to cut down and got to 5 per day, I had help from the Health Centre.'

(Zelda, age 28, Turkish, not born in UK, 1st interview, not smoking)

Zelda spoke very little English but was very keen to participate in the interviews as she felt very strongly about giving up smoking when pregnant.

'When I lived in Turkey and then when I first moved here, I could smoke 20 cigarettes a day.....I knew this was wrong, but it was just something we did....it was the usual....'

(Zelda, age 28, Turkish, not born in UK, 1st interview, not smoking)

Although Paula's pregnancy had not been planned, she had already decided that smoking was no longer to be part of her new life in England as she describes here:

'When I came to England, I thought no, I am going to stop, and then I start having less and less and less. Then I only used to smoke at work, three or four cigarettes a day that was the most. I would smoke a little bit more on a Saturday night if I went out, I would have one or two more but that would be about it. I was trying already to stop, yeah, and then when I found out I was pregnant, I quit!'

(Paula, age 26, Portuguese, not born in UK, 1st interview, not smoking)

Although the reasons for cutting down in preparation for stopping smoking could not be easily explained similar patterns are noted in that this was a gradual process for some women with the occasional lapses when socialising.

'Yes, I used to smoke only occasionally, no... well... yes, I smoked about 5 per day when I became pregnant and then,(pause) but I had already gone through a lot of years cutting down, so I would say at my worst I would

was smoking probably about 15 a day and thenin the 2 years before I became pregnant I had been trying to stop erm, but just managed to cut down to and had got to around to usually 1 a day but then at the weekend, socially I would go out all weekend and would smoke all weekend, you know, basically about 20 a day so.....'

(Jada, age 24, born in UK, 1st interview, not smoking)

Pregnancy instigated a new phase in the lives of the women and caused reason to explore the concept of what the psychosocial effect may have for them.

5.7.1.2. Talk of a New Identity.

Becoming a mother alters all aspects of a woman's life, one in which you have different responsibilities to consider for example a stable home life, a partner and above all the responsibility a child brings. Many women embrace this new role and look forward to this stage in their lives, one in which smoking is no longer a part of. In the excerpt below Jada considers that smoking was part of her makeup associated with youth and to stop smoking altered her identity to a position of responsibility, that of a mother.

'Er, I think in all it was a transitional period and for the few days that I did smoke it made me feel guilty and also it was just a transition between who I was then, a young smoker and free, to being someone who was responsible for a child. So once I stopped I felt that that was my first responsibility for that child.'

(Jada, age 24, born in UK, 1st interview, not smoking)

Conversely, the sense of resuming the old identity revolved around being a couple, For one woman, Anna, returning home from hospital was quite an ordeal for her and to smoke with her partner relieved the anxiety and helped regain a sense of normality.

'Well, it was quite soon after coming home from hospital. I had been in for over a week and I had been very anxious all the time in there, then we came home and I felt very tired, but relieved as well. I didn't feel right; it felt strange to be at home with a baby. My partner had a cigarette and offered me one and as I started smoking it I felt better....relief..... yes, it felt more normal, me and my partner, the baby was in another room and it was just the two of us and it felt right.'

(Anna, age 28, Polish, not born in UK, 2nd interview, relapsed)

The consideration of identity was an important factor in the lives of some women during pregnancy in which they began to see themselves becoming a different person, taking on new roles and responsibilities.

Paula also considered that resisting relapse was no longer a problem now that she has moved on in life and left the risk of smoking behind in her old life.

'Maybe, I just don't feel the need to smoke.... that is left behind in my old life!'

(Paula, age 26, Portuguese, not born in UK, 3rd interview, not smoking)

Going back to work gave rise to further discussion in considering the challenges of combining motherhood with work and the risk of returning to their previous lifestyle of smoking.

5.7.1.3. Challenged by Return to Work.

For the women who had been in employment prior to pregnancy and had taken maternity leave, the return to work was seen as a challenge for some. The return involved not only organising childcare but also signified a further change to their life circumstances, with that came the added risk of exposure to the old habits of smoking.

At the time of the interviews the women did not feel ready for this return as highlighted. Lucy considered that she would not be tempted to smoke on the return to work as she would have been away so long.

'I am happier, 'cos I thought I was going back at the beginning of February, I'd already gone to visit a nursery and I was planning on visiting another one this week. So yes, I am not back until May, so that is brilliant 'cos I was worried about missing some of more of Acacia's firsts and she would have been six months if I had started in March whereas she will be nine months which is a better age. ? Smoking, no it will not be a problem then, it will really be out of my system!'

(Lucy, age 24, born in UK, 3rd interview, not smoking)

The following quote illustrates how the childbirth experience has changed the woman's perception of her identity.

'No, no I don't want to go back. Working and smoking that is just not me anymore. You know before he was born I was little miss career and this is what I am going to do and I was going to go back after three months and I look at him now and think I will be sending him to nursery at this age. Somebody else would, you know, he would be bonding with them and not me. I don't want to go back at all.'

(Moir, age 35, born in UK, 3rd interview, not smoking)

5.7.2. Interval, a Suspension of Normal Life.

The perception of a changed identity was embraced for some as a new start whereas some women considered that lifestyle changes featured in their lives but were only for the duration of the pregnancy.

5.7.2.1. Talk about Lifestyle Changes.

Following the birth of a child many of the women's lives had changed dramatically. Decisions were made as to how the next stage of their lives would develop. For those who had smoked previously now had to consider their feelings in relation to this. Some of the women were ready to embrace

these new changes and challenges, for others it was not so easy to leave smoking behind.

The majority of women cope with the transition to motherhood, however, for others, this concept is difficult to assimilate as they searched for regaining some control over their lives that gave them a feeling of being an individual and not only a part of a unit. Jada exemplifies this notion in her quote as she felt the need for some reconciliation from the past as to who she really was.

'No, the only reasons for me to start smoking again was that I wanted my identity back and that identity I enjoyed and that made me not Rosie's mum that made me Jada and no-one expects you to smoke as a mum.'

(Jada, age 24, born in UK, 3rd interview, relapsed)

Jada had acknowledged that pregnancy had brought changes to her life, however, these changes caused a dilemma, on one hand, she was now a mother responsible for a child, but on the other hand she still wanted some part of her old lifestyle back.

As oppose to starting a new life as a non-smoker and also a mother it was considered by some women as a suspension of life for the duration of pregnancy. Stopping smoking was therefore seen as a suspension and not part of a long-term plan.

The promise of cigarettes was made by a partner by way of misguided encouragement and reward for managing the labour and birth. He had considered that the birth would herald the end of a period of suspended life and that all would revert back to before the pregnancy.

'.....and actually when I was in labour Pete whispered to me 'never mind, just think, tomorrow you can have 20 Benson and Hedges if you want to!' And I said, you get off me!'

(Jada, age 24, born in UK, 2nd interview, not smoking)

Furthermore, not smoking after the birth signified a new chapter in their lives. In contrast for some women smoking was an important step in regaining images of their former life and relationships formed a large part of this retrieval as the following quote illustrates:

'Noooo, it was with Pete and it was like a little celebration, like, oh look what we've done! (Happy voice) And that. And that was the first step really because having a baby blows every aspect of your life, you know, you are not at work, not.... it just blows the whole thing wide open and that was the first thing really of piecing together who me and Pete were 'cos we smoked together, smoking was a part our relationship that we enjoyed so it was kinda like fitting that first piece back on the road to recovery.It wasn't the smoking, it was the freedom of choice and now that I have that freedom of choice I don't actually smoke that much, but it is the fact that I can if I want to.'

(Jada, age 24, born in UK, 3rd interview, relapsed)

Jada also alluded to the freedom of choice, to not be restricted by overarching influences and responsibilities. In contrast, internal conflict was evident in the following excerpt, on one hand the woman considered smoking cessation to be a suspended action for the duration of the pregnancy, but then considered the long term prospects of not smoking.

'At first I just thought of it as a small pause and then I thought 'you know what, I don't need to do this'

(Rena, age 32, Bermuda, not born in UK, 1st interview, not smoking)

In postpartum period the idea of lifestyle changes becomes more apparent when the reality of having a baby takes effect. In the following quote Jacqui was proud of her abilities as a new mother and considered that she was coping well with the transition.

'I think I have dealt with it well. Obviously emotionally your hormones are all over the place, you go through all the emotions and of course your life changes, your life changes completely when you have a baby! But emotionally although things change I haven't felt as if (long pause) as if I can't cope with anything (smoking).....yet'

(Jacqui, age 31, born in UK, 2nd interview, not smoking)

Jacqui had embraced the new lifestyle of being a mother and a non-smoker and felt that the challenge of resisting smoking had not been difficult for her.

For another woman, it was important to her that she could resume her normal life and take up activities previously undertaken. However, this could be considered as part of a new identity as the areas of her life that she wished to resume were healthy lifestyle choices and smoking was not part of this.

'Yes, but I don't go back to work until March anyway, but it is for me to get everything back to normal; I got told that I am allowed to start exercising again yesterday. So for me that means I can start going out for a run again and he (partner) can look after her (the baby) then..... Really just to get back into shape again really, I am fed up of feeling like this all frumpy. (looks slim and healthy already!) I just want to feel normal again...but I will still breastfeed....but not smoke!'

(Lucy, age 24 born in UK, 2nd interview, not smoking)

Although confident in her new lifestyle decisions, Moira still harboured memories associated with smoking and relaxation, however, reinforced her thoughts emphasising that smoking was definitely in the past for her.

'The only time I do want one as I say or can want one, is when we are out with friends having a drink and I feel

*relaxed, I think to myself, 'that's when I **would** have had one!'*

(Moira, age 35, born in UK, 3rd interview, not smoking)

Alternatively, when considering temptation Jacqui is certain that this no longer presented a problem for her within her new lifestyle. However, for others this new lifestyle may be threatened when beginning to re-enter the social circle.

'I just hope that if I am faced with temptation if I go out on a Saturday night, I hope I resist the temptation of the thought, 'oh, I'll just have one....' I am trying to think positively... I am not a smoker..... I am trying to forget that I ever did smoke..... I've never smoked; I am not a smoker, so I don't go back to it.'

(Paula, age 26, Portuguese, not born in UK, 3rd interview,
not smoking)

5.8. Summary.

In summary, the views and experiences of women were explored in relation to their journey in stopping smoking during pregnancy and either remaining a non-smoker or relapsing to smoking in the postpartum period. One of the main findings to emerge was the exciting concept that women viewed pregnancy as a time for change and the beginning of a new life as a non-smoker.

The effect of social influence in friends and family was viewed as both a supportive factor in giving up smoking and maintaining abstinence for some women, however, for others it provided a catalyst for relapsing. The role of the health professional was viewed as mainly supportive when accessed by the women.

Some of the barriers and facilitators that affected women when stopping smoking were unique to pregnancy and of those factors cited as contributing to smoking cessation certain ones were also highlighted as reasons for supporting continued smoking cessation in the postpartum period. These comprised consideration for the health of the baby, breastfeeding, nausea, the smell and taste of cigarettes. Policy change was given as an incentive to stopping smoking as the ban on smoking in public places had made smoking more problematic when out in company.

Other facilitators and barriers referred to by the women that could be experienced by non-pregnant smokers when stopping included habit, feelings of guilt and stress. However, when discussing these issues during the interviews they were usually associated with pregnancy related issues and social circumstances.

A strong sense of self-efficacy and self-belief although seen in the general population was a good indicator for the success of smoking cessation as it also contributed to the decision of a new life. For other women identity was an important issue for them and pregnancy was considered a time in their lives when their own identity was been eroded. This resulted in smoking cessation being only for the duration of the pregnancy and viewed as a suspension to normal life. The decision to return to smoking gave these women their identity back, the cigarette formed part of this identity. A return to work did not appear to weaken the resolve of the women who remained non-smokers, a bigger concern for them was leaving the baby in the care of others.

Stopping smoking during pregnancy was for some women mainly viewed as the health and protection of the unborn baby to the exclusion of close contact with other smokers. For some, the return to smoking signified a reduction in

the need to protect the baby directly and concern for their own satisfaction took over, however, it was intimated that cigarette smoke and associated chemicals were still distanced from the baby. The younger women suggested that smoking was a strategy to help them cope with the additional social turmoil in their lives with some of the migrant women being of the same opinion. The self-belief of beginning a new life was of great importance for the women and aided the transition to motherhood as a non-smoker. Further themes emerging from the data indicate that the return or abstinence to smoking is a multifactorial concern involving social, environmental and psychological influences.

In the next chapter these findings will be discussed in the wider context following on from this summary with recommendations emerging from the study. Implications for practice and opportunities for further research will also be addressed.

Chapter Six: Discussion.

6.1. Introduction.

This chapter will discuss in the findings presented within the previous chapter and how they may relate to earlier literature. Debate will be raised as to how the study aims have been met, however the many facets of the study have been interwoven to some extent and as such some emerging themes may apply to more than one aim. The strengths and limitations of the study will also be discussed within this chapter.

The overarching aim of this study was to explore the experiences of women and smoking during pregnancy and the postpartum period in order to gain greater understanding as to why some women relapse and others abstain. As a result the findings will contribute to developing effective interventions to promote long term smoking cessation for women who stop smoking during pregnancy. Particular attention will be paid to the social, environmental and interpersonal relationships in which women experience the smoking phenomenon affecting their lives at such a pivotal point in the pregnancy continuum. The relevance for taking this stance stems from the sample of participants; many of these had associated risk factors in addition to smoking, for example the younger population often were coping with stressful situations, an area referred to in earlier literature (Boden et al. 2007, Reitzel et al. 2007).

The time of relapse varied between the women, with the majority relapsing between six and eight weeks postpartum. In total, 27 women were interviewed in this study all of whom stopped smoking during the pregnancy,

two of which relapsed and stopped again during the pregnancy, one relapsed and stopped again at two weeks postpartum. Eleven women were not smoking at the final interview, of the remaining 16 women, one relapsed at birth, five by six weeks, a further four at eight weeks and the reminder had relapsed by three months.

Entering into motherhood was viewed as a turning point in the lives of some women in the study and signified a change in lifestyle and behaviour with continued smoking cessation a high priority.

6.2. Reconciliation with the Literature.

The literature review began at the very inception of the study and as such was an aid to identifying the issues concerning smoking, stopping smoking during pregnancy and relapsing for women postpartum during the transition to motherhood. It gave a firm foundation on which to focus the research quest, however, as the study developed the initial literature review had to be continually updated in light of more recent developments in this area and to assimilate with this piece of research in particular. Initial concerns pre-empting the study were that, as depression is a well-documented factor of smoking relapse in the general population, it may also be associated with postpartum relapse to smoking. However, these initial assumptions were not supported in the data collection and analysis of this study whereas psychosocial, environmental and interpersonal factors were more apparent particularly in respect of the more challenging situations. These will be highlighted during the discussion within this chapter which will be presented in sequence to reflect the journey made by women when stopping smoking during pregnancy and into the transition to motherhood.

As the women's stories unfolded it became apparent that the interviews undertaken at three specific times during the pregnancy could not be

considered in isolation. They evolved into a continuous narrative following the journey through the pregnancy continuum and transition into motherhood fitting alongside the thoughts and feelings of smoking. This chapter will discuss the key issues arising in greater depth looking at how this impacts upon the risk of relapsing to smoking postpartum. The pertinent issues that have arisen and will be subject to discussion in greater detail comprise: *socio-ecological factors impacting upon smoking behaviours, reasons for becoming a smoker, reasons for stopping smoking and staying stopped, environmental factors affecting the decision to smoke or abstain, reasons for a return to smoking, self-efficacy and self-identity in the pursuit of a new life.* The discussion will begin with exploration of the socio-ecological framework which will underpin the findings of the study and place the issues of postpartum relapse into context.

6.3. Socio-Ecological Factors.

The theoretical framework for this study has been based upon the socio-ecological perspective as it was found that these factors all impact on women's lives and in particular on why some women relapse to smoking in the postpartum period. However, it must also be considered that these influences also have the potential to prevent relapse and should not be dismissed lightly.

Women's lives are governed to a certain extent by the parameters of the socio-ecological world in which they live and this has an appreciable influence upon their decision to smoke, give up during pregnancy and to relapse postpartum. In the diagram (Figure 6.1) the intrinsic and extrinsic factors affecting women's 'connections' to smoking has been highlighted to illustrate the connections.

Figure 6.1: The Socio-Ecological Factors Affecting Women's Connection with Smoking.



The factors are made up of the individual, personal relationships, connections with the local community and society as a whole. These factors will be discussed individually to explore what each one means to a woman in relation to her experiences of smoking.

6.3.1 Individual Factors

Individual factors impacting on a woman's decision to smoke or abstain postpartum is focused upon how she perceived the notion of stopping during pregnancy. From this study the majority of women suggested that they did wish to stop permanently. However, this could be questioned as to how seriously this had been considered or was it playing lip service to the researcher as permanent abstinence would be the expected response. It was

evident from the study that a number of the women interviewed had not considered how they would maintain abstinence, or indeed what the long term benefits would be. The majority reported stopping smoking during pregnancy purely for the health benefits to the fetus.

Of the women who maintained abstinence after the birth the majority did suggest this was for individual reasons. They had reached an important crossroad in their lives and took the opportunity of making a new life for themselves and no longer wished to be associated with being a smoker. The idea of stopping smoking had been developing for some women before becoming pregnant and the baby gave the impetus to stop. These factors were particularly noted during the interviews with Jacqui (age 31,), Lucy (age 24) and Moira (age 35) who all expressed they felt ready to start a new life.

6.3.2. Personal Relationships.

The influence of partners, friends or relatives appeared to have some impact upon the decision to smoke postpartum or remain abstinent. Whether the person was a smoker or non-smoker did not appear to have a great influence during the antenatal period however, women felt they did have some support when stopping. Nonetheless the situation differed between relationships after the birth. Women appeared to be at a greater risk of relapse if the people close to them were smokers themselves and in some cases the women were actively encouraged to resume smoking. A prime example is of Jada (age 24) who was offered cigarettes as a reward for enduring the labour. In other examples the women's mother offered cigarettes in a misguided effort of support after birth. On the other hand, women in relationships where the partner did not smoke or had given up smoking themselves at some point during the pregnancy did not relapse during the time of the study.

For one woman in particular, the close personal relationship with her partner acted as a deterrent as he continued to smoke. It was the smell of smoke on his clothes hair and breath that proved overwhelming and prevented her from relapsing as she could not bear to be in close proximity when he had been smoking.

6.3.3. The Wider Community.

Within the community smoking has become less popular as more public places ban smoking it has become more difficult to smoke when socialising with friends and at work colleagues. This also proved to be a protective factor for some of the women participating in the study as contributed to their new lives in which smoking was no longer a feature. Going outside of the home environment no longer had the attraction of smoking and women were reluctant to leave their babies in search of an acceptable place to smoke and as a result chose not to smoke.

6.3.4. The Impact of Societal Factors.

The smoking ban in public places had an effect not only on smaller communities but on society as a whole within the UK and many countries in the developed world. A ban on advertising has diminished the portrayal of smoking as an attractive pastime, a method of weight control or as a shared interest between couples. Furthermore, wider publicity of the health risks of continued smoking have had some influence on women's decision to not smoke in the postpartum. Campaigns aimed at the younger population are being promoted with the intention of contributing to fewer younger mothers either starting or resuming the habit of smoking. (British Heart Foundation, 2013, European Institute of Women's Health, 2103).

6.4 Intrapersonal Factors.

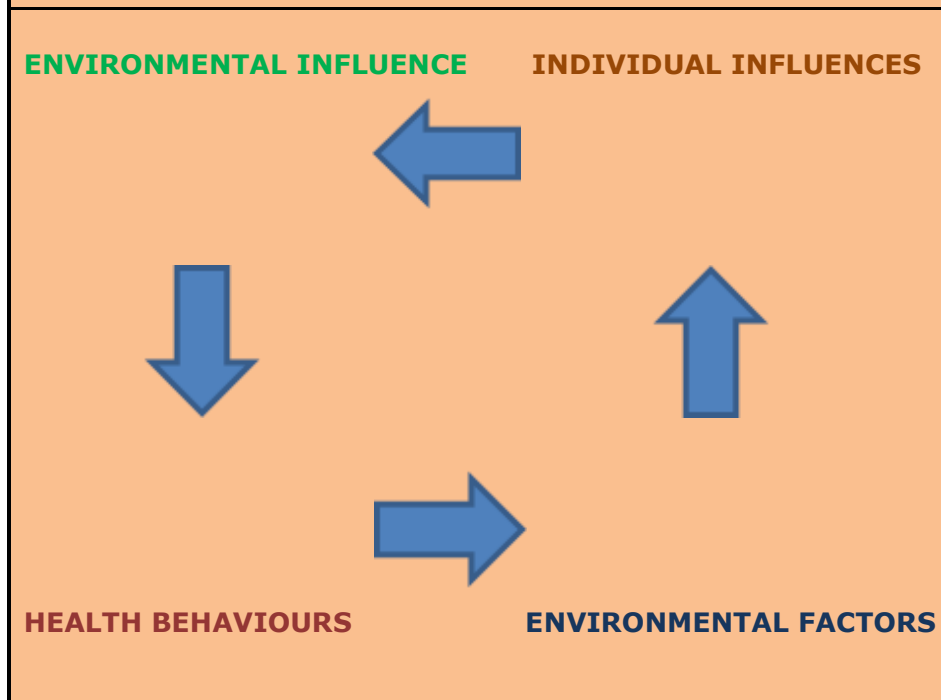
Relapse is also governed by intrapersonal factors; women must have the knowledge to underpin the rationale for their decision to relapse or remain a non-smoker, alongside the skills and the motivation to succeed. Thirlaway and Upton (2009) in discussing lifestyle diseases suggest that influence from several aspects contribute to their progression and as such cannot be linked to individual lifestyle behaviour. This is particularly pertinent with regard to smoking behaviour and patterns in women as their influences are drawn from the many perspectives found within the socio-economic framework. De Bourdeaudhuij and Van Oost (1999) argue that to develop beneficial changes to a person's lifestyle behaviour as a whole would be of greater overall benefit than to change only one aspect. An example to support this notion would be the introduction of physical exercise to aid smoking cessation, the benefits of this besides smoking cessation would be to improve postpartum physical fitness, reduce obesity and enhance mental health. The potential to improve a sense of wellbeing and thus increase perceived self-efficacy would complete the cycle in preventing further relapse. Earlier studies have demonstrated that physical exercise does impact positively on smoking cessation and mental health (Ussher et al. 2008).

Sallis and Owen (2002) consider that both environmental causes of behaviour and the many influences on particular behaviours fit within the ecological models of health behaviours. On the other hand Thirlaway and Upton (2009) argue that although lifestyle changes based on ecological models are the way forward, some aspects are behaviour specific and would not easily fit with this model. For example, Helen (age 27) relapsed to smoking when she began socialising again after the birth within an adult environment. For her the behavioural pattern of smoking in a social setting was the norm for her and as such evoked pleasurable memories which were difficult to resist. On the other hand, Marie (age 16) relapsed to smoking to help cope with the

environmental factors affecting her life, lack of permanent home, poverty and very little social support. Similarities found within this study demonstrate that factors within the ecological model have been recognised as having an influence in postpartum smoking behaviour. The rationale being that smoking controls many aspects of a woman's life not only personally but also in the broader context of interpersonal, environmental and societal situations. Nonetheless, consideration should be given to the stage of the women's journey with regard to smoking and it should be considered that any intervention should be specifically tailored to reap the greatest success. For example, during pregnancy the concern for not smoking centres around the health of the unborn fetus whereas postpartum greater attention should be placed upon the health benefits to the mother and differing socio-economic and environmental factors. Johnson et al. (2000) concur in that although women can maintain smoking cessation during pregnancy in the postpartum period they are not so aware of the risks to the baby. Moreover, relapse is more probable due to lack of support or their abilities to remain abstinent.

It should be noted that the environment is multidimensional and can have an influence on behaviour, conversely the opposite is also valid as illustrated in Figure 6.2. All these influences impact on one another and as such cannot be viewed in isolation when considering how this fits with the concerns of women and postpartum relapse. Considering the earlier example quoted, Helen was aware of the health risks to the baby by only smoking in an environment where smoking was acceptable and the baby was not present, however, the attraction to smoking precluded consideration of her own health.

Figure. 6.2. Factors and Influences Affecting Postpartum Relapse to Smoking.



Kahn et al. (2002), in examining the maternal fluctuations of smoking throughout pregnancy and beyond concluded that many factors could be attributed to relapse and as such smoking interventions should be developed according to individual need. Notwithstanding, Pletsch (2006) argues that intervention strategies for postpartum women needs to take into account the circumstances of women and cannot be based on models developed for the general population. Further studies aimed at developing relapse prevention interventions for pregnant and postpartum women concluded that women experienced difficulties with not only identity but reasons for why they should stop smoking and a lack of social support (Quinn et al. 2006). However, Quinn et al. (2006) although acknowledging women had differing needs were

attempting to produce an intervention to address all associated factors. Levitt et al. (2007) in undertaking a literature review examining the effectiveness of interventions for postpartum relapse concluded that no known intervention proved wholly effective. However, the study did note that reasons for relapsing are multifactorial and that intervention do have an impact upon women's knowledge and attitude to relapse (Levitt et al. 2007). Notwithstanding, Dolan Mullen et al. (1999) argue that self-efficacy has to be factor in the individual dimensions affecting a woman's ability or desire to remain a non-smoker postpartum.

The socio-ecological factors will be discussed in greater detail within the following sections incorporating the interpersonal, intrapersonal and societal dimensions. The discussion will include how these dimensions impact upon the individual experiences of the women interviewed.

6.5. Becoming a Smoker.

The non-smoking population often struggle with the concept of smoking and fail to comprehend the attachment the majority of smokers have to their habit, in particular with female smokers. To aid understanding of these phenomena it is of value to delve into the history of smoking to explore the deep rooted affinity women have with smoking. As previously discussed, history had a part to play in women and smoking as tobacco has been used by women since 16th century, originally restricted to the upper and middle classes gradually becoming an acceptable habit for women with the advent of the Second World War. The power of advertising cannot be overlooked in the adoption of smoking as the norm and even portrayed as being beneficial in some scenarios. Advertising greatly increased the attraction of smoking to women, covertly suggesting that cigarettes were an aid to weight loss and gave added appeal to the opposite sex (Greaves, 1996). The concerns

regarding the effect on health were not publicly demonstrated during these early advertising campaigns of the 20th century. Many women today also claim that smoking helps to keep weight under control, despite literature to support this belief (Levine and Marcus, 2004,) this was not illustrated within the women's stories in this study. However, its role in their relationships with the opposite sex did resonate as a number of women did express that sharing smoking habits with partners was important to their relationships.

For the majority of women in this study, their history of smoking was born out of a need to belong or a sense of belonging and fitting in with peers which has been 'sanctioned' by the power of advertising (Greaves, 1996 and Tinkler, 2001, 2006). The social context of smoking is an integral part of understanding why women smoke, as discussed advertising can play a part in glamorising female smokers and contributing to the influence of belonging. This is seen in the advertisements portraying couples or groups enjoying cigarettes in each other's company. However, this is only one aspect to consider. Poland et al. (2006) suggest that social influences play a large part in the initiation of smoking from close to home with family and friends, to the wider acceptance of smoking in society. This notion sits well within the socio-ecological framework in which smoking can be demonstrated as a multifactorial issue that cannot be viewed in isolation.

Some of the stories told by the women in this study highlight the fact that many are influenced at an early age to try smoking without any thought to the long term implications this may have such as addiction or health concerns. The majority of women began smoking while still of school age. None of the women expressed any difficulty in accessing cigarettes and from trying the occasional one cigarette for fun to becoming regular smokers happened within a relatively short space of time. No thoughts were expressed at this point of smoking being a short term habit and few of the women

interviewed had experienced a serious or successful attempt to stop smoking prior to becoming pregnant. These findings suggest that the power of advertising could be harnessed and utilised in giving greater impetus on preventing the initiation of smoking. Once a woman becomes an established regular smoker it may be some time before she will consider stopping and for some this does not happen unless a change in circumstances causes a reconsideration of lifestyle and habits such as pregnancy. The next section will discuss support this experience in women's lives.

6.6. Stopping Smoking and Staying Stopped.

Having considered the history of smoking in relation to women an understanding of the implications has been established which will inform this next section in discussing the issues encountered when becoming pregnant and the decision to stop smoking including support, intent and psychosocial health. The discussion will draw upon the women's stories gathered within this study in collaboration with the pertinent literature.

6.6.1. Support.

The greatest areas of support when stopping smoking were found among, family and friends, in particular partner support appeared to be most effective even when the partner had no intentions of giving up or was not a smoker himself. This would appear contrary to contemporary literature and findings from this study, which suggested that partners can be obstructive in giving support in stopping smoking both intentionally and unintentionally, (Merzel, 2010, Greaves, 2007 and Bottorff et al. 2005). However, following the birth support from friends and family was sometimes reversed and the resumption of smoking was actively encouraged. In support of this claim, the quotation made by Jada (age 24) illustrates misguided partner support as her partner offered cigarettes as a reward for getting through the labour and

birth. Notwithstanding, Bottorff et al. (2005) state that smoking is a multifaceted issue within a couple's relationship and is densely intertwined with all other aspects of their lives so cannot be viewed in isolation. Greaves et al. (2007) further this debate and suggest that partners use a woman's smoking habits as a means of power and control over her life. On the other hand, Hymowitz et al. (2003) argue that support from partners does contribute to the success of stopping smoking and Carmichael et al. (2000) consider that partners also contribute to preventing postpartum relapse.

With regard to the current study the majority of partners did appear to hold the most influence for women when giving up smoking, parents and friends also were viewed as contacts for support, with the exception of one young person (Marie, age 16). She felt that lack of support and in fact positive encouragement to resume smoking after stopping was detrimental to her quit attempt. The focus of the support by given friends and family centred on the wellbeing of the unborn baby rather than the health benefits for Marie herself. From the evidence it is clear that support or lack of support is a fundamental aspect of whether women relapse or abstain from smoking postpartum.

The contribution of professional support was also discussed during the interviews. NICE (2010) recommend that all pregnant women who smoke are given brief intervention support by midwives initially at the booking appointment and subsequent antenatal visits. Women requiring greater support should be referred to specialist smoking cessation services. Nonetheless, only a small minority of the women interviewed in this study could recall being given such information. The professional support that was offered ranged from information leaflets, brief intervention through to referral into specialist services. One woman disclosed during the interviews that she had self-referred to the specialist service whilst another woman had sent for

an NHS pack that she had seen advertised. These findings are supported by the work of Lawrence et al. (2005) and Greaves et al. (2003) who agree that the majority of women quitting smoking during pregnancy do not access support from specialist services. Reasons given for this may be attributed to lack of services in some areas, however, these services were freely available in the area at the time this study was undertaken. Therefore, other possible explanations should be considered which may account for lack of uptake and thus warrant further investigation such as motivation by the midwife or the pregnant woman. O’Gorman (2008) and Usher (2006) argue that this in part is due to barriers from health professionals not asking about smoking for fear of affecting the midwife-mother relationship or lack of confidence in their own knowledge base with regards to smoking cessation in pregnancy when giving such information. As noted during the interviews that the support and questioning of smoking status during the antenatal period was variable and appeared dependent upon the motivation of individual midwives as recorded within the findings. The perceived motivation of midwives did not appear to be site specific so therefore could be attributed to either the community beliefs or those of either hospital. In a previous study, Condliffe et al. (2004) also argue that midwives’ reluctance to raise the issue of smoking was due to various reasons such as lack of time, lack of knowledge and most noticeably the fear of affecting the midwife/woman relationship. Bull (2007) concurs with these explanations as similar problems were raised in the study exploring the attitudes of maternity staff with regard to smoking cessation interventions.

There also appeared to be a lack of strong links with the local smoking cessation services during the period this study was undertaken. In Trusts elsewhere within the UK the specialist midwife would have been a visible presence in the antenatal clinics, but this was not the usual practice within

this specific Trust. Whether or not this had any impact upon a woman's referral to the service or not cannot be ascertained, however, within the handheld maternity notes carried by the women there is a page devoted to smoking information incorporating a tear out section with referral details to the smoking cessation services included. All midwives are encouraged and expected to complete this section as part of the routine booking procedure along with raising the subject and discussing both mental health and domestic abuse issues. These procedures are periodically reviewed as part of the overall notes and record audit and statistical data is recorded pertaining to women's smoking disclosures. A dedicated Audit Team led by the senior midwife ensures that a high standard of care is maintained and accurate documentation is sustained. This not only contributes to the collection of accurate statistical data but is also to safeguard the women and their families during their maternity experience. This would comply with the earlier recommendations of the Expert Maternity Group, Changing Childbirth (DH, 1993).

Furthermore, this was a feature experienced in the early part of this study when recruiting women to complete the questionnaires, the staff in one antenatal clinic were very proactive and enthusiastic thus a high uptake from women was acknowledged. In contrast, the staff in the other clinic were less receptive to the study and as a result a notable difference was seen in the response rate.

The issue of support is of substantial value when discussing the needs of women in smoking cessation during pregnancy. Notwithstanding, environmental factors also have a contribution to make and should be carefully considered in this context therefore the following section will examine this aspect in more detail.

6.7. Environmental Factors.

The acceptability of smoking has become less popular within society in recent years and for women who were used to smoking while on breaks at work or socialising in leisure time this made them reconsider their smoking habits.

The altered views on smoking could in part be due to the wider commitment of reducing the number of smokers by banning smoking in public places and therefore exposing smoking as a negative habit to uphold. This will be discussed further in the following section.

6.7.1. The Smoking Ban.

The ban on smoking in public places implemented in 2006 and 2007 has changed opinion for many on the acceptability of smoking in the general population and to an extent on the opinions of individual smokers, not least childbearing women and their families. The evidence supports the view that the ban on smoking in public places has had a substantial impact for many women in the fact it made it easier and more acceptable not to smoke when either at work or socialising as noted in the interview quotes from Paula and Moira for example, documented in Chapter Five. WHO in 2005 produced the Framework Convention on Tobacco Control with the aim of protecting everyone from the harmful effects of smoking on health, social and environmental impact including the enormous economic consequences smoking causes to society. The results of this treaty are already reaping benefits as highlighted in a study undertaken in Scotland (Mackay et al, 2012). The study illustrated not only a reduction in the number of people

smoking but also a significant fall in the number of preterm and small for gestational age babies born since the ban was introduced in 2006.

The ban on smoking in public places includes all indoor public and work places and public transport. For many smokers this has been voluntarily extended to include private homes, this fact accompanied by the often inclement weather of England contributed to some women's decisions not to smoke if it meant going outside to do so. Again, as demonstrated within the previous chapter of this study, this was a notable feature both in the antenatal and postnatal periods in promoting smoking cessation. Two examples to illustrate these findings were of Paula (age 26) and Tania (age 28) both living in flats who resisted the temptation to smoke as it involved not only getting warmly dressed but also leaving the baby alone to go outside to smoke. Another explanation for this is the concept of maternal bonding with the baby making the notion of leaving the baby to go for a cigarette untenable. The mothers could not contemplate the potential risk of harm to the baby by leaving unattended, as such the maternal bond proved stronger than the addictive urge to smoke. In most cases women do not live in isolation and as a rule are social beings by nature, for women who had previously socialised when smoking and were now in a different position by not smoking gave rise to deliberations on the issues regarding the social connotations of smoking as illustrated in the following section.

6.7.2. Social Connotations of Smoking.

Further to discussion in the previous section the smoking ban supported women in not smoking, in fact almost gave the women 'permission' to not associate with the rest of the smoking fraternity. However, for others it was made more difficult in so much as they felt 'outsiders' who did not belong to their usual social groups. This may have been due in part to habit and

routine, one woman, Jacqui (age 31) in the previous chapter suggested that she missed the gossip not going outside with the smokers and that the non-smokers were viewed as 'boring'. Greaves (1996 pg.36) asserts that women use smoking to:

'equalise, bond, distance, diffuse or end relationships with others including partners, children and workmates'.

This assumption fits well with accounts in the women's stories that were revealed during the interviews as smoking with colleagues enabled them to achieve a sense of belonging and bonding. One woman, Claire (age 20) tried to break the ritual of the everyday routine by taking a different break time, only to discover not only did this upset her routine but it also distanced her from the office banter and cohesion with colleagues. However, all the women, without exception, considered that not being in a smoking environment did support their aim in not smoking. These comments correspond with earlier studies, Edward and Sims (1998) and Bottorff et al. (2000) who found that exposure to a smoking environment made women more susceptible to relapse. This is also seen in the relationships women have with partners, smoking is something they can share and have a feeling of closeness and intimacy. For some women, the smell of cigarettes on the clothes and breath of partners was reported as a deterrent to smoking. The following section will expand upon the personal and environmental impact of the taste and smell of cigarettes and the influence over the choice to resume smoking or remain abstinent postpartum.

6.7.3. Taste and Smell.

Taste, and particularly smell, played a substantial part in maintaining abstinence from smoking in both the antenatal and postnatal period. For a number of women in the study the smell of cigarettes provoked waves of nausea so overpowering they could not even contemplate smoking. Pletsch

and Thornton Kratz (2004) would agree with these findings as in their study women reported that the taste and smell of cigarettes also gave them an aversion to smoking in pregnancy. However, Pletsch and Thornton Kratz (2004) state that all the women in their study smoked menthol cigarettes and that their aversion to the taste and smell disappeared after the birth. In contrast, some of the women in this study reported that they continued to find that the smell of cigarettes prevented them relapsing up to the time of the final interview conducted between three and six months postpartum. In particular, both Tracey (age 23) and Lucy (age 24) found the smell of cigarettes abhorrent and considered this to be a major deterrent in preventing relapse. For others, Moira (age 35) for example, the smell of cigarette smoke brought back pleasant memories of a previous life before becoming a mother, but did not necessarily precipitate a relapse. Several theories have been mooted with regard to why the taste and smell of cigarettes deter women from smoking. Prutkin et al. (2000) suggest that it is a protective mechanism guarding the embryo from harmful poisons whereas Duffy et al. (1998) purports that hormonal activity during pregnancy affects sensitivity to taste resulting in lack of desire to smoke.

An interesting observation was that Tracey (age 23) and Petra (age 25) in particular reported a return of cravings for cigarettes at around 20 weeks gestation which coincided with their nausea and sickness subsiding. One of the women, Tracey, whose partner had also given up smoking at the same time, did not relapse at any point during the study. The second woman, Petra, recently migrated from Poland and having other significant health related issues, did relapse within two weeks postpartum. Petra's partner continued to smoke throughout the pregnancy and postnatal period, and although he was of the opinion that women should not smoke during pregnancy, he had no intention of giving up.

The taste and smell of cigarettes and smoke proved to have powerful effects on the decision, whether voluntary or otherwise, on a woman's power to relapse to smoking in some cases. This interesting finding demonstrated the profound effect taste and smell had for some women in the study and had similarities in earlier studies by Pletsch and Kratz (2004). However, Pletsch and Kratz (2004) reported that the aversion to smell and taste of cigarettes disappeared after the birth for the women in their study. A further difference in the study undertaken by Pletsch and Kratz (2004) was that all the women in the study smoked menthol cigarettes before pregnancy whereas only one woman in this study reported smoking menthol cigarettes. The experience of stress and depression on smoking outcomes has also been explored in this study. The following section includes the findings of this aspect of the study paying attention to the environmental factors associated with perceived stress and depression.

6.7.4. Stress and Depression.

Both stress and depression have been shown to be linked with smoking in the general population and recent literature correlating such links with particular reference to relapse, support this evidence (Cochrane Review 2008). Moreover, the association between negative mood and relapse has been used to explain women's concerns regarding weight issues during pregnancy and the postpartum period (Levine and Marcus 2004). It was therefore of value to explore whether any similarities would be highlighted within this study.

This study did not find such a convincing association with regard to negative mood and depression or concerns regarding weight issues and smoking. This in part could be attributed to the voluntary nature of participating in a study of this type and as such women suffering from depression felt unable to contribute to the exploration or even contemplate stopping smoking at this

time. Borelli et al. (1996) support this claim and also suggest that depressed women smokers are less likely to seek support for smoking cessation treatment. On the other hand, Ritter et al. (2000) suggest that any predisposing depressive symptoms may diminish as the pregnancy progresses. A history of depression was disclosed by one woman, Tania (aged 28), who did relapse to smoking very soon after the birth, she had also found it very difficult to give up during pregnancy, despite a poor obstetric history, which was in part due to placental abruption. During her previous pregnancy Tania had smoked up to 40 cigarettes per day and although the abruption could not be solely attributed to smoking it is a well-publicised fact that smoking during pregnancy can precipitate this distressing event (British Medical Association [BMA], 2004). Solomon et al. (2007) consider that the struggle to not smoke and the awareness of potential harm to the fetus by continuing to smoke may provoke or exacerbate underlying psychological symptoms. Comments made in the interview suggest this was a contributory factor accompanied by difficult social conditions, similar to those encountered by the younger women in the study. Conversely, Ludman et al. (2000) argue that smoking cessation may reduce stress and depression as some of the stressors have been removed i.e. anxiety regarding continued smoking in pregnancy. In addition, it has been reported that the levels of stress, anxiety and depression have been lower in women who have stopped smoking earlier in pregnancy (Grange et al. 2006).

However, it was found that stress rather than depression was cited in some of the women's stories as a reason to rely more heavily on cigarettes. This featured more predominantly in the younger women smokers who lived more chaotic lives for example, Nicole (age 16) and some of women who had migrated to England prior to becoming pregnant such as Petra (age 25) and Naomi (age 30). These findings are consistent with the literature in so much

as younger women embarking on pregnancies, usually unplanned, are often of a lower socio-economic status and at greater risk of relapse (Reitzel et al. 2007). The difficulties encountered in the lives of these women would suggest that their coping mechanisms and levels of self-efficacy were not as robust as the women who did not relapse to smoking. On the other hand these women may have relapsed to smoking as they already had too much to cope with and stopping smoking was a low priority in their lives. This will be discussed more fully in a later section. The following section will focus on the return to smoking and discuss the factors which may have contributed to the relapse.

6.8. Return to Smoking.

Although Stotts et al. (2000) argue that some women do decide to stop smoking only for the duration of pregnancy, the return to smoking was not always a conscious decision for the women within this study. Furthermore, Stotts et al. (2000) considered that relapse may not be an appropriate term to use for women resuming smoking postpartum. In comparing women who stop smoking during pregnancy with the general population Stotts et al. (2000) contend that the pregnant quitters do not appear the same. Pickett et al. (2003) endorse the notion that pregnant women who stop smoking cannot be compared to the general population of smokers as the pregnancy related factors make stopping an intricate and fluctuating situation. As such, standard interventions for supporting long term cessation may not be appropriate for women postpartum. On account of stopping smoking for women having been a fairly rapid decision to make they may not have stepped onto the 'cycle of change' at the most appropriate point (Stotts et al. 1996). The women may have felt pressured into stopping by both internal and external forces and such had not fully contemplated the potential long term factors of smoking cessation. Stotts et al. (2000) suggest that having a greater understanding of the stage of change women are at when stopping

smoking during pregnancy will aid long term support. In addition, Röske et al. (2006) agree in that the motivation to remain non-smokers may be short term and pre-empted by external social pressures. Consequently, it was of value to explore the situations and thoughts of women around the time of relapse to help build a picture of the circumstances that precipitated such actions.

In light of the association between self-efficacy, smoking and motherhood the following section will discuss how these link for this particular group of women. To have a greater understanding of the position for women at this time it was of value to gain an insight into how they perceived the transition to motherhood. This was in respect of their perceived self-efficacy and coping mechanisms with regard to smoking i.e. the more confident and capable a woman considered herself to be at this time the less likely she was to relapse to smoking. However, consideration must be given to whether the women were confident and capable before pregnancy or whether becoming a mother instilled greater confidence and capability in them. For this to be successful, the socio-environmental factors need to be in place, taking into consideration the internal and external support mechanisms existing in each unique situation. Furthermore, Thyrian and Hannover (2006c) in debating the issue of postpartum relapse endorse the belief that successful interventions should be designed around the individual needs of the woman. Therefore, the following section will explore the thoughts and feelings of the women around the time of birth to gain greater insight into their coping mechanisms with life events.

6.8.1. Thoughts around Birth, Transition to Motherhood and Support after Birth.

The thoughts around birth and the transition to motherhood will be discussed within this section to explore whether the coping mechanisms employed reflect the frame of mind in the women who relapsed. In addition, the factors that may have contributed to women remaining abstinent from smoking in the postpartum period will also be examined. It was found that support around the time of birth and into the postpartum period was mainly from close members of the woman's family, although having given up smoking, thoughts of smoking were not far away as were demonstrated in the quotes from women in Chapter 5.

Although prior to giving birth all the women in the study expressed a desire that they would like to give up smoking for good, in reality this proved difficult for some after the birth. The majority of the women coped well with giving birth but expressed varying views on how they perceived the process. It was at this point in the women's stories that some notion of self-efficacy presented itself, the stories that were relayed of the birth were told with confidence, and women had a sense of empowerment and achievement. For this group of women the coping mechanisms used during birth could also be transferred to preventing relapse when the opportunity presented itself. The transformation in becoming a mother is described by Gaffney and Henry (2007, pg.127) as a 'dynamic process' and that becoming a mother and remaining abstinent from smoking work in tandem. Support during this period was appreciated as this was a time of great adjustment and alleviated much of the anxiety of those new to motherhood. Without support women may have relapsed to smoking as a way of coping, a view proposed by Gennaro et al. (2001) examining the coping responses of new mothers in relation to infant crying.

A phenomenon that occurred in some of the stories told by women was that often the offer of cigarettes came from well-meaning partners or parents.

This would appear to be a misguided sense of support or caring, for one woman, Jada (age 24) the offer of a cigarette was made during the birth that appeared to be as a reward for 'getting through'. The offer at this point was declined, however, Jada did relapse at a later date.

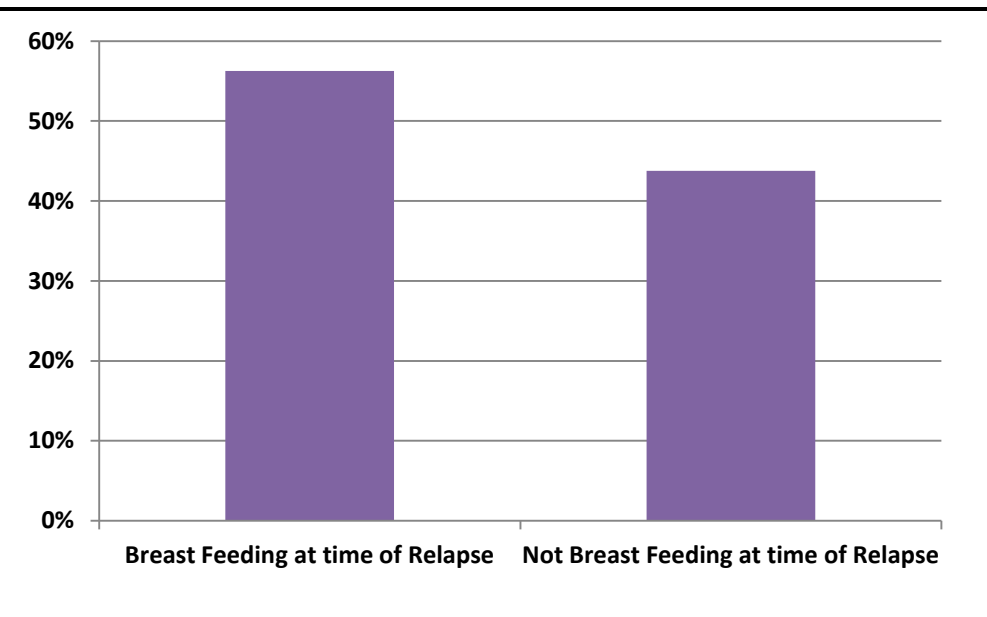
Breastfeeding and smoking have both been reported in previous research with relation to relapse, highlighting mixed views. This study also found varying responses and outcomes which are discussed in the following section.

6.8.2. Impact of Breastfeeding on Relapse.

As stated previously mixed views are held regarding the complexities of breastfeeding and relapse, with many studies advocating that breastfeeding is a protective factor in the delay of a return to smoking. Three of the women in the study did not commence breastfeeding and were still not smoking at the time of the final interview, five were completely breast feeding and not smoking, nine women relapsed but continued to breastfeed, six women artificially fed and relapsed, three artificially fed and did not relapse and one woman artificially fed relapsed at birth then gave up again within the first two weeks postpartum. Figure 6.3. illustrates the percentage of women either breast feeding or bottle feeding the baby at the time of relapse. These percentages indicate that a greater number of women continued to smoke while breast feeding suggesting that relapse did not always occur with cessation of breast feeding.

These findings do not support the current literature which suggests that women who bottle feed are more likely to resume smoking postpartum (McBride and Pirie, 1990; Ratner et al. 2000). McBride and Pirie (1990) argue that a woman may decide to breastfeed based upon her smoking status both in the antenatal and postnatal periods, whereas Severson et al. (1997) and Stotts et al. (2000) made no such conclusion.

Figure 6.3: Mode of Feeding at Time of Relapse.



Letson et al. (2002) suggest that early weaning from the breast is higher in mothers that smoke, the cause was not determined and imply this could be attributed to poorer lactation. Nevertheless, Letson et al. (2002) do acknowledge that data is inconsistent as to the causes of milk insufficiency. Ratner et al. (1999) in earlier studies exploring the association of postpartum relapse concluded that there was a link between the two which may be psychological or physiological in origin. Although literature supports that early weaning indicates there may be an association coinciding with a relapse to smoking, as no baby had been weaned by the end of this study this claim cannot be confirmed or refuted. Changes in lifestyle and habits were commented upon in this study. Women such as Jacqui (age 31) also commented on lack of time to smoke as caring for the baby took up all their time. On the other hand, Helen (age 27) who did relapse commented on the fact that she knew it was not right to smoke around the baby and always ensured the baby was not exposed to the smoke. Whether choosing to

breastfeed or artificially feed the baby there comes a time when a woman chooses to socialise in adult company again. In the next section the complexities of socialising will be discussed and what that meant to the women in this study.

6.8.3. Socialising.

It has been well documented that socialising either with a partner or friends, particularly when out can be the trigger for relapse, away from the baby, relaxing in the company of other smokers (Hannover et al. 2009, Bottorff et al. 2006 and Thyrian et al. 2006a). For some women such as Helen (age 27) the temptation is too much and they succumb to the offer, for others going out is seen as the challenge they needed to prove they can abstain from smoking again. During one interview Moira (age 35), commented that memories of the smell can be enticing, but for others interviewed, Tracey (age 23) and Lucy (age 24) the smell still provided a protection and reinforced the belief that they were no longer smokers.

A longing to belong again particularly with partners was very difficult for some, particularly for Tracey (age 23) and Petra (age 25), smoking together brought back feelings of closeness that had been missing during the early postnatal weeks due to the demands of the baby. For some women socialising took on another meaning which did not involve public houses and clubs, but baby orientated socialising such as mother and baby groups at local Sure Start Children's Centres. These child based activities were found to be protective in so much as smoking belonged to another environment and not part of the new life adopted by some of the women. For Tracey (age 23) who did relapse to smoking, considered that she could separate these two lives and that smoking would be acceptable if not within sight of the baby. These particular beliefs held by women in some part are their interpretation

of accepting smoking again, by smoking away from the baby they were still being 'good' mothers. Self-efficacy played a role in a woman's coping mechanisms and being able to rationalise how she perceived herself as a mother and as someone who no longer smokes is discussed in the following section.

6.9. Self-Efficacy and Self-Belief.

Drawing from the experiences of the women in this study, perceived levels of self-efficacy and self-belief appeared to be factors in determining the ability not to relapse postpartum. For those who embraced the transition to motherhood and accepted the difficulties as an integral component to this new way of life also coped with not smoking this could be seen as a demonstrating a level of self-efficacy. These were experiences reported during the interviews by several women, for example, Moira spoke about her difficulties with breastfeeding but considered this to be part of her new role as a mother. Moira did not consider relapsing to smoking as a course of action to overcome her difficulties. A sense of self-efficacy was evident in the case of Zelda (age 28, Turkish) during pregnancy her determination to stop smoking overcame her language barriers in seeking help from the smoking cessation services. Zelda chose to contact the service directly for support in stopping smoking for her and husband. This must have been a difficult decision to make as Zelda spoke very little English and appeared to be quite a reserved and private person. As Zelda discovered, the pregnancy service also extended to other members of the family including significant others who may be affected by smoking and wish to stop either for their own personal reasons or in support for the pregnant woman. Zelda and her husband both attended appointments, however, only Zelda successfully stopped smoking. Zelda also demonstrated a sense of mastery in overcoming the barriers to stopping smoking. Mastery will be discussed further in the following section.

6.9.1. Mastery.

Bandura (1977, 2004) states that to attain such a level of self-efficacy one has to develop over time and this can be achieved through a series of stages or exposure to challenges or by example from others. This is of significance as the women who did relapse in this study were mainly the younger population, for example, Louise (age 18) who relapsed around the time of giving birth to twins and Marie (age 18) who relapsed within two weeks of giving birth as Bandura (2002, 2004) illustrates mastery experience is one of the prerequisites for developing self-efficacy. Mastery can be explained as gaining confidence when repeated encounters of a certain experience are successfully overcome. For some of the younger women life experiences have been few thus opportunities to stop smoking have not presented themselves and as a consequence they have not 'mastered' the art of successfully overcoming difficult obstacles in their lives. Whereas, the older mothers, in this case, Moira (age 35), Jacqui (age 31) and Zelda (age 28) have had more life experiences and challenges in the workplace and as such learned to develop a stronger sense of perceived self-efficacy. Gaining the confidence in becoming a new mother triggered a cascade of associated feelings that reinforced the perception of being a 'good' mother, not smoking belonged in this category alongside other life changing decisions that may be made at this pivotal time in a woman's life. Alongside Mastery, Bandura (2004) considers that social modelling also has a part to play and this will be discussed in the following chapter.

6.9.2. Social Modelling.

Social modelling is further concept to be considered during the development of self-efficacy in relation to postpartum relapse. Bandura (1997b, 2004)

argues that the observations of others in similar situations can impact on the success or otherwise in the person trying to achieve an aim. Again, this argument can be considered with regard to the women in this study to a certain extent, in particular with reference to the younger women and women from countries other than England. It was noted that these two particular groups of women lived in environments where they mixed with more people who were smokers and in these instances smoking was viewed as a normal type of behaviour. As a result, relapse was more likely for these women in the absence of a role model to emulate in the successful cessation of smoking long term. An area of particular consideration is that some of the women such as Petra (age 25, Polish) had migrated from one of the new European countries which do not have a smoking ban enforced. Consequently they have spent most of their lives in environments supportive of smoking whereas women and their families born in the UK have become more familiar with the alienation of smoking in public places. However, a further viewpoint to consider is that these women had smaller supportive networks in England as they were away from friends and family and were more reliant on only their partner, who may also have been a smoker. This had been the experience in the life of Petra (age 25) who had migrated from Poland with her husband to start a different life in England, however, they had very few friends in the UK and all their family had remained in Poland. Petra did not work and consequently only had the support of her husband, who was in fact a smoker and smoking was something they were familiar and comfortable with.

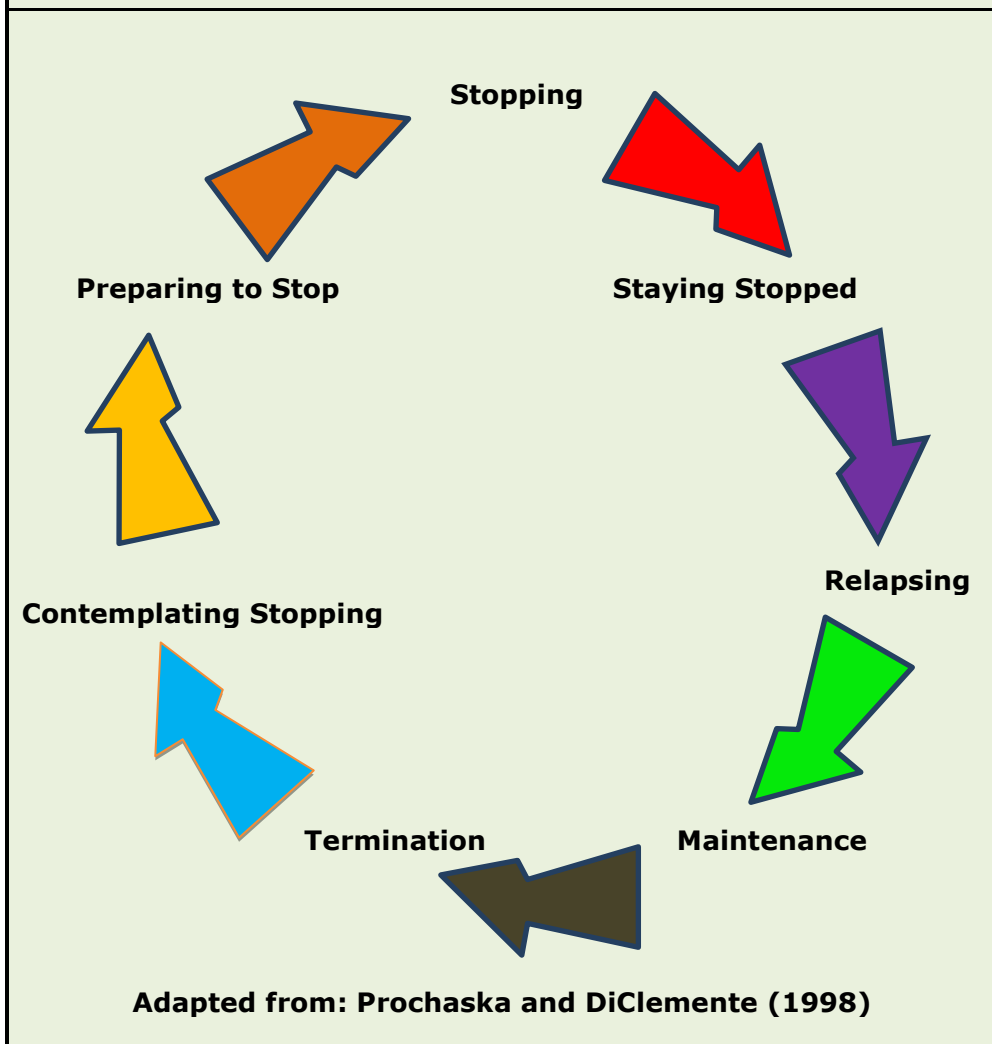
Nelson-Jones (2006) is of the belief that self-efficacy can be achieved if a certain course of action is taken i.e. smoking cessation is successful as the result of suggestion by another person. Nonetheless, when considering permanent smoking cessation within the context of pregnancy and

motherhood, the realities of such suggestion may be counter-productive. Furthermore, an alternative stance contends that self-efficacy can be harmed if unrealistic goals are set and individuals are unable to attain the goal set.

The cycle of change developed by Prochaska and DiClemente, (1998) as illustrated in Figure 6.4. clearly demonstrates the stages a smoker will go through in the process of giving up smoking or any other addictive behaviour. However, this model does not set time parameters for each step of the cycle, for the general population this will not be an issue as each stage can take weeks, months and even years to accomplish. In supporting pregnant women to stop smoking this process needs to be accelerated to achieve non-smoking status as early as possible in the pregnancy for the optimum health benefits for both mother and fetus.

Where a pregnancy has been unplanned the pre-contemplation stage of stopping smoking would not have been given due consideration before actually stopping and the woman had not had the chance to plan for the long term prospects of smoking cessation. For these women the risk of postpartum relapse to smoking was greater as not only were they unprepared for the pregnancy, they were not prepared for smoking cessation to be suggested to them at this juncture. When faced with the suggestion of smoking cessation by a member of their family or health professional they were unable to comply long term resulting in a relapse to smoking and a lowering of self-efficacy as a result.

Figure 6.4: The Cycle of Change



The same difficulties were experienced by some of the women who had moved to England, although not young mothers, these women were often coping with the added stresses of living in a new environment and finding themselves pregnant whilst still smoking. In particular the stresses of moving to the UK and coping with an unexpected pregnancy put added strain on the life of Naomi (age, 30). Although Naomi had been able to stop smoking during the pregnancy, she relapsed around ten weeks postpartum, no longer able to refrain from smoking. The suggestion of stopping smoking at this time created an added burden for which they were not fully prepared. This led to a

decline in self-efficacy when after the birth they could not maintain their non-smoking status.

In this study, the majority of women stated that the pregnancy had been unplanned; nevertheless they confessed to have been harbouring thoughts of contemplating stopping smoking prior to becoming pregnant. For that reason alone, it must be considered for those women, whether subconsciously or otherwise they had entered the contemplation stage of the smoking cycle of change (Prochaska and DiClemente, 1998). Confirmation of the pregnancy may have provided the final trigger to stop and cement the end of their relationship with smoking. For these women stopping smoking was the preferred option on discovering they were pregnant as opposed to cutting down or continued smoking. It must also be taken into account that as these women had stepped into the 'cycle of change' they were in a strong position not to relapse postpartum, for stopping smoking was something they were doing for themselves and pregnancy was just the trigger they needed- not the cause for stopping. The physical and emotional challenges associated with relapse or resisting relapse also contribute to women's ability in achieving self-efficacy and will be expanded upon in the next section.

6.9.3. Physical and Emotional Challenges.

The further component in the development of self-efficacy proposed by Bandura (1997, 2004) is in the belief that changes in physical and emotional states have an impact on perceived self-efficacy. When considering childbirth, there can be no greater time when one's physical and emotional state is challenged. As women can move through feelings of great elation to feelings of despondency and inadequacy these altered states can be the result of physical or mental tiredness affecting mood and coping strategies. It is at these times women may be vulnerable to relapse as their confidence is at low

ebb and their sense of perceived self-efficacy is weaker. Inadequate support as witnessed in the life of Nicole (age 16) one of the younger women interviewed in the study, contributed to negative feelings. The experience of women such as Nicole and others in similar situations do not have the support mechanisms in place to bolster their self-esteem and belief in their own capabilities in not relapsing to smoking following the birth.

In relation to the success of self-efficacy and the prevention of postpartum relapse, consideration should also be given to those women for whom this may have an adverse effect. Bandura and Locke (2003) discuss the theory of perceived self-efficacy and argue that setting high goals that are unattainable could be detrimental to wellbeing. This theory was worthy of consideration for those women such as Nicole, who relapsed to smoking in the postpartum period as it could be argued that the 'ideal' of not relapsing was a goal too high. The goal was not only set by themselves, but by the wider socio-environmental perspective: family, friends, society and policy. However, there was no evidence for this process that emerged from the narratives of the women in this study, which could be attributed in part to the small number of participants. Nonetheless, this notion cannot be wholly discounted and is still worthy of consideration in future studies of this nature.

Notwithstanding the fact that lack of self-efficacy cannot be responsible for all instances of relapse postpartum it must be considered that one of the key factors in aiding the prevention of postpartum relapse would appear to be a high level of self-efficacy, examples of which have been demonstrated in this study. The women who had not relapsed to smoking at the time of the last interviews felt more confident in their lives and had adapted well to becoming a mother. The new way of life was a start of a new identity and smoking had not been included. For example Moira (age 35) and Jacqui (age 31) had both decided smoking was no longer to play a part in their lives. They had

considered this carefully in the antenatal period and had prepared for this change in different ways.

An alternative stance for two other women included in the study, Tracey (age 23) and Claire (age 20), the incentive to remain smoke free was a financial one and they had carefully calculated their savings, achieved by not smoking and had definite plans on how these savings would be used to the best advantage. A return to work can also trigger a psychological change in the women's perceptions, from being solely a mother to being part of a workforce again. A return to smoking may pose a further issue as it could signify a further change in identity, that of a working mother. These aspects will be considered in the following section.

6.9.4. Return to Work.

A further dimension to be taken into consideration was a return to work; many of the women enjoyed the working environment and the camaraderie of colleagues in their day to day lives. Jacqui (age 31) did consider the risk of smoking again when back in the workplace but was of the opinion that the longer she had abstained i.e. throughout most of the pregnancy and up to a year before returning to work the temptation would be less likely. On the other hand, Paula (age 26), although feeling confident in her success of stopping smoking still harboured concerns that being in the company of other smokers socially and at work might not be easy. Despite the history of work none of the women interviewed felt ready to return, but had also incorporated this into their long term plans for the future, again demonstrating evidence of perceived self-efficacy, building confidence of a new life with a baby, subsequent return to work or study and without cigarettes in their lives. The main reason for returning to work for the majority of women was due to financial reasons; however, this appeared not

to be the only aspect considered. Returning to work also gave women back some independence and self-identity; back to the person they were before becoming a mother, including the life of a smoker. Thoughts of self-identity at this point, were raised and will be discussed further in the next section.

6.10. Self-Identity.

As perceived self-efficacy can have both positive and negative effects upon a woman's transition through pregnancy to motherhood and the decision to smoke or not to smoke in the postpartum, so too can the search for self-identity. For some of the women in this study the quest for self-identity was in fact a positive journey with regard to who they were after becoming a mother. The most significant factor emerging from this study is the idea that stopping smoking began a new chapter in their lives. The women considered that the old life they had left behind was now closed and that the previous hedonistic life of parties, drinking and smoking was a phase to look back on as a stage they enjoyed but would not miss. They were content to be consumed by their new role as mother and had no desire to return to this lifestyle. On the other hand, for others this was not the case and they felt insecure in their new role and unsure of whom they actually were now as illustrated in the quotes from Jada (age 24). Jada expressed some concern as to who she really was now and considered that smoking regained some control over her life. These thoughts are consistent with work by Bottorff (2000) in discussing the impact of being a new mother advocating that the loss of identity can be a problem when striving to regain normality in life. Greaves (1996) contends that a return to smoking at this stage can renew a woman's confidence and maintain a sense of identity but at the same time creating mixed tensions of guilt and contradiction. Not only do women struggle with their own identity but also struggle with their relationship with their partners. The next section will discuss what this means to women.

6.10.1. Couple Identity.

A return of identity as a couple was an issue raised by women in the study, in particular Petra (age 25, Polish) and Helen (age 27) who both commented that they felt isolated from their partner since the birth of the baby and to share time smoking together reunited the relationship and gave them a sense of belonging. Bottorff et al, (2005) strongly agree with this notion, confirming that smoking together reinforces a couple's relationship with regard to familiarity and a unique closeness not shared with others. One woman, Tracey (age 23) in discussing relationships and identity suggested that her relationship was stronger through sharing the smoking cessation process together. They had both given up during the pregnancy and this formed a close bond between them, Tracey added that if her partner had relapsed then there was a high probability that she would have found it difficult to abstain. Equally, where only one partner smokes dissonance may develop in the relationship regarding the acceptability of smoking after childbirth.

For women who had migrated to the UK the question of identity raised further issues regarding who they were in relation to being in a new environment and relationship with smoking. The following section will discuss the aspects pertaining to their identity in the UK.

6.10.2. Mixed Identity.

The identity of women not born in England for example, Paula (age 26, Portuguese) and Naomi (age 30, African) depended largely on their integration into the English way of life and smoking issues drew a mixed response. Women participating in this study had varying reasons for migrating to England; women moving to England of their own volition appeared confident when discussing their identity that contributed to the

adaptation of a new way of life. Of the women who had migrated to the UK, only one, Rena (32) came from an English speaking country.

The more confident women had settled well, lived in comfortable accommodation and had a good command of the English language. For Paula (age 26) and Zelda (age 28, Turkish) two women in the study, a new sense of identity and a new life had been developing before pregnancy and continued during pregnancy and beyond, smoking for them did not fit into this new life and they did not want to be reminded of this aspect of their lives. Other women, such as Naomi (age 30) and Petra (age 25), struggled with such a huge change and returned to smoking postpartum to regain their previous identity and security with their partners as they had not many friends and no other family with them in England. These findings are in opposition to earlier studies undertaken in the UK, (Hawkins et al. 2008). Hawkins et al. (2008) opine that the longer immigrant women live in the UK the more they become accustomed to the health behaviours within the culture and adopt such practices as smoking. Perreira (2004) concurs with these findings as they mirror studies undertaken in the USA, however, it was not found to be the case in this study. As different time frames may exist in other studies for the length of time the participants have resided in their new countries this study cannot be compared to others. Identity for younger women may hold different views to those women of an older disposition and women not native to the UK and will be discussed separately in the next section.

6.10.3. Young Women and Identity.

For some of the younger women the return to smoking was not so much a reaffirmation of their previous identity, but a continuation of the same. Smoking was still a major part in their lives as for many they were still

shaping their original identity and forming friendships. Smoking was part of their social identity and could not be easily discarded when picking up the threads of lives. Greaves (1996) demonstrated that identity was a major issue for women when trying to find a reason for the meaning of smoking in their personal situation. For younger women, such as Louise (18) and Marie (16) they tended not to analyse what smoking actually meant to them but considered it was something they could rely on in times of emotional disturbance. The majority of younger women and to some extent a number of the non-English women did consider, albeit unconsciously that cigarettes were the only constant in their lives.

It has to be taken into consideration that these young women such as Marie (16) had often left home, moved frequently from place to place, become estranged from close family and partners and unexpectedly found themselves in the strange new world of motherhood. For them the cigarette was their closest companion a loyal confidante in times of joy, sadness, anxiety and pain. The cigarette was always available to turn to and unlike people would never verbally distress or abuse them. For such reasons, in the situation Marie found herself in, cigarettes could not be abandoned for without them there was no familiar anchor to hold her together when all other ties had been severed.

6.11. A New Life.

Certain findings presented within this study concur with previous research undertaken to examine the reasons why women relapse to smoking during the postpartum period. However, a recurrent theme that has woven through the narratives of the women in this study is not so much the reasons for relapsing but the reasons for staying a non-smoker. This is a significant finding in the exploration of why women do relapse to smoking in the

postpartum period and has not been recognised before. In the consideration of stopping smoking and having a new baby the women, in particular, Moira (age 35), Jacqui (age 31), Paula (age 26, Portuguese,) Lucy (age 24) and Tracey (age 23) had all decided that smoking belonged to an old way of life in their past. They were now looking forward to a future that no longer held smoking as an integral part of who they are. For this group of women the transition to motherhood opened a window of opportunity to start a new life as both a mother and a non-smoker. Beginning a new life was empowering not only in aiding the development of a new identity, but putting a divide between whom they were and who they had become.

Many of the women interviewed welcomed the pregnancy as a time to reconsider their smoking habits and felt this gave them the opportunity to stop. Edward and Sims (1998) would agree with this statement and go further in claiming that for some women stopping smoking was a long term prospect. This aspect also resonated with the experiences of some of the women in this study, although not always openly acknowledged. Notwithstanding, the majority of women in this study intimated that they intended to remain non-smokers after the birth of the baby which is at variance with the earlier work of Edward and Sims-Jones (1998). Moreover, Von Kohorn et al. (2012) expostulate in that although most women claim that they wish to remain a non-smoker after having stopped most do only suspend their behaviour for the duration of the pregnancy. Nevertheless, Von Kohorn et al. (2012, pg.68) propose that to support women in stopping smoking long term interventions should be tailored towards preparing women to move from being a '*pregnant* former smoker to a *permanent* former smoker'. In addition, Dolan Mullen et al. (2004) suggest that greater investigation into the theory of 'suspended smoking' would aid understanding and promote the development of interventions to support this group of

women. Conversely it would also be of value to gain a deeper understanding of what influences women in the decision to stop permanently. This proposition sits comfortably with the belief of the women in this study with regard to starting a 'new life' as this is what they expressed when discussing the permanency of their new status as mothers.

All these women had supportive partners, but they had arrived at their decision themselves to begin this new life. For Moira, Jacqui, Paula and Lucy this was their first pregnancy and although this precipitated their aim to stop smoking, the idea had been forming prior to this. However, Tracey was already a mother and although had given up smoking during the first pregnancy had relapsed at a time when she had been much younger and felt she had less control over her life. The idea of stopping smoking did not always coincide with planning a pregnancy for some of the women as they admitted that the pregnancy had not been planned and had in fact been a surprise.

In contrast, for some women who did relapse, for example Jada (24), it was a fear of losing their identity that encouraged a return to smoking. Jada felt that she did not know who she was anymore and having a cigarette gave her comfort and security that she was still the same person as before giving birth. She did not feel ready for a new life and smoking was embedded in the old life.

In observing the two viewpoints it is apparent that the conception of beginning a new life is indeed a major commitment to not smoking and in eradicating the whole concept that smoking encapsulates. The notion of beginning a new life when stopping smoking and becoming a mother has not been found in previous literature to date and should be considered for greater exploration as could have a significant contribution in developing future

interventions to promote smoking cessation and preventing postpartum relapse.

6.12. Strengths and Limitations of the Study.

6.12.1. Introduction.

The findings from this research study have been discussed in the previous section and this section will draw together the strengths and limitations of the research methodology. The implications for practice will then be discussed based upon the theoretical perspectives which developed from the interviews and field notes undertaken within the main element of this study. Personal reflection upon the role of the interviewer and the interviews will also be discussed within this chapter.

It is important for any study to acknowledge not only the strengths and attributes that emerge but also the limitations that were encountered during the process. It is only by building upon these findings that research can make a difference to the issues concerned, therefore it is of value to discuss the pertinent points within this chapter beginning with the decision for the chosen methodology.

6.12.2. Choice of Methodology.

Phenomenology was the approach adopted in this qualitative study to explore the experiences of women smoking, stopping and relapsing during the transition to motherhood. Dykes (2004) supports this approach when attempting to explore individual experiences, regardless of class or culture as oppose to observing the characteristics of groups. The aim of the study has been met as the experiences of the women under scrutiny have been fully explored therefore the chosen approach can be considered appropriate. Although the small numbers of participants recruited for this study are

acceptable in qualitative research, the findings cannot be generalised however, the findings presented can contribute to improving understanding of the problem of relapse.

The intention was to explore the experiences of women and not to find definitive answers to the issue as would have been expected in alternative approaches. In addition, narrative analysis was employed to enable the researcher to focus in greater depth on the individual story being told (Cresswell, 2007). For that reason both the phenomenon and the experience could be interwoven in the experience narrated by the women. A quantitative approach could have collected statistical data related to the experience of relapse but would not have achieved the level of in depth exploration of the experiences beneficial to gaining a greater understanding of the difficulties encountered. Nonetheless, using a quantitative approach in the form of a questionnaire was advantageous in the first part of the study. This enabled the researcher to gain access to the participants willing to participate in the interviews and also proved a cost effective method of gathering demographic information pertaining to the contemporary population of pregnant women. However, questionnaires and surveys are at risk of misinterpretation or of providing incomplete or inaccurate responses (Parahoo, 2006). As reported in an earlier chapter this proved to be the case in this study, for a number of women had completed the questionnaire that had either never smoked or had no intention of stopping. Although this did not affect the results it was time consuming to filter these questionnaires out of the correctly completed forms. The collection of data through this method reinforced the reason for conducting in depth interviews, as the questionnaires were very impersonal and did not build a picture of what the women was actually experiencing. The interviews enriched the data by allowing the researcher an insight into the lives of the women during their experiences. This observation was also the

view of Edwards and Sims-Jones (1998), Bottorff et al. (2000) and Nichter et al. (2008) in previous studies exploring similar issues of postpartum relapse.

The principles of phenomenology were used to develop a number of significant statements and meaningful themes to then present the experiences of the participants (Cresswell, 2007). Some researchers argue that triangulation methods should be utilised to support the findings within a study, for example incorporating different methods, theories and sources (Patton, 2002, Silverman 2000, Miles and Huberman, 1994, Lincoln and Guba, 1985). Cresswell (2007) states that peer review or peer debriefing can be undertaken to ensure validity and reliability is consistent. In this instance the supervisors of the research were able to provide this support and were able to question and probe the interpretations of the analysis thus provide an external viewpoint of the process.

An additional method of maintaining credibility and trustworthiness of the research is by member checks whereby the participant is given the opportunity to review their interviews. However, not all qualitative researchers are in agreement with this notion and consider it to be more fitting within the quantitative field. On the other hand Lincoln and Guba (1985) argue that member checking is of vital importance in confirming credibility. Moreover, Stake (1995) agrees and suggests participants should be able to view the researchers work and contribute by including different language. This can be undertaken on an individual basis or in focus groups as implemented by Cresswell (2007). In this study it was not possible to review the transcriptions with the women. Nonetheless on returning to interview the women on the second and third visit the previous interview was discussed before proceeding to reaffirm the focus of the study and to ensure there were no issues or ambiguities arising. This ensured that both the woman and the researcher were confident that the data were trustworthy and credible. The

transcripts from the pilot studies however, had been read by the participants to assess for accuracy before proceeding with the main study.

6.12.3. Choosing a Longitudinal Study.

The phenomena smoking, stopping smoking during pregnancy and either remaining a non-smoker or relapsing happens over time. The women in the study could have been interviewed retrospectively on just one occasion following the birth to explore their experiences. However, it was decided to undertake a longitudinal study to capture the women's experiences closer to the time they happened. As Parahoo (2006 pg. 156) purports 'peoples' attitudes, beliefs and behaviours may change over a period of time' and memories fade it was considered appropriate to interview at three points during their journey through the childbirth continuum.

6.12.4. Range of Participants.

To ensure that a fair representative of the population under exploration was gained women were selected from the volunteers to include both the younger and older age group and women who had not been born in the UK. This enabled a variety of experiences to be studied and increasing the wealth and richness of the data. No-one under the age of sixteen was selected as it may have proved problematic in gaining consent to participate. The number of women volunteering as a result of the questionnaire supported the view that the selection of the chosen range of women was at less risk of bias than actively seeking out participants.

6.12.5. Researcher Bias and Reflexivity.

Bias can place a serious threat to the data in terms of reliability and validity and should be avoided wherever possible (Parahoo, 2006). Cluett and Bluff, (2003, page 209) describe bias as:

'any feature that has the potential to skew research or research findings, intentionally or accidentally'.

Potential bias could have arisen from the women themselves in the fact the subject matter was a contentious issue and they have felt obliged to only give the answers they thought were expected of them. Assumptions can be made upon the advantages and disadvantages of the methods of recruitment, for both the questionnaires and the interviews. By offering the questionnaire to all women suggests that women were not singled out and of those a wide variety and potentially unbiased number questionnaires are returned. On the other hand, allowing women to self-select to complete the questionnaires cannot be viewed in any way as coercion with only motivated women willing to participate. A further consideration was that if only motivated women completed the questionnaire then they may have given the issue of smoking greater deliberation and as such had planned strategies to support themselves long term from the risk of relapsing.

With regard to the interviews all the women who participated appeared to be comfortable and relaxed in discussing their experiences of smoking and relapsing after stopping. The fact that the women had all volunteered to participate indicated that they were actually motivated to contribute to the study thus further demonstrated a lack of bias on their part. Alternatively, their motivation to participate could also be construed as bias in the fact they were more enthusiastic to discuss their experiences. It could be said that other women may have been less driven to discuss their experiences with the researcher, particularly if they felt pressured into stopping smoking. Nevertheless, a degree of bias cannot be excluded by the very nature of a phenomenological study which includes human beings that are not all of a uniform standard.

Cresswell (2007) and Merriam (1988) state that researcher bias is also an important issue that should be addressed at the start of a study. This was a pertinent issue to consider in this situation for not only was I the researcher and midwife, but also an experienced smoking cessation specialist, equipped with the knowledge to pre-empt certain situations should they have arisen during the interviews. This knowledge could also have impacted upon the interpretation of the data analysis and make assumptions rather than clarifying the answers first. Parahoo (2006, page 166) reinforces this disclosure claiming it could be viewed as '*omissions and exaggerations*' rather than deliberate misinterpretation.

Taking a reflexive stance, I as the researcher considered the position and was able to detach the midwife/smoking advisor role from that of the researcher, recalling only two potentially difficult situations. The first was when undertaking an interview with a woman not born in England who wanted advice on her immigration status. As a midwife I knew how to find this information, but this would have detracted from the interview and placed both myself and the woman in a midwife/ client relationship as oppose to researcher/participant. However, contact was made with the community midwife caring for the woman and an action plan was put in place without affecting the interview or the relationship.

The second situation was on visiting a woman for the third time, confident that she would have not relapsed. On commencing the interview it transpired that the woman had actually relapsed to smoking in the previous week. Internally, this was difficult for me as the researcher to process, on one hand, disappointed that the woman had relapsed and wanting to provide support to reverse the situation. On the other hand, excitement, as it meant the experience would be relayed during the interview and therefore providing rich data on the experience. Thomson (2011) recalls similar experiences during

studies exploring traumatic childbirth of which she had considerable knowledge of as a midwife. To overcome her feelings towards the situation and eliminate bias Thomson (2011) kept a reflective diary in which she openly discussed her feelings which were also discussed during supervision meetings. This was helpful to the researcher in this context as being able to discuss and write reflexively about bias and prejudice is cathartic encouraging observation both '*inwardly*' and '*outwardly*' (King and Horrocks, 2010, page 125).

It was helpful to make short field notes after each interview as it aided researcher reflexivity when returning to the transcribed interviews and considering the analysis process. This also aided the memory and focused the researcher on each individual transcript and situation allowing for examination of any preconceptions that the researcher may not have been fully aware of. An example of an interview transcription and field notes can be found in appendix 15.

Reflecting upon the practical elements of the study, with consideration to inviting women not born in the UK to participate, translation may have posed a problem both in recruiting and in the data analysis. I acknowledge that some women may have been lost to the study as the information posters were only displayed in English language. Space did not allow for multiple or larger posters in the antenatal areas. Only two women completed the questionnaires in another language (Polish) and due to the layout of the questionnaire it was possible to record the responses. Three of the interviews required the assistance of a translator as discussed earlier in Chapter Three (page 112). If I had not been accustomed to working with women and families for who English is not their first language, I may have been quite daunted. However, as a midwife working in areas of cultural diversity, this was something I could work with. On occasions, it took a while longer to

explain the questions as not always understood fully by the person translating, on reflection I consider that the extra time was most worthwhile in gaining a varied viewpoint on the phenomena being explored.

Being a midwife and acknowledging having knowledge of smoking cessation was not all perceived negatively as not all qualitative research can be objective, but does come from a particular perspective (Bannister et al. 1994). The fact of being a midwife with smoking cessation expertise, put women at ease during the recruitment and interviews as gave credibility to the study. The women commented that they did not mind discussing their experiences with someone who understood what they were saying. King and Horrocks (2010) concur with this theory suggesting that a relationship which is involved, and with effective dynamics contribute to how research is carried out. Moreover, Mair (1989) argues that research which is bland but to the point is not of great interest to those who have commissioned it as it may not tell the whole story.

Utilising reflexivity opens up the research and encourages critical appraisal of the research process. In this study, the researcher was able to reflexively consider how the experiences of women participating were interpreted and acknowledge the part played within this. To some extent the personal reflexivity was considered as to how the way of thinking about interests and accumulated knowledge fitted into the overall picture. Willig (2001) discusses personal reflexivity and agrees that it does have an increasing part to play in research of a social background. On reflection, I consider that my background of being a midwife with experience of working in the field of smoking cessation supported my credibility with the women during the process from recruitment through to interviewing. This was further enhanced as both a woman and mother when appreciating the lifestyle changes experienced

during the transition to motherhood and making decisions regarding choices to be made.

To summarise, bias in qualitative research cannot be totally excluded due to the subjective nature of the methods employed, however, researchers should be encouraged to think reflexively and to reflect on their work and themselves in order to be confident that it is honest, trustworthy and valid.

6.12.6. The Use of NVivo and the Analysis of the Data.

Although the pilot study had been analysed manually, it was decided to use a computer software package to analyse the data generated by the main study. This was deemed appropriate due to the amount of data finally collected which may have been difficult to handle and manually analyse. Cresswell (2007) and Boeije (2010) both advocate the use of a software package for analysis, but reiterate that the computer is only as good as the researcher inputting the data. This was a personal learning curve for the researcher in this instance and sound advice. It was also appreciated that by entering the data personally gave a deeper understanding of the emerging themes, enabling the later theories to develop. Only once an understanding of the practical applications of using NVivo had been embedded could the value of using a software package as oppose to manually analysing the data be recognised. Reflecting upon this experience, it must be acknowledged that this has been another hurdle crossed in gaining expertise in technology and will assist in further studies in the future.

6.12.7. Representativeness and Transferability of the Findings.

Qualitative data is concerned primarily in exploring a phenomenon as oppose to proving or disproving a hypothesis, however, the data should be collected and analysed by a systematic method (Parahoo, 2006). Moreover, Polit and

Hungler (1995) claim that research should be able to reproduce similar results in other settings and situations. Although quantitative data can claim to achieve this aim, qualitative data, on the other hand, is more concerned with the resulting findings being a joint attainment between the researcher and participant (Parahoo, 2006). Cresswell (2007) agrees that the data represents both the experiences of the participant and to an extent the understanding of the researcher. Further debate arise from the number of participants taking part in a study, quantitative researchers generally work on large numbers to validate the study being representative of the population under examination. Sandelowski (1995) argues that numbers are important however, it is more dependent upon the type of study undertaken. For example as in this study it was crucial to gain an in depth exploration of women's experiences and so it was deemed pertinent to study a small sample in depth than to exceed saturation point with a large number and thereby weaken the findings. In order to gain a representative section of the population of women who stopped smoking during pregnancy, questionnaires were utilised to capture a large sample from which volunteers were selected. This was based upon statistics collated within the Trust in which the study was undertaken of the number of women smoking and stopping during pregnancy during the year preceding the study taking place. These statistics were also representative of the total population of pregnant women's smoking in the UK (DH, Infant Feeding Survey, 2005).

Lincoln and Guba (1985) suggest that rather than use generalisability as a criterion in qualitative work, the term transferability is more appropriate as the findings from the data could be found in similar settings. Transferability could also be considered to exist if the original researcher has provide and 'audit trail' for which future researchers could follow in order to replicate the study (Lincoln and Guba, 1985). Talbot (1995) suggests that being able to

reproduce a study in this way would also affirm dependability. This study built upon the earlier work of Edwards and Sims-Jones (1998) following a qualitative, phenomenological approach in order to explore a similar phenomenon. Furthermore, in documenting all the stages of this study within the thesis it is anticipated that future researchers can build upon these findings in the quest of exploring the experiences of women in this setting. Morse (1992) agrees in the belief that similar findings are transferable when previous literature supports this.

6.12.8. Inclusion of Younger Women and Women not Born in UK.

Although younger women and those not born in England only represent a smaller number of the population of pregnant women, they do have a higher percentage of women who smoke. It was decided that their viewpoint may differ from that of the other women included in the study and as such could provide rich data to contribute to the understanding of women's experiences of postpartum relapse.

Thought was given to the inclusion of women for whom English was not their first language and may have been a barrier for them in communicating their experiences. However, as a result of securing some funding, the questionnaires used in the first part of the study were able to be translated into other languages (appendices 10 a, b, c, d, e, f, g). In reality, very few of the questionnaires were actually completed in the alternative languages provided; the reasons for this were not established. On reflection, this may have been a limitation due to the advertising posters displayed being written in English and as such only women understanding written English fully understood. Due to the design of the questionnaires by using yes and no answers and numbers the services of a translator were not required for this stage of the study. However, on reflection, if the posters advertising the

study had also been in the languages of the questionnaires there may have been a greater response from women for whom English was not their first language. In the main study, the interviews, only two women required the services of an interpreter again this may have been in part due to the small number of questionnaire respondents volunteering to take part.

The experiences of both the migrant women and the younger women did add to the study as in some cases they did have different issues to contend with, putting a different perspective on the study. Although the language barrier was potentially problematic for the non-English women, contact with the younger women was not without some difficulties. Some of the younger women moved house and changed telephone numbers during the study and so took greater time to make contact with. Several of the young women could not be contacted at all after volunteering to participate when completing the questionnaires and two women had to be excluded after the first interview as again could not be traced. One woman had moved away due to domestic circumstances but retained her telephone number so the last two interviews were conducted by telephone instead of in person. These problems contribute to the study by demonstrating that for some young women, pregnancy is a time of great stress and associated problems which compound their difficulties in stopping smoking and not relapsing postpartum.

It was considered that the experiences of these women was valuable in gaining greater understanding as to why relapse is a problem for some and therefore could not be excluded from the study.

6.13. Congruence with the Theoretical Perspectives.

This section will discuss the main issues that impacted upon the women's decisions in relapsing or maintaining abstinent from smoking in the postpartum period. The influence of the socio-ecological perspective will be

included. This was introduced within the literature review to give focus to the external factors that may have potentially impacted upon smoking. The findings from the study formed into three main concepts comprising: social influence, barriers and facilitators and pregnancy, the start of a new life or just an interval.

6.13.1. Social Influence.

Social influence was the first concept to be explored as it was considered that this set the context in which the whole smoking phenomena encompassed. It was of value to examine how smoking had become an integral component of the lives of these women. The majority of women had commenced smoking during their formative teenage years as a response to peer involvement, initially experimenting with the concept of smoking. Although society as a whole frowns upon smoking and in particular young women smoking it would appear at 'rite of passage' for some and fitted into their social context. For some women smoking was a way of feeling a sense of belonging within this like-minded group of peers. No-one admitted to considering the long term consequences of smoking and the risk of addiction. Smoking very soon became a way of life for these women and smoking became a regular habit. This early initiation into smoking has also been documented in the literature (Hymowitz et al. 2003, Breslau and Peterson 1996) however, no correlation between smoking from an early age and relapse has been observed. Smoking with peers gradually extended from experimental to a group activity when out in public places such as public houses and nightclubs. This progression appeared to follow a similar pattern in both the English and non- English women, however, for the younger women the distinction between social smoking and smoking in general did not present itself.

Partner influence was a significant feature in women's lives and formed part of the shared bond they had between them. Smoking gave a feeling of closeness to the partner in the intimacy of the time spent in sharing cigarettes together. This appeared to be a universal factor across all three groups of women where the partner was also a smoker. Similar findings have been found in other studies which support this theory (Bottorff et al. 2000 and Edwards and Sims-Jones, 1998).

Encouragement and support from partners, family and friends also reinforced their decision not to smoke in the postpartum period. Partners provided moral support either by verbal encouragement or choosing to stop smoking as well. Financial incentives were offered on occasion by close family members in an attempt to show support.

Social influences as both a positive and negative support emerged as having an impact on the woman's decision to smoke or abstain during pregnancy and the postpartum period. Other forms of support were discussed during the interviews, in particular the support offered and provided by the health professionals. The perceived support from external agencies was variable and the majority of women admitted to giving up smoking of their own volition. The support from health professionals was not visibly reinforced during the pregnancy.

6.13.2. Barriers and Facilitators.

Interestingly, what was viewed as a facilitator for some women in stopping and maintaining abstinence from smoking was on occasion also viewed as a barrier. Nausea contributed to stopping smoking for some women, the smell and taste acted as a deterrent for most women. However, the lure of the smell did attract one woman back to smoking.

The health of the baby was cited as one of the major reasons for stopping, with less thought given to their own health. This correlates in accordance with previous literature exploring the issues of postpartum relapse (Quinn et al. 2006). For some women between the 20 and 28 weeks thoughts of smoking again emerged and this appeared to coincide with the subsiding of nausea and a return to feeling of being 'normal' again. However, the strength of their convictions and determination not to smoke stopped a relapse at this stage of pregnancy.

The greatest socio-ecological factor influencing the women's smoking behaviour latterly has been the ban on smoking in public places in 2006 and 2007. The women discussed the impact of the smoking ban on their smoking behaviour during the interviews. For the majority of women, the ban had helped to develop a different mind-set in that had begun to question what smoking actually meant to them. Smoking at work became more problematic and when socialising they were often excluded from the friends that did not smoke by having to go outside to smoke. The thoughts and feelings expressed by women during the first interview fits with the basic principles of the socio-ecological model discussed in Chapter 6 page 181 These closely mirror the beliefs of Stokols (1992) in that the individual is influenced by the environmental and personal factors and these should be considered in research concerning health. Stokols (1996, 1992) goes further in stating that the environment and the individual are mutually intertwined and that each has an influence on the other. Moreover, the environment can influence the individual behaviour as observed with the smoking ban in public places. The attitude on a personal and societal stance has shifted towards the alienation of smoking as an acceptable form of behaviour.

This study found that for some women the relapse to smoking was a conscious decision, for others it was something they drifted back into

subconsciously. Stress caused by external influences was cited by a minority of women in all three groups. The conscious decision to resume smoking was in a search for their old identity, a return to their former selves, who they remembered themselves to be, fun and without responsibilities. Edwards and Sims-Jones (1998), Bottorff et al. (2000) and Nichter et al. (2008) also reported similar findings alongside a return to a shared experience with partners as the women in this study discussed. Cigarettes were still a significant part of their lives and the crucial health benefits for the unborn baby had now been passed. Their personal experiences of smoking within a social experience were making a return.

6.13.3. Pregnancy, the Start of a New Life, or Just an Interval.

The most significant concept to emerge from the study was the impact of adjusting to the pregnancy and smoking cessation. An interesting finding was that many of the women had already begun to consider that smoking should no longer play such a dominating role in their lives. Although none of the women had stopped smoking at the onset of pregnancy some had started to cut down with a view to stopping, this was predominantly in the 20-38 year age group including some of the women not born in Great Britain. However, this did not feature so strongly in the lives of the younger women. Comments made by the women were that they wanted to begin a new life and that stopping smoking would signify the end of their previous identity, that of a female smoker. This desire for change had not been brought about by a decision to become pregnant as many admitted that although they accepted the pregnancy it had not been consciously planned. All of the women had adjusted well to being pregnant and there had been no discernible difference in the stage of pregnancy when smoking stopped in either the planned or unplanned pregnancy.

All the women considered that pregnancy was a time of great adjustment and to reconsider their position in life and how their lives would change when they moved through the transition to motherhood. It was interesting to note that most of the younger women did not harbour the same feelings of starting a new life. They viewed having a baby as a natural progression in their lives with some ambivalence towards long term smoking abstinence postpartum.

In contrast, women who remained abstinent were of the belief that this stage in their lives signified a new way of life a different persona, which would live in a non-smoking environment. For some women the smell was still was still abhorrent and they felt a sense of shame and disgust that in their 'previous lives' they had actually behaved and smelt like the smokers they now viewed so differently in the streets and social settings in which they found themselves.

The new lives the women had designed for themselves included long term plans in returning to work as a non-smoker and excluding the baby from any association with smoking. This would be to avoid situations where the baby could be exposed to cigarette smokers to the exclusion of banning friends and relatives any close contact if they had been smoking. The financial incentives of not smoking, such as the savings made, were used to improve their physical health which in turn impacted upon their psychosocial wellbeing.

Once again the ban on smoking in public places had an impact upon the decision to not smoke as women no longer had to be exposed to risky situations that would be a temptation to smoke. Women could go out alone or with their families and not be subject to socialising in a smoky atmosphere, risking their health and that of the baby.

6.13.4. Significance of the Theoretical Perspectives.

In listening to the stories told by the women in this study, the theoretical perspectives that were important in the decisions women made in stopping smoking, relapsing or remaining abstinent through the transition to motherhood have been exposed and explored. The study has highlighted the social norms and how acceptable forms of behaviour are seen through the eyes of women. Smoking is dependent upon a number of interrelated personal, interpersonal, social and environmental factors which all impact upon the experiences of women. Findings within this study support the socio-ecological factors such as smell or identity that can impact both positively and negatively on the ideals of a life without cigarettes. The environmental, social and political factors have also been explored in relation to the impact they may impose upon smoking behaviour. Women commented on the ban on smoking in public places which had encouraged them to consider their attitudes with regards to smoking. Moreover, the women who did not relapse had contemplated their stage in life relative to the social norms and expectations. These considerations had signified a time of great change with women choosing to begin a new life, one in which cigarettes no longer belonged. By discussing the findings from a socio-ecological theoretical framework enriched the study by considering that relapse cannot be viewed in isolation and that wider issues are implicated in the decisions women make. To gain an understanding of what beginning a new life means for women will enhance knowledge and improve the understanding of health professionals when supporting women during this important transition in their lives.

6.14. Summary.

Through exploring the stories of women and their experiences of smoking, giving up during pregnancy and relapsing, this chapter has discussed the

multifaceted dimensions affecting the decisions women face during one of the most transformational times in their lives. The chapter has focused on the key issues emerging from the study encompassing the original aims which were fulfilled by taking a phenomenological stance aiding comprehension of the experiences of stopping smoking during pregnancy and either relapsing or remaining a non-smoker postpartum.

The stories told by the women and quoted within the previous chapter have been discussed within the sections of this chapter. The majority of women in this study all began smoking at an early age whilst still at school, apart from the younger women all had several years' experience of smoking with few seriously attempting to stop before the current pregnancy. This does not appear to have an impact on those who remained a non-smoker postpartum and those who relapsed.

The socio-ecological factors governing the lives of the in the study women does appear to have some impact upon their smoking behaviour, for example women living in more stable conditions, benefit from greater family and social support and were less likely to relapse to smoking in the postpartum period.

Relapse did not appear to correlate with whether a woman chose to breast feed or bottle feed or when breast feeding ceased. However, younger women breastfed less and relapsed to smoking to a greater extent than the older women. For women who had migrated to the UK a greater number breastfed but also a greater number relapsed. As the study was undertaken on only a small number of women it must be acknowledged that the findings cannot be generalised and was not the intention. The study aim was to explore the experiences of women not to quantify the findings.

It has emerged that some of the findings arising from this study have also been identified in earlier research (Nichter 2008, Bottorff 2000, Edwards and Sims-Jones 1998), such as issues of identity and partner relationships. However, two interesting findings that did emerge were the protective factor of smell that prevented women from smoking. The smell although attractive to some women, proved to be a strong deterrent for others.

The greatest and most exciting finding to emerge is in the belief of starting a new life for the women who successfully remained abstinent from smoking in the postpartum. In discussion with the women during the interviews it evolved that for this group of women stopping smoking was the start of a new life for them and that the idea had often begun to develop before the pregnancy began. Pregnancy was sometimes unplanned but still remained the catalyst for creating a new life and identity. The women considered they were no longer the person that smoked and did not want to be identified with the old way of life again. Socio-environmental factors contributed to this idea as smoking is no longer viewed as an acceptable habit within society and the introduction of the smoking ban has impacted upon how some women view smoking. This idea is new as earlier studies were undertaken before the impact of the smoking ban had any effect on women's views and experiences of smoking.

The final chapter will summarise the findings from the study in relation to the significance and beneficence for women and the professionals in promoting and supporting healthy lifestyle choices for women and their families.

Chapter Seven: Next Steps: Summary and Recommendations.

7.1. Summary.

Smoking remains a major public health concern and particularly in regard to pregnancy and childbirth. Smoking during pregnancy can cause serious problems for both the mother and the fetus and continue to be of concern in the postpartum period. Through experience in the field of midwifery and smoking cessation the researcher was aware that for a number of women who give up smoking during pregnancy relapse in the postpartum period. Therefore the purpose of this study was to explore the smoking experiences of women by means of qualitative semi-structured interviews with 27 women on three separate occasions through their journey into motherhood. The women had all been smokers who stopped smoking at various stages through their pregnancies.

The most significant finding from the study was that for women who made the conscious decision that they were beginning a new life in becoming a mother, no longer considered smoking as part of their identity. These women appeared to have high levels of self-efficacy and self-belief in their abilities in life to cope with their new identity. The introduction of the ban on smoking in public places appeared to have a positive effect on not smoking for many of the women. For some of the women who relapsed, the idea of a new identity had not been considered and the return to smoking was a continuation of their previously known way of life. They did not appear to have strategies in place to cope with the perceived difficulties in their lives and smoking gave them a sense of normality and familiarity.

One of the aims of the study was to improve the knowledge and skills of healthcare professionals when supporting women in smoking cessation and preventing relapse in the postpartum period. Recommendations to support this aim will be made in the final section of this chapter. The recommendations will then be disseminated through publication and oral presentation both locally and internationally to inform both maternity service and education providers of the findings generated by this study.

7.2. Recommendations.

Literature pertaining to smoking and pregnancy unequivocally agrees that continued smoking at this time is detrimental to both the mother and unborn infant (NICE, 2010, BMA, 2004). The risks to health continue into the postpartum period for mother and child and again have been well documented (Kahn et al. 2002, Gaffney 2000 and Bottorff et al. 2000). Many successful interventions have been developed to support women in stopping smoking during pregnancy; however less success has been achieved with long term cessation postpartum.

7.2.1. Pre-Pregnancy Planning for Smoking Cessation.

The NICE (2010) public health guidance was produced in response to the Department of Health request for greater support for women to stop smoking during pregnancy and beyond childbirth. This guidance recommendations were intended to benefit women who were planning a pregnancy, were already pregnant and for up to twelve months postpartum. The guidance suggested that the benefit should also be extended to partners, other children or others living with the woman. However, the recommendations declined to include those women who had given birth as there was a dearth of evidence of interventions aimed specifically for women planning a pregnancy or following birth. It is therefore a matter of urgency that this

deficit is reversed. It would be of benefit to pay greater attention to the thoughts of women even before a pregnancy is planned to capitalise on the opportunity of supporting them to stop smoking. As was discovered in this study for a number of women the pregnancy had not been planned but for some the seed had already been planted in considering giving up smoking. This would be the optimum time to educate and encourage women to stop smoking and commence the changes required in starting a new life.

To implement this intervention would involve the contribution from a number of health professionals as midwives are not always involved with women prior to embarking upon a pregnancy. Referring back to the historical perspective of women and smoking it was apparent that advertising played a substantial part in promoting smoking as a glamorous activity (Tinkler 2001, Ernster et al. 2000 and Greaves 1996). It also portrayed smoking as a special time for sharing as a couple. These aspects could be capitalised upon in advertising the benefits of not smoking and that giving up together could be highlighted as a shared activity. These messages could be continued into pre-pregnancy planning through to the postpartum period, reinforcing the successes of women alongside the health benefits.

7.2.2. Antenatal Support.

As discussed in the previous section the optimum window of opportunity to stop smoking is before embarking upon a pregnancy, but as discovered many women find themselves pregnant while still actively smoking. Midwives are then ideally placed to support women in stopping smoking as they are usually the first point of contact for the woman. However, as the literature has highlighted midwives are often reticent in raising the subject of smoking for fear of unbalancing the midwife-woman relationship (Thyrian et al. 2006b and Condliffe et al 2005). To reduce the taboo surrounding the subject of

smoking, the approach needs to be made in a positive way rather than focusing on the negative aspects that often leave the woman feeling a 'bad person'. Capitalising on advertising more welcoming and encouraging posters and information leaflets should be produced encouraging women to take the initiative to stop smoking. As woman centred care is at the forefront of the care midwives give during pregnancy then a similar approach is needed in smoking cessation. The support must be tailored to the woman's individual needs with referral to the most appropriate agency for maximum success. Attention needs to be paid to the individual circumstances of the woman as seen in the case of Nicole (age 16) who struggled with isolation and social support. Until her chaotic lifestyle could be more stable, then long term smoking cessation would not be attainable. Nonetheless, pregnancy did present the opportunity for Nicole to stop smoking as the health of the baby was a concern. This window of opportunity could provide the incentive to stop smoking long term if appropriate support could be put in place to stabilise the social and environmental factors affecting Nicole's life at this point. This would involve not only the smoking cessation support but also that of a wider multi-professional team.

Within this study the concept of a new life was predominantly discussed by the older women, nonetheless one younger person did allude to this. She acknowledged that her smoking behaviour had been unacceptable and that becoming a mother had given her the opportunity of reassessing her life. Consideration was given to the choices and the young woman decided upon continuing with her education and putting her old life of smoking and irresponsible behaviour behind her. Amber hoped to set an example for her child by achieving success at school and gaining employment. This approach could be used to encourage the younger women to stop smoking long term and not only for the duration of the pregnancy.

The needs of the migrant women also need to be clearly identified in order to provide the best long term support. It emerged from the study that some of these women adapted well to migrating to the UK and embraced the opportunity of starting a new life. This again could be incorporated into the support provide in stopping smoking and maintaining long term abstinence postpartum. For those women who did not readily adapt such change in their lives, support would have to be individually tailored to meet their needs.

7.2.3. Promoting Long Term Abstinence.

It has been established that for many women maintaining abstinence from smoking in the postpartum period has proved problematic (Nichter et al. 2010, Levine 2008 and Thyrian et al. 2006a). The reasons for this are manyfold and as such cannot be attributed to one cause. As supporting women to stop smoking pre-pregnancy and during pregnancy needs to be tailored to individual circumstances it follows that the support provided postpartum should also be on an individual basis. It must first be established as to the intentions of stopping smoking in the antenatal period. For some women this is a short term plan to stop smoking only for the duration of the pregnancy. The long term benefits of smoking cessation need to be reinforced during pregnancy to encourage these women to consider remaining abstinent postpartum. In this study, some women expressed a need to regain some control over their lives and in doing so regain affiliation with their previous identity. Greater exploration of this desire to return to the earlier way of life may enable health professionals better prepare women for the transition to motherhood. Greater emphasis needs to be placed on the benefits of moving into a new stage in life, that of a mother. If women were better prepared for becoming mothers then smoking may not hold such a strong memory for them and the desire to return to the past would not be so dominant.

It would also be of benefit in the drive to reduce postpartum relapse to also explore in greater depth the women who did not relapse and who cited a new life as the reason for this. As a result intervention could be more focused on positively developing the theory of a new life as oppose to comparing past events associated with smoking therefore hindering the detachment from the habit.

Positive reinforcement would increase the confidence and self -esteem of women who wish to remain abstinent from smoking in the postpartum period. Now that the general population is more technically advanced in the use of mobile phones and computers, these resources should be harnessed and incorporated in smoking cessation support. Text messages and emails could be used to keep in contact with women to support maintenance of smoking cessation. Social networking sites could also be utilised by health professionals and also by women. Evidence shows that sites such as Mumsnet* provide support for mothers during pregnancy and beyond, using peer support a site could be developed specifically for women who have given up smoking and wish to remain smokefree. There are already information sites on the subject but need greater media exposure to advertise their facilities more widespread. One example of such a site is Babycenter.co.uk* which provides information on smoking and pregnancy for women.

*Registered names for internet support groups for women.

7.2.4. Spreading the Word.

The choice of whether to smoke or not to smoke during pregnancy can only be made by the women herself, relapse however, may not always be due to a conscious decision to start smoking again in the postpartum period. Lack of professional support may contribute to relapse and as such health professionals are in the best position to support women at such a vulnerable

time. Notwithstanding, midwives and allied health professionals can only support women if they are equipped to do so.

Education in smoking cessation and relapse should begin during midwifery training and all student midwives need to have an understanding of the issues encompassing women at risk of postpartum relapse. Within the local Trust in which this study was undertaken student midwives have the opportunity to have a brief introduction to smoking cessation services within their Public Health modules. However, this does not include preparing students for supporting women at risk of relapse. If this was incorporated into the curriculum in all years during training, then on qualifying midwives would be better informed and more confident in discussing and supporting women in preventing postpartum relapse to smoking.

Educating midwives to enable them in becoming more conversant with women would reduce the anxiety that many perceive when discussing issues with regard to creating incongruity in their relationship with women as raised earlier. On-going training and updating is essential for qualified midwives and other professionals to keep abreast of new research, evidence and interventions in postpartum relapse. Training should include brief intervention techniques and communication skills both verbal and non-verbal which will improve the relationship with women who are at risk of relapse to smoking.

Technology can be implemented in training and updating by means of on-line packages, newsletters and forums where good practice or issues can be discussed in an informal manner and at times to suit the busy practitioner. Closer links must be forged with smoking cessation services in referring women for specialised support in the postpartum period for women at risk of relapse. Greater emphasis is required on the value and importance of preventing postpartum relapse, waiting until after the birth to put strategies

in place is too late. Preparation for long term abstinence should commence as soon as a woman indicates that she is ready to stop smoking. This study revealed that long term planning is not often a priority for either the woman or midwives involved in the care.

7.2.5. Further Research.

This study explored the experiences of women and smoking during pregnancy and the postpartum period in order to gain an understanding on why some women relapse after the birth of the baby. A varied range of experiences have been explored including those of women not born in England and younger women with similarities and differences being observed. However, the study only captured the experiences of women up to a maximum of six months after birth, with the majority at around three to four months postpartum. It would therefore be of value for further studies to continue for at least one year after birth to gain a greater perspective. This would be of interest in observing any changes in women who considered they had begun a new life when or if they decided to return to work and had less contact with the baby. Findings could then be compared to this study to ascertain whether a return to work precipitated a return to the old life.

The women include in this study did not have any direct support in maintaining postpartum abstinence and all the choices they made were not influenced by a midwife or health professional with the exception of one woman. The woman benefitted for postpartum support instigated by her SCPHN when relapsing soon after the birth. Further studies could be undertaken to compare outcomes for women given specialist input throughout pregnancy and into the postpartum period and those who had help only for the duration of the pregnancy. A study of this kind could

demonstrate whether support after the birth is beneficial in reducing the number of women who relapse postpartum.

It is also not known whether women who give up smoking before becoming pregnant and maintain abstinence throughout pregnancy are at a greater or lesser risk of relapse postpartum. This study only recruited women who had stopped smoking at some point during pregnancy and it may be of value to conduct further study on women who did stop prior to pregnancy to explore whether they were at a lesser risk of relapse.

Although some partners were present during the interviews in this study their personal views and experiences were not recorded. It was noted that their influence on women's decisions regarding support during pregnancy around smoking and relapse did have some effect on postpartum smoking behaviours. The influence of partners on smoking and relapse has been explored in the literature, however, positive influence on preventing relapse has not been documented. It would be of interest to explore the experiences of partners during this period in order to gain further knowledge of how partners may contribute to preventing postpartum relapse.

It would also be of value in establishing what women consider would be of the greatest benefit in terms of effective interventions to support long term abstinence from smoking in the postpartum period.

7.3. Conclusion.

The findings from this study have been summarised and discussed in relation to existing literature, including the similarities and differences observed. In addition, it is anticipated that the findings from this study will add to the body of knowledge in greater understanding of the issues surrounding postpartum relapse, and the particular issues faced by individuals.

As women do not always consider a contingency plan for preventing relapse in the postpartum period, this should be introduced early into the pregnancy to encourage women to think more long term rather than the immediate antenatal period.

This study was based upon earlier work (Edwards and Sims, 1998) which was undertaken in the USA and prior to a ban on smoking in public places being implemented. Findings from this study indicate that the smoking ban has had an influence on women's smoking habits today. It is acknowledged that the participation of women was voluntary and as such may have influenced the findings, due to the sensitive nature of the topic.

Recommendations for further areas of research have been included in this chapter indicating that studies are required to explore the potential of more effective interventions in preventing postpartum relapse. The literature has demonstrated that no single intervention to date has prevented postpartum relapse as there is less known about this phenomenon than preventing smoking during pregnancy.

This study has highlighted the fact that women who smoke come from all walks of life with different needs and expectations, with some readily adapting to the role of motherhood and a smoke free life. On the other hand, for other women in the study the return to smoking was for varying reasons affecting their daily lives. With this understanding it is clear that different approaches are required to support women in not relapsing during the transition to motherhood. Despite the women in this study who successfully stopped smoking during pregnancy the factors impacting upon relapse may have begun during this time. It must be recommended that support to maintain smoking abstinence should commence in the antenatal period and continue through into the postpartum.

The expectation of this study is to inform midwives and other health professionals of the experiences of women during this important stage of their lives in order to increase awareness of the value of promoting continued smoking cessation postpartum. Nevertheless, in conclusion, unless women are conversant with the desire not to relapse and the health concerns surrounding the resumption of smoking by being kept informed of the latest research, will progress continue.

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APPENDICES.

1. Consent Form.
2. Participant's Letter.
3. Participant Information Sheet.
4. Interview Schedule.
5. Ethics Agreement in Principle.
6. Ethics Full Approval.
7. Local R & D Approval.
8. Poster Information (as displayed in Antenatal Clinic Areas on both sites).
9. Participant's 'Thank You' Letter.
10. Translated Questionnaires:
 - 10a. English.
 - 10b. Chinese Simplified (Cantonese).
 - 10c. Chinese Traditional (Mandarin).
 - 10d. Polish .
 - 10e. Russian.
 - 10f. Punjabi.
 - 10g. Portuguese.
11. Profile of Women Interviewed (Born in England).
12. Profile of Women Interviewed (Not Born in England).
13. Profile of Women Interviewed (aged 16-19).
14. Demographics of Women Completing Questionnaire.
15. Sample interview transcript and field notes.

APPENDIX 4

Semi-structured interview schedule

Before embarking upon the interview the researcher, following introduction to the participant, will reiterate that the taped interviews will be strictly anonymous and that names will not be used and all information will be treated in strictest confidence as per introductory letter and consent form.

1. Sociodemographics

The initial part of the interview is to introduce the participant to the subject, by first asking general questions about themselves. This will serve a two-fold purpose of helping the participant to feel more relaxed with the interview and secondly to gain background information regarding their sociodemographic history.

1.1 Can you tell me a little about yourself?
(Prompt- age, ethnic group, marital status, occupation, other children)

1.2 Regular contact with other close members of the family.
(Prompt- parents, siblings, friends, do any smoke)

2. Smoking history

This section will discuss smoking history of participant.

2.1 Can you tell me about your smoking?
(Prompt- when you started, average number of cigarettes smoked per day)

2.2 Have you ever quit smoking before this pregnancy?
(Prompt- when, for how long, did you seek advice, what prompted a return to smoking)

2.3 How did you feel?
(Prompt- happy, sad, anxious, confident)

2.4 At what stage of pregnancy did you stop smoking?
(Prompt- who or what influenced your decision)

2.5 What support did you have to help you in stopping smoking?
(Prompt- smoking cessation services, family, friends, colleagues)

2.6 Did you feel pressured into stopping, or had you intended to stop during pregnancy?
(Prompt- reluctant or willing, intention to remain a non-smoker)

3. Mental health in pregnancy

This section will explore the mental health of participants during pregnancy.

3.1 How did you feel during pregnancy?
(Prompt- physically- healthy, tired, unwell. Mentally- happy, sad, anxious, stressed.)

3.2 Did smoking affect how you were feeling?
(Prompt- given up and happy, guilty and smoking)

3.3 Can you describe how you were feeling about the birth?
(Prompt- looking forward to it, confident, well prepared, excited, anxious, frightened)

4. Postpartum relapse

This section is concerned with postpartum relapse.

4.1 What were your feelings about resuming smoking after the birth?
(Prompt- intentions)

4.2 Can you tell me about the relapse?
(Prompt- what triggered the relapse, the baby, partner, other family member, friends)

4.3 How did you relapse?
(Prompt- one puff, gradual, immediate resumption of usual amount of daily cigarettes)

4.4 Describe your feelings on having that first puff/ cigarette when relapsing.
(Prompt- good/bad, elaborate)

4.5 Do you think you would have had a greater chance of not relapsing if there was more support in place?
(Prompt- family, friends, professional.)

5. Mental health postpartum

This section will explore postpartum mental health of participants.

5.1 How have you been feeling since the birth of your baby?

(Prompt- happy/sad, confident, coping well)

5.2 Do you think motherhood has been easier or harder than you imagined it would be?

(Prompt- expand)

5.3 What support, if any, do you have either professionally or from friends and family?

(Prompt- support groups, physical or mental support, greatest support)

5.4 How would you describe your coping methods when caring for your baby?

(Prompt- when stressed, baby crying, multi-tasking)

5.5 Are/were you looking forward to going back to work?

(Prompt- describe feelings)

5.6 Did your feelings affect the decision to smoke or not to smoke?

(Prompt- ability to cope, sadness, need for escapism)

6. Conclusion

In this final section the researcher will thank the participant for agreeing to take part and emphasize the importance and relevance of their input. Time will be given for any questions or clarification the participant may wish further.

2.7 Have you ever quit smoking before this pregnancy?
(Prompt- when, for how long, did you seek advice, what prompted a return to smoking)

2.8 How did you feel?
(Prompt- happy, sad, anxious, confident)

2.9 At what stage of pregnancy did you stop smoking?
(Prompt- who or what influenced your decision)

2.10 What support did you have to help you in stopping smoking?
(Prompt- smoking cessation services, family, friends, colleagues)

2.11 Did you feel pressured into stopping, or had you intended to stop during pregnancy?
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This section will discuss smoking history of participant.

2.12 Can you tell me about your smoking?
(Prompt- when you started, average number of cigarettes smoked per day)

2.13 Have you ever quit smoking before this pregnancy?
(Prompt- when, for how long, did you seek advice, what prompted a return to smoking)

2.14 How did you feel?
(Prompt- happy, sad, anxious, confident)

2.15 At what stage of pregnancy did you stop smoking?
(Prompt- who or what influenced your decision)

2.16 What support did you have to help you in stopping smoking?
(Prompt- smoking cessation services, family, friends, colleagues)

2.17 Did you feel pressured into stopping, or had you intended to stop during pregnancy?
(Prompt- reluctant or willing, intention to remain a non-smoker)

3. Mental health in pregnancy

This section will explore the mental health of participants during pregnancy.

3.4 How did you feel during pregnancy?
(Prompt- physically- healthy, tired, unwell. Mentally- happy, sad, anxious, stressed.)

3.5 Did smoking affect how you were feeling?
(Prompt- given up and happy, guilty and smoking)

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(Prompt- happy/sad, confident, coping well)

5.8 Do you think motherhood has been easier or harder than you imagined it would be?

(Prompt- expand)

5.9 What support, if any, do you have either professionally or from friends and family?
(Prompt- support groups, physical or mental support, greatest support)

5.10 How would you describe your coping methods when caring for your baby?
(Prompt- when stressed, baby crying, multi-tasking)

5.11 Are/were you looking forward to going back to work?
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5.12 Did your feelings affect the decision to smoke or not to smoke?
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6. Conclusion

In this final section the researcher will thank the participant for agreeing to take part and emphasize the importance and relevance of their input. Time will be given for any questions or clarification the participant may wish further.

Women's Experiences of Smoking and Quitting in Pregnancy



I am a midwife who is undertaking a research study to explore the experiences of women who have smoked during pregnancy and have now stopped or are considering quitting.

I would therefore like to invite you to take part by completing a questionnaire at your 20 week scan appointment.

If you would like further details please contact me on 0115 8231923 or by email: cathy.ashwin@nottingham.ac.uk

Thank you for your help

APPENDIX14

DEMOGRAPHIC DETAIL FROM QUESTIONNAIRES.

	<u>n</u>	<u>percentage</u>
<u>Parity</u>		
1st pregnancy	122	53.2
Not 1 st pregnancy		46.8
<u>Marital Status</u>		
Married		19.7
Live with partner – not married		51.5
Has partner- not co-habiting		30.3
Single		20.5
<u>Place of Birth</u>		
Born in Britain		81.7
Born outside Britain		18.3
<u>Smoking Status at 20 weeks gestation</u>		
Stopped smoking		54.5
Still smoking		45.5
<u>Support in Stopping</u>		
Had help to stop (not specified)		21.2
Specialist smoking cessation services		10.6
<u>Associated Smokers</u>		
Family members		57.6
Colleagues		28.8
Close friends		77.3
<u>Employment</u>		
In employment		50.0
Not in employment		50.0
<u>Socialising</u>		
Often socialise		48.5
Not often		51.5
<u>Amount Smoked per day</u>		
Pre-pregnancy	<10	43.9
	>10	56.1
While pregnant	<10	28.8
	>10	16.9
	None	54.5
<u>Stress</u>		
Life more stressful since pregnant		39.4
Life less stressful since pregnant		50.0
Declined to answer		10.6
<u>Life Events</u>		
Usually cope well		86.4
Does not usually cope well		3.0
Declined to answer		10.6

