The Experience of Head Lice Infestation in the Twentieth Century: Mothers' Understandings in Context

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Abstract

This thesis reports on a study that aimed to add to the understandings about head lice that were already available in society. Previous accounts of infestation had focused largely on its social and expert medical perspectives and there was limited comment on the experience at a personal level. In order to address this Liverpool mothers and grandmothers were asked about their perceptions and understandings of what it meant to experience head lice. The women's experiences spanned most of the twentieth century and this provided the study's historical dimension.

The inquiry used hermeneutic phenomenology as a way of investigating highly personal aspects of an experience that had not been explored before. By using an approach that drew on hermeneutic phenomenology and anthropology it was possible to explore aspects of the experience that generated culturally specific beliefs and understandings. Lambert and McKevitt, (2002) argue that in doing this a phenomenon defines itself. In this inquiry the boundaries of mother's understandings concerned with the experience of head lice were unknown. Hermeneutic phenomenology allowed these hidden understandings to emerge.

Van Manen's (1997) framework for phenomenological inquiry was used to guide the study and Colaizzi's (1978) method for the interpretation of the women's stories was used to highlight the understandings that emerged. The women who took part were of different ages though all had lived, been mothers and experienced head lice during the twentieth century. They were asked to tell their stories and these were recorded, transcribed and interpreted. The interpretation of their narratives generated themes of understandings. These included understandings about the responsibilities of being mothers and giving care, beliefs and views about the insect and infestation and the meaning and impact of social stigma.

The understandings that the women expressed were concerned with their individual responses to infestation. Essential feature shared by them represented a complex interplay of guilt feelings about themselves as poor mothers and the importance of the responsibilities they felt they had to protect their children, their families and society from head lice. Their own mothers played a significant role in fashioning their understandings as did their childhood experiences. Images of others outside the family who had infestation were linked to stigma, poor mothering and to lay epidemiology. The women talked of other mothers' responsibilities to prevent and treat infestation and how this created a feeling of lack of control. They also told of the need to remove all traces of infestation from their home and with it the influence and presence of what constituted their image of an infested family.

The women shared their stories, but as Widdershoven (1993) points out these have little value unless their relationships to other sources of experience are also considered in some way. Therefore the women's understandings were placed into context by examining the way in which they linked to other available discourses about head lice. A search was made of the social, historical and expert medical sources available during the twentieth century; local Liverpool sources were consulted wherever possible. The understandings that emerged from these were then considered alongside those of the women. There was a link between the women's understandings and those in the social discourse concerning the public health role of women during the twentieth century. Infestation was used as a measure of mothering by social discourses and the women alike. This gave healthcare practitioners and society the opportunity to comment on, influence and control what went on in the family. Stigma, exclusion and labelling were evident in both the social discourses explored and the women's stories particularly in relation to experiences of school and the school nurse. Personal and social discourses about prevention, detection and treatment reached no overall consensus with evidence based approaches being used alongside those influenced by myths and more socially constructed understandings.

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This Thesis is dedicated to the memory of my Dad,

James George Sweeney

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Chapter 1

Introduction to the Study

"Isn't it terrible, you only have to mention head lice and you
start itching your head?
Everyone does it don't they?
I wonder why?" (Participant 3)

These are the animated comments of one mother who took part in this study: a shudder and a scratch of the head accompanied the remark. Her views are shared by many of the women who took part in this study and they illustrate the way in which people often respond to the idea of head lice *(Pediculus humanus capitis*) infestation.

Feelings about infestation are complex and often create horror, anxiety or confusion. Our personal understanding of an experience is always about a whole range of factors and influences which make people respond in the way that they do. These include what to believe, how to respond, who to tell, who to go to for advice and how to use this, particularly if it conflicts with things like personal, family or community beliefs and knowledge. This study set out to make sense of mothers' experiences of dealing with head lice infestation and to discover their fundamental understandings of it.

1.1 The Development of the Study's Focus

When healthcare practitioners provide any type of care this is undertaken on the basis that planning is directed by need and can only be undertaken in partnership with people receiving the care. Despite this the relationships that exist between practitioners and people receiving care are unequal, particularly with regard to understandings about individual health and well-being experience. As a result, much of healthcare practice is based on professional understandings that are often underpinned and influenced by quantitative evidence. This often takes little account of the importance of the experiences of the ordinary people they are working with (Greenhalgh, 1999). In trying to address this, healthcare practitioners use frameworks of practice that purport to include people at all stages of care planning, but questions remain here about the extent to which this is possible when individual experience and understanding about health and well-being may be hidden or untold.

Clinical practice based on available evidence underpins issues of responsibility and professional accountability. This allows practitioners to defend their professional decisions and actions, even though these may not sit well with the decisions, choices and actions of those for whom they care (NMC, 2002 & 2008; UKCC, 1992). The threat of litigation and the need to constantly justify what is being done and why means that the driving forces behind any decisions about care or treatment tend to be concerned with research, and professional knowledge, guidelines and protocols. Many of these are based on scientific evidence and as a result professional practice can become concerned with seeing the world in one way; the professional way. This can mean that "only one answer" is available: one that is based purely on empirical evidence.

Overall, the treatment of head lice infestation is strongly influenced by expert, medical science. Professional guidance is straight forward; diagnosis is followed by mechanical or chemical treatments and if undertaken correctly head lice eradication will take place. These actions follow particular therapeutic protocols that are based on pharmacological, entomological and public health research. In addition, they are directed by national and local health policy and practice guidelines. These are fraught with limitations in that they do not take into account the impact of individual experiences. This means that the personal beliefs of individuals that frame understandings about head lice, long before any contact with a healthcare practitioner is made, can be missed. Once missed or dismissed they become invisible and their impact on any decision making or action is minimal or non-existent (Mykhalovskiy & Weir, 2004).

This inquiry set out to explore the real life experience of head lice infestation in order to try and examine lay people's essential understandings. By using narratives constructed from mothers' personal accounts and memories I used a hermeneutic phenomenological approach to guide the study. Firstly I undertook a personal phenomenological reflection; this was followed by a study of the sources of the experience already available to me within society. Finally, I interviewed mothers who had actually had the experience and I analysed and interpreted their stories in the light of the context created by the other sources. This enabled me to highlight the essential understandings of their experiences so that these became available for healthcare practitioners to consider in their day to day practice. The understandings and beliefs of the mothers that emerged concerned a range of foci which included the following: personal decision making, the impact of social perceptions, the importance of familial and social relationships and critical perceptions about motherhood.

1.2 The Thesis Structure

The structure of this thesis is inspired by Munhall (1994) and the critical observations, discussions and framework that she identifies for the reporting of qualitative and, in this case, existential inquiry. She makes the point that inquiry is as much about the process and the journey as it is about findings and outcomes and the structure used throughout this thesis is intended to reflect and demonstrate these beliefs in relation to my own study.

The remaining individual chapters within the thesis reflect the process of hermeneutic phenomenological inquiry as used to explore my experience of interest with an ultimate goal of gaining a greater clarity about the understandings that are fundamental to it. The chapters guide the reader through the inquiry process from personal reflections and the context of the experience, to philosophical influences and considerations of method, on to my encounters with and consideration of personal experiences and the understandings that emerged from these. Figure 1, below, sets this out and demonstrates how my inquiry steps reflect van Manen's (1997) approach to hermeneutic phenomenological inquiry which helped me create the structure and process of my study.

Inquiry Step	***Step in van Manen's [1997] approach to Inquiry***	***Inquiry Activity***	***Thesis Chapter***
1	***Step 1*** *Turning and orientating oneself to a phenomenon which seriously interests us and commits us to the world.*	Narration & Reflection on personal experience	3
2		Collection of sources of the experience currently available	4
3	***Step2*** *Investigating experience as we live it rather than as we conceptualise it.*	Process of collecting and interpreting the mother's narratives	5 & 6
4	***Step 3*** *Reflecting on the essential themes which characterise the phenomenon under investigation.* ***Step 4*** *Describing and interpreting the phenomenon through the art of writing and re-writing.* ***Step 5*** *Maintaining a strong and oriented relation to the phenomenon through a strong focus upon it and its context.*	Analysis & interpretation of dialogues, writing and re-writing to establish essential themes of understanding	6
5	***Step 5*** *Maintaining a strong and oriented relation to the phenomenon through a strong focus upon it and its context.* ***Step 6*** *Balancing the research context by considering parts and the whole as guided by the hermeneutic circle.*	Discussion of the understandings in context	7
6		Summary of the study and discussion of the inquiry process	8

Figure 1 - The Inquiry Process and Thesis Structure

(after van Manen 1997)

Chapter 2 provides an overview of the inquiry and addresses its aim which was to use hermeneutic phenomenological inquiry to reveal the hidden understandings held by mothers who had dealt with head lice infestation in their families. It includes justification for the use of a hermeneutic phenomenological approach as well as some discussion concerning the phenomenon of interest. Issues concerning context, inquirer biases and assumptions also form part of this chapter.

Chapter 3 is the first of two chapters that explores the evolution of the study and orientate the reader towards the specific context in which the study actually originated; it also represents the first stages of existential investigation. The experiential stage of the inquiry process is justified here and the chapter provides insight into the way my personal experiences of the phenomenon directed, focused and added to the study. In addition some discussion takes place concerning the themes that emerged from reflections on my own experience of dealing with head lice infestation.

Chapter 4 is the second chapter exploring the evolution of the study and further orientates the reader towards the context in which the study originated, this time providing an overview and discussion of the experiences of head lice that are available within the wider world. A justification for this stage of the inquiry process is presented within this chapter. The social and expert (medical science) experience and understanding that are included provide context for the experiences and understandings of the women participants (and the inquirer) gathered throughout the study.

Chapter 5 explores the hermeneutic phenomenological inquiry process as applied to gathering and interpreting individual experiences and understandings concerning the experience of head lice. The chapter considers such issues as the principles of existential investigation, participant considerations (which include sampling), interviewing and verification and the analysis and interpretation of individual experiences through phenomenological reflection and writing. It considers these perspectives of the inquiry process in relation to achieving the study's aim.

Chapter 6 focuses on the findings of the study and records the analysis and interpretation of the experiences encountered. The findings that emerged during dialogue are reported in this chapter and a reflective, narrative style of writing is used in order to ground the interpretations in the experiences of the women.

Chapter 7 reflects on the relationship of the women's experiences to the other discourses about head lice encountered and brings the inquiry together a whole in terms of the meanings and understandings that have emerged.

Chapter 8 considers the overall findings of the study in terms of their contribution to further understanding and knowledge. It also explores the meaning and implications they hold for healthcare practice. In addition it links these to the strengths and limitations of the study. A summary of the inquiry completes this chapter.

Chapter 2

Aim and Overview of the Inquiry

This chapter provides the aim and an overview of the inquiry and introduces some of the issues of importance that provided the framework for the study. These include some discussion about the experience of interest and the use of hermeneutic phenomenology as the chosen inquiry approach.

2.1 Introduction

Having head lice is a common experience in families but little is known about how people respond to their discovery and treatment or, indeed, what influences this. This study used a hermeneutic phenomenological approach to discover these hidden beliefs, meanings and understandings through the stories told by mothers about their experiences and the understandings that these created. The stories were gathered from Liverpool women who had children currently at school as well as Liverpool grandmothers who had also had the experience when their children were younger. I was keen to look at the differences in understanding between the groups of women as well as what they shared. I was also particularly interested in whether these changed and evolved through time and the extent to which meanings and understandings were influenced by the wider historical and social context of which the older women's stories were also a part.

My inquiry's approach focused on the analysis and interpretation of discourses that emerged during a number of interviews with the mothers and grandmothers as they explored their experiences. It aimed to establish the essential themes of the women's meanings and understandings and these were then considered alongside the discourses that already existed within the wider, social world. Critical reflection was central to all aspects of the study.

2.2 The Experience of Interest

The idea for this inquiry emerged from my own community healthcare practice experiences as a health visitor and the contact that I had on a regular basis with mothers seeking advice and support about how they could treat and prevent head lice. Often the women would talk about their beliefs about how the parasites, for example, could fly or jump from person to person. Though not accurate, the importance of these beliefs and how they influenced the way in which the women addressed the problem was something that I rarely considered other than to reassure them that this was not the case. Indeed, the fact that they may have felt self conscious about their beliefs and understandings never really occurred to me.

On most occasions the emphasis I placed on care tended to be about evidence based detection, treatment and prevention, even though people often see such scientific or expert knowledge as being incompatible with their daily lives, particularly where these are seen against other priorities or influences in their life (Backett, 1990). On reflection, I came to realise that I rarely considered the relationship between my evidence based approach and the women's personal experiences, beliefs and understandings about head lice, of which I actually knew very little.

Personal views about health can often seem irrational to the outsider but usually there is a logic to their beliefs and actions that enables people to make sense of an experience or an event and to act accordingly (Helman, 1994). This "lay logic" is concerned with personal responses to an experience and is always very complex in nature (Furnham, 1994; Good, 1994). The importance of understanding how such beliefs about health originate, are maintained and evolve is stressed by Radley, (1994) who says that they influence choice and decision making about where people go for help and who they eventually consult. From this perspective the understandings and meanings constructed by lay people and experts may be significantly different or indeed, in conflict and this can undermine any support, decision making or action in practice (Popay & Williams, 1994).

In reality lay people's constructions about health issues may not sit well with the medical science that often guides healthcare practice. This is largely constructed rationally and objectively and does not tend to take the individual or their experiences and understandings into account in its construction.

Furthermore, lack of representation of lay knowledge within expert sources of knowledge, understanding and practice suggests an apparent irrelevance of such experiences (Popay & Wiliams, 1994).

The importance of understanding health beliefs and meanings as a way of promoting health is therefore essential (Radley, 1994). Yet the nature of how mothers actually experience the discovery of the head lice parasite on their children and the emotions, understandings and responses that emerge as they try to eradicate this insect are unexplored. Therefore, they are not available for the development of healthcare practice. For the experience of head lice the overwhelming weight of understanding within the wider world currently relates to expert comment, with the emphasis being on for example, biology, pharmacology and public health with little emphasis being placed on the living person, their narrative and the relationship of this to the social world (Omery, 1983).

The aim of this inquiry was to find out more about these hidden, individual experiences. I wanted to discover the nature of mother's experiences when dealing with infestation and to find out how these, as well as prior experience, influenced understanding and action. Individual understandings are fluid because they are constantly changed by the experiences and understandings of others in the world (Burr, 1995). They are under constant construction and always carry with them some of the shared understandings of others. It was the essential features of this shared understanding that I wanted to study so that they could be seen for the first time.

The objectives of the inquiry were to hear the experiences of Liverpool mothers whose children had been infested with head lice and to uncover their beliefs, meanings and understandings in relation to this. Through storytelling, I wanted to identify and analyse their experiences alongside the narratives of Liverpool grandmothers with similar experiences. By doing this I looked for the essential elements or themes of the experience and then considered the significance of my interpretations of these for healthcare practice. The background that concerned other experiences in the world was provided by contemporary and historical documentary, printed and electronic sources which came from social as well as expert medical science perspectives.

2.3 Why use a Hermeneutic Phenomenological Approach?

Gaining an understanding of an experience in terms of perceptions, beliefs and meanings is the prime aim of hermeneutic (interpretive) phenomenology. It expresses the inseparable relationship between individual existence and the world in which we live, and stresses that understanding and reality are individual yet shared (Merleau-Ponty, 1964). It offers the chance to reach a greater collective understanding about an experience (Annells, 1996) and it draws on the belief that perceptions, meanings and beliefs influence this understanding and can be explored and interpreted on the basis that there are many understandings and realities. It is well suited to answering questions about "How?" and "Why?" (Leonard, 1984) and can provide alternative perspectives to traditional inquiry findings and understandings that might be already available. It is both descriptive and interpretive and illustrates the range of human experiences and their contexts (Whitehead, 2004).

Meaning and understanding emerge as we construct the world around us. Heidegger, (1927/1962) argues that our conscious experience of the world is never separate from its social and cultural contexts, or indeed our personal social and cultural context, in terms of our background and history. For hermeneutic phenomenology understanding is found as we interact with the world and those around us, as well as through the way we refer to our own backgrounds and experiences.

2.4 Constructing Understanding through Dialogue

The individual experiences of people provide the focus of hermeneutic phenomenological inquiry but its aim is to allow the shared, fundamental understandings of these to become visible. Our understanding is constructed as a result of the way we react towards the world and the way we behave within it and this includes our relationships with and actions towards other people (Colaizzi, 1978). People communicate in order to make sense of the world and meaning and understanding are created as products of this (Littlejohn 1992). As a result it is language that is the mechanism that constructs both the person and the world around them; our meanings and understandings therefore arise from the communication that we have with others (Berger and Luckman, 1966).

In any face to face contact each person tells their story and opens up a previously hidden aspect of themselves, and it is through the sharing of these stories that the understandings of everyday life are created. Individuals can choose what to tell and what not to tell and can modify meanings and as they see appropriate. This activity creates a constant flux and as a result there is never just one notion of understanding or reality merely different ways of seeing the world that are based on different individual social and historical experiences (Coulon, 1995). As a result different or opposing perceptions and understandings can exist together with neither being "right" or "wrong". With each discourse this reality is then re-constructed in different ways opening up a huge range of possibilities of belief, meaning, understanding and action (Burr, 1995).

As a result, understanding is dynamic and constantly changing and social reality is always unclear. All that individuals have is a variety of different discourses or perspectives which all exist together, have equal validity and are neither true nor false. Hermeneutic phenomenological inquiry attempts to capture the intangible nature of this almost in a snapshot and to convey it to others.

Hermeneutic phenomenology is therefore never a study of generalizations and can never demonstrate that one understanding is of greater importance or more valid than another. Instead it tries to find fundamental features of meaning and understanding so that these become clearer. It can explore people's experiences where understandings are hidden or have never been expressed and studies about individual's experiences of health, illness and healthcare practice are particularly well represented here. These studies provide the opportunity to see people's experiences from a very different standpoint and to gain insights into the complex nature of the understandings that the experiences create. Essentially such studies ask what exactly makes something what it is (van Manen 1997). The studies outlined below illustrate this.

2.4.1 Hermeneutic Phenomenology in Action – The Meaning of Care

The importance and complexity of this view is perhaps demonstrated in a study by Sundin and Jansson, (2003) which looks at care for and communication with people who have suffered a cerebro-vascular accident resulting in aphasia. The study uses video accounts of care givers as they give care. The researchers asked them to narrate their experiences as they watched their own video tape. What emerges are understandings about the subtleties of communication that develop through "silent dialogue" between care giver and patient. These are about touch and the care giver's sensitive response to the patient's body language.

The study shows that time is needed to reach understanding between patient and care giver. In such encounters the patient is acknowledged as *"being in charge"* while at the same time caregivers acknowledge the immense vulnerability of their patients and express feelings of how this linked with patient dignity, respect and the complexity of care giving. The essence of such complex interactions is difficult to see when we just *look in from the outside*. However, hermeneutic phenomenology makes very visible both the spoken and unspoken actions and understandings of such encounters in a way that helps us see what it is like to provide and receive care in this way and how the understandings of those involved might influence our own practice.

2.4.2 Hermeneutic Phenomenology in Action – The Vulnerability of Doctors

Hermeneutic phenomenology can be also be used to highlight and bring out aspects of life that take place but are not evident to others within society. These may not necessarily be clear to see but can become so through dialogue and interpretations of the text they create (Lopez and Willis, 2004).

One such example of this is a study by MacLeod (2001) where the experiences of doctors caring for people who are dying are explored. The doctors in the study talk of their vulnerability in the face of inevitable death and that greater involvement and interventions encourages greater intimacy with patients at this critical period in their lives. They express feelings of uncertainty when dealing with such emotive encounters, as in clinical education there is an emphasis on enabling medical students to be in control and avoid intimate encounters. In addition society does not imagine doctors feeling or responding in this way in such situations.

The study comments that as a result they feel unprepared for the overwhelming impact of someone's experiences at this stage of their life journey. The doctors emphasise that a greater prominence in their education about coping with complex care situations would have enable them to more ably meet patient needs. These are important understandings which had not been explored previously. They were experiences that were not easy to talk about and the doctors' stories not only provided individual insights and understandings into these difficult to explore situations but they also highlight shared understandings between practitioners and it is these that have the potential to influence medical education for the future.

Hermeneutic phenomenology therefore is well suited to clarifying meaning and understanding. It encourages interpretation and the analysis of experience and is more about trying to get at understandings that will have some benefit in the wider world than just trying to reach some sort of causal hypothesis (Berger and Luckman, 1966).

2.4.3 Hermeneutic Phenomenology in Action - Understanding Family Life in Transition

From another perspective Kellett's (1999) study of family life in transition explores care giving at the point where family members are moved into nursing homes. The study looks at the impact of this on family life and the importance of family carer support at this time. Kellett found that many aspects of the experience were hidden from view and therefore could not be acknowledged by those who could offer support to family carers at this time. Her work identifies carer's feelings of loss and lack of control as their role changed. They experienced changing meanings and understandings about their perceptions of past family life and caring and she points out that these challenge the nurse-patient relationship in ways that make them reassess the value of their caring role.

She recommends changes in the practice of professional carers that take these on board by enabling decision making, acknowledging the value and meaning of family caring as something that is needed [but not "essentially obvious" if it does not include hands on care], treating carers as individuals as they adjust to their changing role and giving importance to the development of the caring relationships needed during this transition. Her study is concerned with how practitioners might consider these previously hidden understandings to improve this sensitive and critical stage in people's lives and how it can be used to increase the benefits for all those involved.

2.4.4 Hermeneutic Phenomenology in Action – Understanding Suffering

Finally Smith's (1998) qualitative study, about suffering, adds to the quantitative knowledge that already exists about people who are problem drinkers by trying to understand their experience and giving them a voice. The study uses hermeneutic phenomenology to explore this and his work shows suffering as a state lived in despair, shame, guilt and powerlessness which are only relieved by unburdening these feelings to those who understand. For healthcare practice this means that people must be allowed to unburden their feelings in a trusting, therapeutic environment and it is only through this approach that people become more able to cope and recover some meaning and purpose to their lives. His study has wider implications in that it highlights hidden needs and the importance of the involvement of service users in developing services that appropriately meet these.

2.4.5 Hermeneutic Phenomenology in Action – This Study

All of the studies above are about individual, yet shared experiences where the stories associated with these have not been heard before. The insights they provide add to our understanding in order that we can more sensitively respond to what people tell us. My study reflects the same overall approach and is about trying to understand more about a sensitive, little understood social experience that is often hidden from view but has a major impact on family life. Hermeneutic phenomenology allowed me to uncover what it means for mothers (and grandmothers) who have experienced head lice infestation within their families. By doing this it has been possible to see the experience from previously unconsidered perspectives which have a number of implications for knowledge, understanding and practice.

The women told their stories and the dialogues these created were analysed, interpreted and written about within the context of their own experiences and those available in the wider world. The essential themes that emerged from this inquiry process represented the coming together of experiences to create an understanding and vision of reality that had not been available before. The implications of these for others, particularly those in healthcare practice form a part of this.

2.5 Justifying the use of hermeneutic Phenomenology to understand the experience of head lice

The importance of understanding people's experiences of health and health care is vital for the development of healthcare practice as it allows practitioners to see the world in other ways and this changes what they do and how they behave. There are many examples where hermeneutic phenomenology provides opportunities to widen understanding, providing a clearer picture of an experience not available to practitioners when more quantitative, medical science based approaches are used. These studies enhance decision making and choice for healthcare practitioners and ordinary people alike. Additionally they fill the gap that exists between a mainly evidence based approach to practice and real life experience. Two studies that highlight this follow.

In exploring the differences in lived experiences between men and women suffering from angina, Miklaucich (1998) points out that many academic papers on the subject are written by men about men and their experiences, and that the outcomes of such studies are applied directly to women without any consideration of gender differences. Her work explores the nature of women's experiences and offers an insight into the caring needs of women with this condition and how this differs from men. She stresses the importance of understanding such specific gender differences when healthcare practitioners are meeting needs of both men and women.

From a different perspective, Duke's (1998) study explores the lived experience of partners during their spouse's terminal illness highlighting the significance of social support as a mechanism for coping and adapting and the importance of collecting and constructing memories at this critical time. Her work demonstrates some different findings from previous literature, most notably, the importance of the experiences of spouses as it is perceived as part of their partner's own experience. This is about coping and role and relationship changes and had not been identified by any previous research despite its importance in ensuring person centred care.

In many ways these studies demonstrate the main features of all qualitative inquiry in that they are about focusing on the understandings the emerge from people's experience. They are holistic, focused on human experience, concerned with narrative and storytelling, include an extended level of inquirer involvement and give attention to the context in which the inquiry is set (Boyd 1999). When these are brought together the perspective that they bring to the experience adds to and extends any previous quantitative studies that have gone before.

The implications of such studies and the understandings that emerge from them is particularly pertinent for healthcare practitioners who are encouraged to use an evidence based approach when making decisions about treatment and care. While seeking to provide justification and excellence this may serve not to take individual people's stories into account. Person led care and the view that each individual is a partner in and consumer of healthcare is about what people want and see as being important rather than what practitioners feel should be provided. The research that underpins so much healthcare practice is based on generalisations that relate to the study of controlled samples of one form or another; the stories that these create may be very different from those of people in situations where life is uncontrolled or uncontrollable and don't reflect real life (Greenhalgh, 1999). The use of narratives and the understandings that these generate creates the potential for healthcare practitioners to take a more holistic approach to addressing health needs. Individual beliefs, meanings and understandings are an important aspect of this it is essential that healthcare practitioners share in this *"population derived evidence"* (Greenhalgh, 1999, p324). By using this alongside the outcomes of evidence based understandings, there is the potential to increase partnership and make therapeutic relationships more equal and more effective (Greenhalgh, & Hurwitz 1999). In addition narrative provides an important learning tool for all those involved in the delivery of healthcare. One such service is the Database of Individual Patient Experiences (DIPEX/Healthtalkonline). Here healthcare practitioners can hear and see people talking about their experiences of changing health status. This gives them a different perspective on what is the lived experience of the individuals who share their understandings.

2.5.1 Experiencing Head Lice Infestation

Finding sources that represent people's understandings about the real life experience of dealing with head lice is limited. There has been no opportunity for parents, particularly mothers, to recount their experiences and this means that these have been unavailable for healthcare practitioners to learn from (Annells, 2004; Koch et al., 2001). As a result healthcare practice addresses the problem from a largely evidence based perspective that ignores personal understandings because these are hidden. In this study the stories told by mothers and grandmothers created fundamental, shared understandings of the experience which not only became visible to others but were available for the development of practice.

The women who took part in my study were ordinary people whom I contacted and included by using snowball (Guba & Lincoln, 1985) or chain referral sampling (Holloway & Freshwater 2007). They met particular participant membership criteria which included being born and having lived in Liverpool all of their life and having experienced head lice in their family. Their ages ranged from women in their twenties to women in their eighties and all had to be happy to talk extensively about their experiences. Further discussions concerning sampling and the membership criteria take place in Chapter 5.

2.5.2 Collecting and Analyzing Experiences

We met and talked and our dialogues were then transcribed, analysed and interpreted by me. The narratives of women below fifty and above fifty were analysed separately and then all narratives were analysed together. The fundamental themes of their experiences were extracted and the understandings that emerged from these were written about and considered within a broader social context that was created by exploring discourse about the experience that already existed within the world. The implications of these for wider understanding and healthcare practice were then considered.

The analysis and interpretation stage of the inquiry process was influenced by the work of Colaizzi (1978). I used his phenomenological analysis of text to generate clusters of themes from within the dialogues and van Manen's (1997) framework for doing hermeneutic phenomenological inquiry as this allowed me to interpret these further. This stage of the inquiry process is discussed in depth in Chapter 5 of the thesis and Chapter 6 presents the women's understandings that emerged as a result of analysis and interpretation.

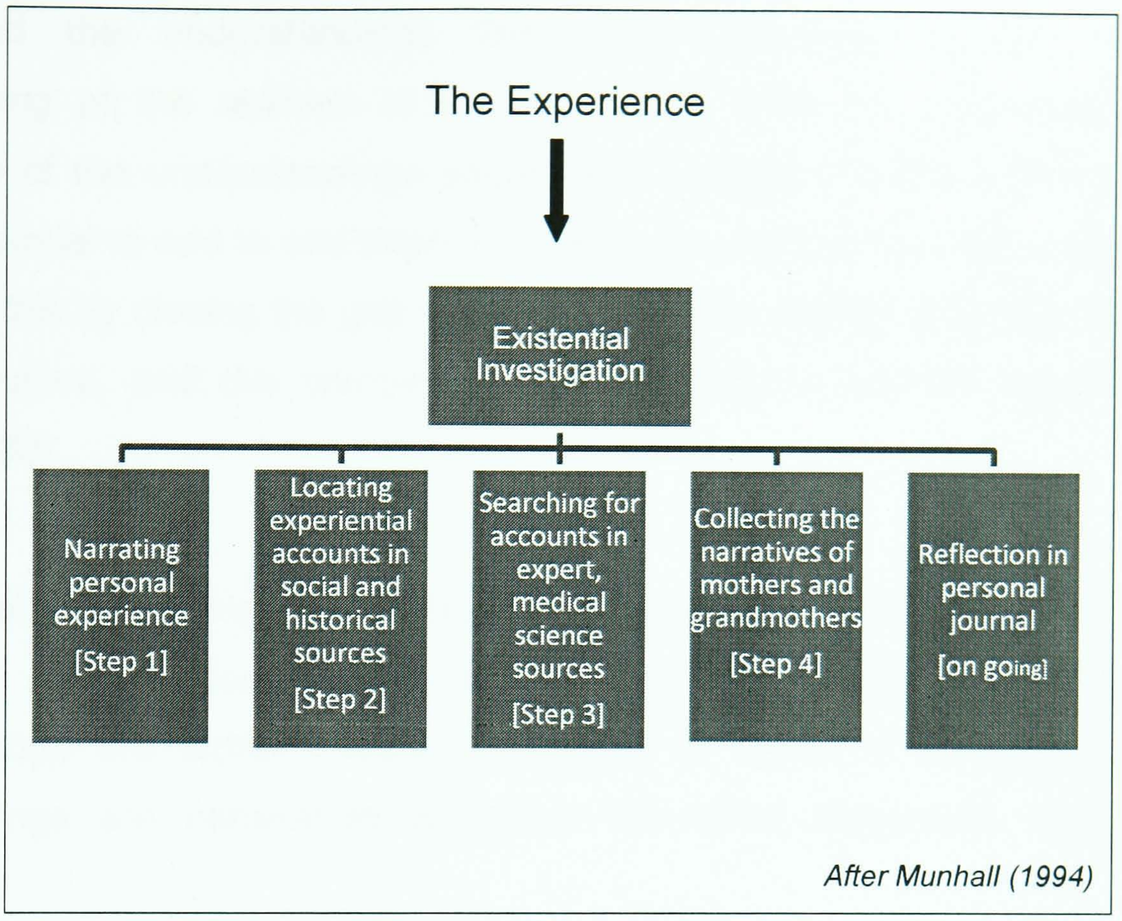
2.5.3 The Existential Perspective of the Experience.

An existentialist approach was used throughout the study as this is concerned with the relationships of individuals with other people and the way our lives are always closely linked to the interactions that we have with eachother (Spinelli, 1989). We are shaped by others and we shape those with whom we relate. Indeed being alone can be understood as being away from others. In the light of this it means that an inquirer can never separate themselves from the world or the people in it and, as a result they and their experiences and understandings are an integral part of any study and its findings.

People also relate to things in the world and they assign meaning to objects and experiences; the significance of which they also decide. The relationships that exist between individuals and the meaning that they create about things and experiences do not exist in isolation within the world, rather these are influenced by the social, historical and cultural context in which they interact together. It is dialogue that allows experience to be shared and common meanings and understandings to be created (Coulon, 1995; Patton, 1990). From this point of view existential experience is at once solitary and shared.

The world and the meanings that are created are about the things, situations, experiences and choices that we make within it and are therefore concrete rather than abstract. They are concrete in terms of their spatial, temporal, corporeal, relational and emotional dimensions (Heidegger, 1927/1962; Todres & Wheeler, 2001; van Manen, 1997 & 2002). These dimensions are always interwoven through a person's life experiences and are influenced also by their social, historical and cultural context. The experience of head lice is about such things as, choice, decisions, and previous experience and any understandings generated are at once individual as well shared with other people (Hammond et al., 1991).Therefore it was important to capture these dimensions of experience within the concrete world so that individual accounts and stories, the influences that exist in relation to this and the wider world are taken account of (Leonard, 1984; Munhall, 1994).

As a result, the women's experiences and the understandings that emerged from the face to face stage of the inquiry process were influenced by the social world. This needed to be considered as part of my study and I used the work of Munhall (1994) who sets out how this, with reflection, can be effectively addressed through existential investigation. Some of the social and historical context was created in part by the stories that the grandmothers told in that these influenced the interpretation of all of the narratives. All of the stories told were about domestic life and were therefore oral histories about the private life of the family, either currently, or how it was experienced in the past (Tosh, 1991). In order to add to this existential perspective a variety of printed document and electronic sources of experience that were already available in the social world were also consulted. These were about individual and collective experiences, and included expert, scientifically based sources and as well as those with a social and historical focus. The existential process is set out, step by step, below in Figure 2.



After Munhall (1994)

Figure 2 - Encountering Experiences

The social and historical sources represented the experience in a way that reflected the meanings, understandings and actions of people, organisations and institutions as they were influenced by their social world at that time. Some offered insights into the experiences of individuals and families coping with the experience on a day to day basis, while others were more about the meaning that policy makers, legislators and others attached to the experience. However, there was limited comment in the sources covering the more recent experience of ordinary people.

Expert, scientifically based discourses about the experience were well represented in the wider world and had a very different focus which was overwhelmingly concerned with the experience as a broadly clinical issue. There was an emphasis in these on the use of evidence-based knowledge to assist healthcare practitioners in the detection and management of head lice.

As the main sources available for the experience during the twentieth century were fundamentally scientific, this did not represent the experience of ordinary people and the understandings that these generate. Greater overall understanding of the realities of the experience then not only provided a perspective of the understandings about the experience at that time but also has the potential to add to and improve healthcare practice now. My study tried to address this by closing the gap between what was already available through existing sources, and the complex reality of mother's real life experiences (Omery, 1983).

Further details concerning the documentary and electronic discourses about the experience can be found in Chapter 4 of the thesis. The women's understandings are written about in Chapter 6, while in Chapter 7 their understandings are considered alongside the other discourses about the experience.

2.6 The Inquirer's role, assumptions and biases

I am a mother who has experienced head lice in my family. Husserlian phenomenology states that you must set aside your personal perceptions and meanings of the experience when undertaking phenomenological research. It requires the inquirer to view an experience from a naïve point of view in order to see it in a "novel" or unfamiliar way. By doing this, it argues, new awareness is generated for the inquirer (Plessner, 1953) and any preconceived notions and ideas that might influence participant's narratives are put to one side (Husserl, 1931).

An alternative approach, however, is for the inquirer to be seen as a much greater part of the inquiry from the collection of stories to its reflective and interpretive stages. From this point of view the interaction and involvement of the inquirer are seen as vital in the creation of understanding as this reflects the social construction of reality that take place each time people talk together. Everyday language is the medium for expressing this and it is through language that we consider and organise what takes place in the world (Patton, 1990).

Language is about the discourse that takes place between at least two people. To be an active a part of the construction of new understandings an inquirer must acknowledge and take account of their prior experience and understandings. In existential inquiry these cannot be set aside as they are an integral part of the person and therefore inseparable from their social world. I actively brought my own experiences to this study so that I could reflect on them and later include them in the interpretation of all of the narratives. In doing this I was able to explore how my own experiences were influenced by my own social, professional and historical world (Colaizzi 1978).

As a consequence this study began with self-reflection and a consideration of my personal experience of head lice infestation and the impact this might have on inquiry. It was undertaken prior to exploring any documentary sources of experience and understanding and before undertaking all interviews. Colaizzi (1978) stresses that in undertaking a personal phenomenological reflection the inquirer can explore and come to terms with their experiences. In doing this in my study I had the opportunity to hear my narrative for the first time. This began the process of reflection, which was part of every dimension of the study. In addition it allowed me to experience to some extent what it would be like to for participant generating a narrative about their experiences and it helped me to clarify the nature of what it was that I was trying to study (van Manen, 1997). I recorded my story and then transcribed, analysed and interpreted it alongside those of the women. I heard myself considering the experience and reflecting upon it as I tried to come to terms with my own understandings.

My role was to encourage my participants to tell their stories, in their own way in as much detail as possible (Holstein & Gubrium, 1997). I had to be able to generate a social environment that allowed this to take place and my involvement with this was important if I was going to be able to really uncover the understandings that I sought (Baker, 1997). I reflected at each stage of the inquiry process but this was particularly important during the interviews and at the analysis and interpretation stages. It ensured that I maintained my focus on the women and what they were saying and also helped me focus on the dialogue texts and the themes of understanding that emerged from these. My personal phenomenological reflection helped me in relation to all of these points but it also helped me clarify what it is that I was trying to accomplish through the study and look critically at the impact of my personal roles on how I considered and reflected on the experience (van Manen, 1997).

I kept a reflective journal throughout the study as, through dialogue with others (and with all textual and electronic sources) I knew that my own understandings would change further and that this would influence my interpretations and my understandings. Whitehead (2004) points out that, experiences, meanings, understandings and prejudices are not fixed but change with each new discourse and I did not want to lose this. Further discussion about and interpretation concerning my personal phenomenological reflection appears in full in Chapter 3 of the thesis.

2.7 Summary

This chapter has set out the aim, and provided an overview of the study, which was to use hermeneutic phenomenological inquiry to reveal the hidden meanings and understandings of mothers who had dealt with head lice infestation within their families.

A justification for the inquiry's approach has been introduced as has of the role of the inquirer in relation to this. The chapter has highlighted the rationale for the choice of the study's focus and has introduced some initial discussion concerning the experience and its context.

The next two chapters look at the first two steps of the inquiry and consider the context in which the study originated. Chapter 3 offers experiential insights into this through a personal phenomenological reflection and Chapter 4 examines sources of experiences of head lice within the wider world.

Chapter 3

Evolution of the Study: Personal Experiential Context

This chapter and chapter four place the study undertaken within the context in which it originated. Both are closely linked and give some insight into the way my personal experience and an examination of other available sources about head lice infestation, focused, influenced and added to my study.

This chapter is my personal phenomenological reflection on my experiences of head lice infestation. It begins with a brief introduction to the relevance of reflecting on the inquirer's own experience. A reflection on my personal experiences is then presented as this relates to the study.

3.1 Introduction to the Experiential Context

Hermeneutic phenomenology relies on self-awareness and the ability of the inquirer to reflect throughout the inquiry process. Issues raised by this activity are complex and these are always deeply embedded in the inquirer's own personal perceptions, meanings, understandings and actions. These go on to influence every stage of the inquiry (Schutz, 1970). Though it is acceptable within hermeneutic phenomenology to bring these to an inquiry it needs to be clear how such personal understandings and beliefs relate to the inquirer's social, cultural and historical context.

All understanding involves some prejudice (Gadamer, 1976) and an inquirer cannot remove these from their experiences instead they have to consider them and come to terms with themselves and the world around them (Morse, 1991). Therefore they have to be able to explore pre-conceived ideas, prejudice and personal meanings and constructs within the context in which the inquiry is being undertaken. At the heart of this is the importance of the inquirer's awareness of their personal and social characteristics and the way these may impact on the relationships they have with participants and the texts they are trying to analyse and interpret (Whitehead, 2004).

Reflection is an essential aspect of an existential approach to inquiry in that it places an emphasis on what is termed *"reflective conversation with a situation"* (Schön, 1983). This suggests a phenomenological approach in which there is an emphasis on self awareness and interpretation (Thompson, 1995). Where a situation is unusual or complex this is often the chosen inquiry approach as, through interaction, the inquirer becomes a part of the experience being explored and the outcomes that this generates. Reflection takes into account *knowing-in-action* in which previous knowledge and understandings contribute to what Schön terms *surprise*. He goes on to point out that it is this *surprise* that can actually generate more reflection whether it is taking place during an experience or whether it is undertaken after the experience has taken place. There are strong links between reflection and existentialism and these are essentially about creating understanding and making sense of complex situations in which factors interact in ways that are difficult to make sense of and understand (Thompson, 1995). It is through reflection that synthesis takes place during inquiry as the various parts of an experience come together to create a unique whole – a different reality.

The reflective process was essential as I knew that as the inquirer, I was very much a part of this existential inquiry process. My own perceptions and meanings concerning the experience of dealing with head lice had to be considered with regard to how participants in the study would later balance these against their own. Colaizzi (1978) suggests that through this reflective process understanding comes from within the inquirer via their personal, contextually influenced understandings as well as those articulated by others. This interaction has the potential to generate unfamiliarity and strangeness of the familiar and means that such fresh perceptions can forge new meanings and understandings (Plessner, 1953). In addition, the act of reflection allowed me to explore different facets of myself, as a woman, as a mother, as a healthcare professional, and to consider the way in which these might influence my own thoughts and actions in relation to being part of discourse and the analysis and interpretation the texts generated by these.

To this end, my personal phenomenological reflection was taped, transcribed and, along with personal diary accounts, reflected on in order to generate essential themes of the experience. This approach to analysis and interpretation then formed the framework for the analysis and interpretations of the participants' narratives later in the study. In essence the approach used in my personal phenomenological reflection gave me my analytical framework that allowed me to explore other's stories and create a clearer understanding of the experience of interest.

This part of the inquiry process was highly personal and encouraged me to look closely at my own experience how my understandings about this were structured as a result of how I interact with others in the social world (Merleau-Ponty, 1964). I was very aware that my responses concerning the collection and interpretation of other's stories could be influenced by my personal experience in as much as this might affect how or what was actually investigated through the study. Thus, this important stage of the study allowed me to re-examine my skills of self-awareness and enabled me to begin to see the ways in which I, as inquirer, actually responded to the experience under study in terms of such things as understandings, beliefs, meanings and actions. Later this helped me relate to the perceptions and meanings expressed by others, as my own experience became part of the co-construction of realities that took place through discourse with them.

At this personal reflection stage I had not undertaken any additional reading over and above the literature that I had consulted during my practice as a health visitor. I was aware that consulting other sources available would alter my personal perceptions. I therefore maintained awareness, through later reflection, of the impact of such discourse upon my initial views, opinions and beliefs. Certainly, later in the research, the context in which I was reflecting expanded through a range of different discourses that altered my perceptions in different ways. Further changes in understanding took place later in the research when I found that reflection was needed more and more as the context became a social one which focused on discourses with the participants.

3.2 Personal Phenomenological Reflection

In relation to this study, an interpretation of my personal phenomenological reflection allowed the following essential themes to emerge:

3.2.1 Professionalism:

Within my phenomenological reflection it was evident that the starting point for this research centred on the issues raised within health visiting practice when dealing with women (there have been no men in my experience) seeking advice about head lice. From a professional perspective the emotional response of women was always the first need to be dealt with when they sought advice and support and the feelings were often of embarrassment and disgust along with notions of where the head lice infestation had come from. Generally the women just wanted confirmation of infection and then advice with regard to treatment, and despite the obviously unpleasant nature of the experience they wanted to be "in and out" as quickly as possible. My role as health visitor in this situation was largely concerned with health education and I rarely thought about the impact these parasites were having on the women I spoke to. As far as I was concerned they were a minor problem that could be addressed with relative ease.

The main aspects of the support that I provided encompassed the need to increase the women's control over the situation, reduce dependency on professionals and give them options over treatment. Many women contacted me following failed treatments or repeated use of lotions over a very short period of time. Generally these women felt desperate that they could do nothing more to deal with the infestation. They also often felt confused about the advice they had been given by various healthcare professionals particularly when infestation was still evident. This was difficult for me to deal with as my prime focus was my client but I was constantly aware that to make comments about another professional's advice could undermine the relationship the client had with them and so I found myself constantly taking great care with what I said in these situations and this often posed a considerable challenge. It never occurred to me before undertaking my reflection that on these occasions I might have been one of those seen to be offering conflicting advice.

Some of the more successful support sessions I was involved with focused on getting women together to learn more and to talk about head lice therefore offering opportunities for them to increase their knowledge and therefore to gain a measure of control over the experience. On reflection such sessions must also have given the women the opportunity to share experiences and to explore their understandings. I never saw these interactions as a way of gaining insights into the experience of the women and therefore adding to my own understanding. I saw them rather as aspects of broader social contact. Women whose children had been unaffected often came to these sessions to learn more and in particular to see the samples of nits and adult lice that I had taped to cards in the hope that these would help with detection. The sessions were always informal and there was always a great deal of discussion between the women. For my part I gave the "party line" with regard to detection and treatment and always offered support, however I rarely thought about how the women were feeling at that moment or how they would feel when they actually discovered them in their children's hair. To a great extent I feel that this approach represented ignorance on my part as to the importance of their feelings and how the women would respond to infestation when they discovered it, but it was not something that then seemed to be of great importance at that time. On reflection these were missed opportunities for me to learn more and to add to my own understanding so that I could have better supported others.

3.2.2 Professional-personal conflict:

At a later date I was to discover that the professional knowledge & understanding that I had did not prepare me for the personal experience of head lice in my own family. Though I understood the aetiology and treatment of head lice this did little to reduce the conflict I felt in relation to my own responses at a personal level within my own family. Suddenly I was no longer a professional supporting others, I was a mother and here in front of me I could see a head louse crawling across my son's fringe.

I learned very quickly and to my surprise, that helping others to deal with such experiences was very different to dealing with decisions about one's own children; rationality was of little importance where the emotions being experienced were strong. It was at this point that I realised that I had never actually asked others about their experiences nor really seen the value in this, and therefore I did not have a real, family orientated insight into how other people dealt with such situations. It became immediately clear to me that the feelings I had as a mother, with all the love and responsibilities that were a part of this, bore no resemblance to those I had when checking the child of another woman. Although I knew what to do in terms of treatment, the other aspects of the experience, such as horror, though they had been expressed by others really were not things I had considered as important until that very moment. This suddenly became a shared experience but one that I was experiencing alone and isolated from others. How could this be? As a health visitor I had always felt able to deal easily with these situations when they were experienced by others so why was it different now? I could not answer these questions as I felt confused trying to make sense of an experience that with others had appeared so simple for me to address and yet now had become so complicated and distressing. I found that my professional expertise was not particularly valuable to me as a mother in this situation instead I felt that I was becoming a disempowered, isolated and anxious woman.

3.2.3 Irrationality:

Conflict was evident in my response to the experience and this existed between what I knew to be the best way to deal with the infestation [professionally] and what I thought was right [maternally]. Though I knew as the professional, for example, that treating the hair using comb and conditioner was effective if carried out rigorously for 14 days, I also found myself washing bedclothes, clothes and brushes to ensure that there was no possible re-infection despite the fact that I knew that there was no strong evidence for this. There seemed to be little rationality to my responses and reflection and professional knowledge did not help this. Why did I want to wash and clean? On reflection it seemed more about my responses to my feelings concerning the experience, in that to wash and clean removed the associations that I knew I had with the insects being dirty and creepy and the fact that I had to protect my son from them. Therefore if doing more than what was expected achieved this aim in my mind this was what I had to do and it made me feel better and more in control of the situation. Where did these ideas come from? Certainly they did not represent professional knowledge so they therefore represented something else; something that was about other aspects of me and other sorts of learning that had taken place about head lice.

Although I knew professionally that head lice were not associated with dirt and being dirty I have to admit that this feeling was there in a demonstrative way during the experience. I rationalised that I was clean but felt that if others knew about the infestation that they might view my family in a different light and that my son could be isolated and ostracised by others on the basis of this – *"Keep away from him as he's got head lice"!* Similarly my thoughts that my son had actually caught these insects from someone else were horrifying. *"Who were they? What were they like"?* Were these people "dirty" or did the head lice really choose clean heads as I'd been led to believe and as I told my clients? I found it difficult to deal with these very strong feelings even though I knew the evidence behind them was poor and that I was behaving in an irrational manner. It became a challenge to gain a balance between what I knew as a health visitor through professional practice guidelines and what I had learned from other sorts of discourse, for example in magazines and on the internet and how, in considering alternative ideas I had developed beliefs and understandings, which were now strongly influencing my actions and I was unsure as to their nature or origin.

3.2.4 Maternal guilt:

Strong feelings relating to maternal responsibilities were evident in the reflection when talking about discovery of the infestation. There was constant questioning about my actions – *"Was it my fault that the insects were there? What had I done wrong for this to happen? Should I ask others?"* The vision of the insects on the head of my child filled me with so great a degree of distress that it was difficult to express in the spoken or written word; I had put him through this experience so it was my fault. I considered again and again why had I not checked his head more regularly as I always explained to other women that this was the best way to deal with head lice, why had I not followed my own advice? This may be because like others I never thought it would happen to me such things always happened to others. This feeling was exacerbated by the fact that as a professional I felt that I should have been more aware, somehow more in-tune with events, more sensitive, more knowledgeable, more skilful.

The feelings were overwhelming I had let my son and the rest of my family down; others would think of us in a poor light and would see me as being unable to care for my child and to act responsibly towards others who we came in contact with us. It was now my son who potentially had to bear the brunt of comments and jibes about what had happened to him. Also I felt that there was an association between such ignorance and being a poor mother – one who didn't take appropriate responsibility for the care of her son; one who had failed in providing protection; one who was not able to make decisions and take action. My son would appear to all as the face of my guilt and would represent to others my poor mothering.

Discussions with my mother were clearly important in deciding what to do as I tried to deal with the situation, I did not consider consulting anyone else. Her counsel helped me think more rationally about the situation. Her support was paramount to me during this time and greatly reduced the guilt and stress that I felt. Sharing the experience with someone who I trusted enabled me to examine my own thoughts, feelings and actions, and I felt I was not alone. Her perceptions however coloured my responses and at times generated additional conflict particularly as she did not want anyone else to know about the infestation as she felt that associations with families who she considered to be dirty was one that might be reached, in relation to us, by those who found out. I carefully considered whether to tell my son's school about what was happening. Though what my mother was saying had a great influence on me I did eventually let them know. This was evidently viewed as a social duty because I *"wanted other mothers to be aware"*. I also wanted them to know that I was dealing with the problem and that my son would not pose an infestation threat to their children on return to school. On reflection it was important for me to make it clear to others that I was a responsible member of society and that I had the interest of others at heart. Despite feeling that telling school was the right decision it generated feelings of guilt concerning my relationship with my mother as I felt I had rejected her advice and let her down and in her eyes labelled our family as I addressed my responsibilities regarding my child and the other children at school. From this perspective family loyalties conflicted with responsibilities to those outside.

3.2.5 Cleanliness:

Despite previous knowledge and understanding the reflection identifies perceptions of feeling and being unclean while the infestation was present. This was a psychological, physical and social un-cleanliness that pervaded all aspects of my family life. I did not want anyone to see the insects in my child's hair as I felt that people might make judgements about our family; judgements, which suggested to them that we were a family with poor standards of hygiene or that I was a mother who just did not care.

As a result I excluded him from school until the insects were gone (though I did make the school aware) as it was clear that these insects were visible to all, not like scabies for instance that could be hidden by clothing. The insects sat upon the hair for all to see and for all to make judgements about and the very fact that they were visible and had established themselves suggested a lack of awareness on my part. Most importantly it was my son who was the vector of these parasites and it was his image that was immediately associated with any judgements being made. This generated conflict between "what is seen" and "what is spoken of" in relation to informing others of current infestations. Somehow if the parasites were not visible this would have made the experience more tolerable.

There were feelings that this should not happen within my family and shock that it actually had. Did not this always happen to someone else? Somehow it was something I envisaged happening to others; other mothers, other children, other families. Surely my family wasn't like the children I'd been at school with who got notes from the school nurse indicating that they were infested, and who always seemed to be grubby with greasy, tangled hair and runny noses? My childhood experiences were a strong influence on the way I thought about and made sense of the experience. Would other people have this sort of image in their mind when they knew about my son? This in itself seemed an irrational response as my experience as an adult had been with individuals who did not fit in with the mental picture I was using as a reference point. The social implications of carrying these parasites seemed enormous.

Discussions with my mother only served to reinforce these feelings as her own perceptions of families who had experienced head lice while she was at school were the same as the stereotypes I described. She talked of families living in poverty where there were lots of children who were constantly dirty and had mothers who obviously didn't care. It appeared to me that in her mind too having head lice had the potential to represent a poor level of cleanliness to others in society and that this was also based on her past experience. Despite the fact that I knew this stereotyping was unacceptable, the image remained in my mind, and though it seemed somewhat divorced from my own experience at that moment they still had considerable impact on my perceptions. Although I knew there was no threat of disease from these tiny insects I still felt the urge to rid my son of them as soon as I possibly could in the hope of returning to the family to "normality" though this had now been changed in some way by the experience of head lice.

3.3 Summary of the Experiential Context

A range of essential themes emerged from the reflection on my experience. In relation to these themes discord was a clear, complex feature that pervaded them all. What was apparent was the co-existence of different views about the same issue, different sources drawn into understanding at different times, conflicting perceptions, confusion with regard to feelings about myself and my roles and often, lack of clarity about how to address a range of issues. From these perspectives the conflict that arose from being an individual, a healthcare practitioner and a mother featured highly, though this was also influenced by wider considerations which related to others in the world and extended from my own mother to anonymous individuals who were part of society as a whole. In addition other sources of influence featured in this from professional knowledge to my own personal lay experiences.

The reflection also confirmed that though the experience was complex it was possible to hold a variety of, often conflicting, beliefs and understandings at the same time and deal with these when making sense of what was being experienced; for me these were at once personal, professional and maternal. Furnham (1994) points out that this kind of experience is common to healthcare practitioners and though it is assumed that their individual understandings will always be underpinned with evidence, in reality these often develop alongside retained lay understandings and beliefs. In relation to this point it is interesting to consider the extent to which previous (lay) experience, prior to (professional) healthcare practice influenced me in my beliefs and understandings and how these then changed when motherhood subsequently followed extensive professional practice. This issue was important because it made my experiences different in many ways to those of the other participants in the study in that they were all lay people. In this respect, though many aspects of the experience would be shared, the nature of my professional background and its interaction with other aspects of my life would to some extent add another dimension to the experience the impact of which would need to be considered throughout the study.

From this point of view the act of exploring my experiences not only generated new insights and views but also made me aware that in generating these I, like the women I came in contact with in practice as well as during the inquiry, could choose what to reveal in terms of my experiences, feelings and understandings. Even now as I write I know that there are aspects of these experiences that I do not wish to share. This is always a consideration in healthcare practice and inquiry as private accounts of experiences, where, for example, views that might not be considered acceptable to others may not be expressed (Cornwell, 1984). This meant that within my study I needed to consider this with each participant and to acknowledge that narratives may not be complete. From this perspective my acceptability to participants was fundamental and included considerations of trust, good communication (Dines, 1994) and, most importantly, an understanding of what it was like to talk about such experiences.

The value of undertaking such a reflection changed my perceptions of the experience when I later came in contact with other mothers seeking help. Though I continued to use an evidence based approach in providing help and support I found that my reflections enabled me to understand and take account of the importance of the stories and questions that women were expressing to me; stories and questions of which I had previously been somewhat dismissive. My own experiences for example demonstrated the intensity of feelings that could emerge from the experience; feelings which were related to relationships rather than the experience itself. Now I could see the importance and impact of the women's stories and I could more clearly see why some understanding of these was important in guiding the care I gave by making it more focused on the individual and their family and ensuring that therapeutic decision making was responsive to individual perceptions, feelings and need.

In conclusion, my personal phenomenological reflection encouraged me to examine my personal understanding of the experience of head lice and enabled me to recognise that these are structured as a result of how we interact with the wider world. It is clear that the complexity of making sense of experiences, even when they are your own, is immense and that aspects of personal understanding and meaning making do not exist independently but overlap and inter-relate to form a complex whole. My personal reflection demanded that I consider the manner in which the rest of the inquiry would progress based on this complexity which throughout the study would always involve my own experiences as well as the experiences of others.

In the next chapter the focus on existing discourses continues but the emphasis moves away from my personal experiences to those that are accessible from a range of sources that already existed in the wider world of the twentieth century.

Chapter 4

Evolution of the Study: Social Context and Expert Sources

This chapter looks at the sources of understanding about head lice that are already available in wider society. These are drawn from social and expert documents created during the twentieth century. They provide something of the wider context in which my individual understandings and those of my participants emerged.

4.1 Introduction

Existentialist inquiry is about acknowledging that the things that occur in the wider world create the context in which all personal understandings develop (Heidegger, 1927/1962; Wollan, 2003). Consequentially, in any existential inquiry the individual and the social must be explored together (Munhall, 1994).

Documentary sources that provide the context of an experience can be extensive. They can include text and non-text documents ranging from the written word to creative art forms and pictorial representation. In an inquiry, as each of these is encountered and engaged with, a dialogue with the inquirer begins. This is an interpretive activity that has the potential of allowing many different understandings to emerge.

Documents create a particular version of reality. However, the meanings they generate are not necessarily transparent and can be manipulated as much by the author as the reader (Atkinson & Coffey, 2004). Authors produce documents with a particular audience in mind but distance quickly develops between these and their readers and interpretation and re-interpretation take place as a result. This is influenced by both the social context at the time the document is produced as well as at the various points at which the document is read. As a result, any document will say different things in different contexts (Hodder, 1998).

Deciding when an inquirer should actually search for and consult documentary sources in a study is contentious. One view about this is that in approaching other discourse at an early stage in the inquiry, this can mean that a specific research question can inadvertently emerge as this takes place (Streubert &

Carpenter, 1999). Furthermore, it is argued that once these discourses have been engaged with the knowledge and understanding that emerges from them can influence future interpretations of narrative.

These views seem to undermine the aim of hermeneutic phenomenological inquiry, which is to describe and interpret real life experiences where the meaning and understanding attached to them is unknown. However, van Manen (1997) emphasises that it is better to make explicit these influences so there is clarity in term of the meanings they create and the potential impact they may have on the inquiry process. Additionally, as historical, social, scientific and political influences shape and organise experience and understanding these should be considered when interpretation is taking place, and indeed throughout the whole of the research process (Lopez & Willis, 2004).

In the light of these views an examination of available sources began directly following my personal phenomenological reflection and immediately prior to any interviews with participants. In doing this the context generated by these added to the overall understanding of the experience.

Searching for and accessing documents was not confined to the early part of the study but continued throughout the whole of the inquiry process. The intention was that this and the interpretation of participant's narratives should create a clearer understanding of the experience of head lice. Public documents were consulted and the participant's oral histories added to the context that these generated. Most of the documents consulted were solicited in that they were created with a particular purpose in mind and wherever possible primary or original sources were accessed. Some secondary sources were consulted to assist with interpretation and alternative understandings (Lincoln & Guba, 1985).

Documents are located in the past and their understandings can be hidden in time. Any in-depth study of these is time consuming and labour intensive. In this study I concentrated on creating an overview of the social, historical and expert medical science contexts in which the experiences of my participants took place. The intention was to provide a landscape of understandings about the experience during the twentieth century into which the women's narratives would sit.

To this end I obtained as many documents as I could that related to the experience of infestation during the period of interest. I sought documents that related to the whole of the twentieth century as I wanted these to relate to my participants life-spans and at this stage of the study I did not know what this age range would be. From a social and historical perspective I focused largely on experiences connected with Liverpool, though I also consulted documentary sources from further afield. I accessed local history archives, drew from sources in the British Library and I used internet search engines to enable me to access a variety of relevant websites.

With any document that is created it is difficult to know what its meaning and intention was, and limitations on interpretation are always present when such discourses are situated in the distant past. Plausibility, credibility, honesty and accuracy can be called into question and it may not be possible always to have the answers to these questions (Mason, 1996). Due to the time constraints the emphasis in this part of my study was to establish some *"historical experience"* (Crabtree & Miller, 1992 p165) about past experience in order to gain an overview of the discourses available in documents created during the twentieth century. These would later be considered alongside the stories my participants told. This approach is in contrast to using a critically interpretive *"historical knowledge"* (Crabtree & Miller, 1992 p165) approach which would have been concerned with gaining a depth of understanding about the documentary sources but which would have left little room for the understandings that emerged from the women's narratives. The study's focus had to be the women's stories not the discourses contained within documents.

By its very nature the experience of head lice has a strong social focus and it was important to reflect this through the documentary sources explored. I accessed local history texts, popular media and electronic sources which included personal forum accounts to reflect this. However, infestation management and treatment is found in expert sources also so it was essential to examine comment made here. Though many of the historical expert sources referred to in this chapter are City of Liverpool, School Medical Officer's Reports covering the period 1923 to 1962, I also accessed memoranda, local and national government reports and policies and local statistics to add to these. Within these documents social comment and expert understanding began to merge as professionals made comment on the lives of ordinary people.

In addition to these sources I also accessed peer reviewed scientific research studies, text books and evidence based guidelines that also addressed head lice infestation throughout the century. While most of these were written during its last thirty years, reference is also made to other studies written during its middle and early decades. The studies explored use different scientific and public health approaches and methodologies to study head lice infestation and many of their outcomes have implications for addressing head lice infestation nationally and internationally. Other sources are, however, specific to British culture in that they have been undertaken using British participants and any research outcomes relate directly to the social world in which the participants live.

All of these provided me a variety of comment, opinions and views as well as different understandings that were not necessarily available from the stories told by my participants (Silverman, 1997). Broad themes emerged from this documentary search that showed how the experience of head lice has been represented in social and expert medical science discourses during the twentieth century. These are used to guide the reader through the sources and to give the chapter structure. The chapter continues by presenting social and historical documentary perspectives and then moves on to look at expert medical science sources.

4.2 The Social Experience of Head Lice during the Twentieth Century

I killed them, but they would not die.
Yea! All the day and all the night
For them I could not rest or sleep,
Nor guard from them nor hide in flight.

Then in my agony I turned
And made my hands red in their gore.
In vain – for faster than I slew
They rose more cruel than before.

I killed and killed with slaughter mad;
I killed till all my strength was gone.
And still they rose to torture me,
For Devils only die in fun.

I used to think the Devil hid
In women's smiles and wine's carouse.
I called him Satan, Balzebub.
But now I call him, dirty louse.

The Immortals" by Isaac Rosenberg (1918)

The language used to describe any social experience is a way of representing understanding and meaning which links it to a particular point in social time. Many of the familiar terms that we currently use in everyday language are concerned with the changing social circumstances of history yet today we hardly think about their meaning. Head lice related terms such as "lousey", "nit-picking", and "going over things with a fine toothed comb" are familiar to us and are used in day to day language while the term "chatting" (a term used by WW1 soldiers as they sat about talking while searching for lice in their clothes) describes a particular, relaxed form of communication (Winter, 1979). These expressions and terms are about the experiences of head lice in the twentieth century and it is these that are explored in this part of this chapter.

The twentieth century is where the stories told by my participants sit. It was a time of immense and important change in society with rapid developments in social structure and policy, public health, medical science and technology. During this period in history there were two world wars, the social and political position of women changed and society's commitment to social welfare was reflected in the emergence of, for example, the National Health Service and improvements in education and housing.

From a personal perspective a picture of day to day life in Liverpool in the early part of the twentieth century is available through the written accounts of ordinary men and women. Infestation often features in such accounts, for example in O'Mara's (1933) observations in his autobiography about the pawning and redeeming of family possessions as a way of making ends meet, he points out that the presence of lice in clothing influenced whether the pawnbroker was willing to enter into a financial contract or not:

> *"I recall one furtive fellow placing his sweater on the counter saying 'Gimme eighteen pence on that, Mr Harris'. "There's enough on that right now", replied the veteran pawn broker, inferring, of course, vermin, as he rejected the pledge."* (1933 p47)

Pledging items at a pawn brokers and then redeeming them when money was available was a vital part of family economics for those living in poverty at that time and was so important that the presence of lice in the clothing could mean that a family ate or starved (O'Mara, 1933).

The personal professional accounts of those involved with surveillance and treatment of infestation also provide insights into the experience, this time into the understandings of professionals. The account below by a superintendant school nurse illustrates this. She is talking about infestation rates in Liverpool in 1958 and feels free to make critical comment on the perceptions of mothers and grandmothers:

> *"The schools with an infestation rate of above ten percent, generally are the schools located in the poorest areas of Liverpool, where to have "nits" is not according to the mothers anything to worry about. I was once explaining to a mother how to take her child to the Cleansing Station, and the mother said to me: "I know where it is, that is where my mother took me". This weight of apathy on the part of the mothers, and grandmothers, is very difficult to overcome."* (City of Liverpool, Report of the Principal School Medical Officer by Semple, 1958 p50)

4.2.1 The Extent of the Problem

While personal accounts of infestation in general are evident in a number of different sources these do not provide details of the extent of the problem of head lice either locally or nationally throughout the twentieth century. Even where figures are available it is not always clear whether these relate to head lice or to head and body lice together and locally though it is possible to access a number of School Medical Officer's Reports from the 1920s, although these are incomplete.

From 1923 to the demise of the routine head examination in the late 1970s, local rates of infestation from School Medical Officers reports for Liverpool showed that, for example, in 1923, 19.8% of girls to 4.3% of boys were infested or verminous (Hope, 1923). At this time, most children were treated at home while others attended cleansing stations where this could be carried out. In that year some 19,000 children attended the two available stations at Beacon Street and Mansfield Street for treatment and by 1925 a further cleansing station was agreed (Mussen, 1925).

By 1935 there were six cleansing stations in Liverpool and the School Medical Officer's Reports were then identifying rates of head lice infestation in school children which, that year, were between 14.6% amongst girls and 4.6% amongst boys (Frazer, 1935). These rates remained fairly constant until 1939 when, due to the war years, there is a gap in the reports available.

From the 1950s the reports return to recording infestation in general. They do not break figures down by gender or clearly identify those infested as a proportion of the school population as a whole. At this time the rates of Liverpool children show evidence that infestation at routine medical inspections fell from 9.6% in 1953 (Semple, 1953) to 3.3% in 1959 (Semple, 1959). These rates remained at the same levels during the early part of the 1960s (Semple, 1960, 1961 & 1962). Surveys in 1970s looking at the extent of the problem at a national level in primary schools across the UK showed relatively similar rates of between 1.1% and 5.2% (Donaldson, 1975) and this was confirmed by the 1978-79 School Nurse Survey for England and Wales which placed it at between 1% and 1.5% .

More recent studies have pointed to prevalence rates of 4.1% (Roberts et al., 2000) within school populations in Wales. However the links between these finding, initial infestation and true prevalence in the population at large are unclear as it is thought that only 1:10 infections are acquired in school and that invariably family members also have lice (Maunder, 1988). In an attempt to quantify prevalence within the UK, the Public Health Laboratory Service (PHLS, 1998) commented that though there was no surveillance data available for England and Wales as a whole a study in Southern England suggested that an average of 10% of children catch head lice each year.

Figures from Office of National Statistics (ONS) concerning dispensed prescriptions for insecticides shows an overall increase in prevalence with a thirty-six fold increase between 1980 and 1995, though Downs, Harvey and Kennedy (1999) have commented that this could be due to GPs providing free prescriptions. A particular problem with such statistics is that they only record prescribing for the person attending the GP consultation and this can give a biased view of prevalence (Downs et al., 1999). Overall the picture of prevalence over the last century reflects an emphasis on the screening of the child and the epidemiological implications of this for its management. This presents some difficulties in that it does not give a complete picture of the problem which is also about individual experiences and people's responses to these. Watterson (1993) has argued that professional control over epidemiology and financial restraints are sources of conflict when qualitative epidemiological approaches are being considered. Consequentially, studies that engage with people and discover more about such issues are in constant competition with epidemiological studies that take a more quantitative, evidence based approach. This can therefore limit the way in which the problem as a whole is both explored and addressed.

4.2.2 Reservoirs of Infestation

There are a range of issues that influence the rates of head lice infestation present in the population. Their transmission from one person to another is by close head to head contact and these intimate moments and the days that follow infestation often go unnoticed. As a result, trying to establish a picture of the extent of the problem can be difficult to do. The epidemiology of head lice infestation is said to resemble that of typhoid in that levels within the population are dependent on the numbers of people who are actually symptomless carriers and are therefore unaware of their condition (Maunder, 1996). Close social contact with other people in their immediate social circle allows the infestation to pass into the wider population. Other people then become infested and they then go on to carry and transmit the parasite without being aware that they are doing so. As a result there is a reservoir of adults within the population who carry the infestation (Maunder, 1996). In this way head lice are transmitted back and forth between adults and children and the true extent of the problem becomes difficult to fully estimate.

Indeed, Maunder (1996) argued that rather than focusing on children, as society has traditionally done, it is adult carriers who should be targeted in terms of the assessment of the problem and the ways in which infestation overall can be addressed. He emphasised that *"no amount of child or school orientated activity has much effect or ever has had"* (p554) and as a result placed great importance on contact tracing as a central activity in head lice control. Despite this view, it remains difficult to know how many people are infested at any one time and even harder to actually make contact with those who are unaware that they are carriers. This view is not new and the following comment by Mussen, the School Medical Officer in 1924, illustrates that this was recognised, but difficult to deal with even then:

> *"Whatever methods for dealing with verminous conditions amongst school children are put into force, they cannot be expected to eradicate completely this condition, for, unfortunately, the infestation is, in a majority of cases, a family one, and the difficulty of dealing with adult members of the family at the present time seems almost insuperable"* (City of Liverpool, School Medical Officer's Report by Mussen, 1924 p6)

In a similar manner Davies comments on this issue in the 1960s stating that:

> *"Treating the child only is of little lasting value in what is often a family problem because of infected relatives who cannot be persuaded to carry out treatment. Hence there is continual re-infection of the child."* (Davies et al., 1966, p171)

This means that the problem is one that is concerned with those unaware in the community at large (De Maeseneer et al., 2000). To illustrate this, a survey of school children in 1999 demonstrated that 53% of those taking part were asymptomatic and did not know that they were infested. They therefore represented significant reservoirs of infestation; a "silent reservoir" (Downs et al., 1999). Parents too might also be unaware of any infestation. They may not address the problem and additionally they themselves may also be asymptomatically infested.

Therefore, though children are the largest group to carry head lice the nature of this infested reservoir also extends to the largely unaware adult population and potentially into the community as a whole (Droogan, 1999; Koch et al., 2001). However, though an important epidemiological consideration, the importance of transmission between friends and family and adults and children outside school has been poorly addressed (PHLS, 1998).

4.2.3 Other Characteristics of Infestation

The profile of those most likely to be infested point to children, girls rather than boys, particularly those aged 4-11 (Ibarra, 1998; Medical Resources Centre (MeReC), 1999). Studies also suggest that children rather than adults are infested and this perhaps illustrates Maunder's earlier point that limited surveillance does not necessarily indicate true prevalence in the population as a whole. Pray (1999) and Downs et al. (1999) have suggested that girls and young women are more at risk of infestation due to their lifestyle where there is more close social contact and the sharing of personal articles and girls are generally 2.2 times more likely to have active infestation than boys (Counahan et al., 2004). This gender difference has also been found in much earlier UK based studies by Mellanby (1941) where he noted greater frequencies of infestation in girls with overall infestation rates for boys being generally lower and continuing to decrease steadily into their teenage years. These findings are also reflected in the local statistics presented earlier in the thesis in section 4.2.1. As might be expected infestation is thought to be more common in children and mothers in comparison to the rest of the population (Aston et al., 1998; Teale et al., 2008). Any seasonal variation in head lice prevalence that might occur is thought to be more about reduced physical contact with others during the summer months rather than any links with the weather and temperature (Downs et al., 1999).

Internationally large families rather than small ones are more likely to experience infestation suggesting an issue concerning overcrowding (Chunge et al., 1991). Also, Wegner et al. (1994) found associations between children with difficult to treat and repeated infestations, large families and parents with limited education though these are not defined. Vermaak (1996) has suggested that such findings may highlight the difficulties of managing a large family in socially disadvantageous circumstances. It is suggested that this might lead to less attention being paid to personal hygiene that results from a lack of support and limited financial circumstances. Social class has been identified as a risk factor for head lice infestation in a Belgian study (Willems et al., 2005). However, this is disputed by Aston et al. (1998) who have argued that overall, rates of head lice in communities at large do not appear to be linked to either social class or levels of cleanliness (Canadian Pediatric Society, Infectious Diseases and Immunization Committee, 1996, 2002). While some of these studies and views relate to the UK, others are concerned with communities internationally; as a result care needs to be taken when trying to consider the implications of such findings at a local, national level.

Personal hygiene and hair cleanliness is further considered in other studies with some writers arguing that head lice prefer clean heads rather than dirty ones as blood vessels are then in easy reach (Oliver, 1994; Sutkowski ,1989). This is also a view expressed when talking to people about head lice and it perhaps reflects the need of people to distance the idea of infestation from poor personal hygiene standards. However, Aston et al. (1998) have supported the view expressed by the Canadian Pediatric Society Infectious Diseases and Immunization Committee, (1996, 2002) that hair cleanliness has no impact on infestation rates and it is on this understanding that public health guidelines about head lice rest (The Report for Consultants of Communicable Disease Control (The Stafford Report), 1998, 2008).

Patterns of infestation are however linked to an individual's racial characteristics with people from Afro-Caribbean descent being less likely to become infested as the oval cross-section of their hair shafts makes it difficult for the louse to cling on to the same extent as round profile Caucasian or Asian hair (Pray, 1999).

Many studies only relate to the child and their world and head lice infestation in the school age child has always been a focus for information gathering in UK. Prior to the 1980s routine medical examination of school children and regular surveillance for head lice within the school population was common practice. This surveillance formed the basis of much of our understanding of the extent of the problem in UK. However, since 1980s these examinations have been abandoned in favour of an approach that placed an emphasis on parental responsibility for detection and treatment and as a result assessment of the extent of infestation has become much more difficult to undertake (Plastow et al., 2001).

Some information is available via General Practitioner statistical returns about consultations for head lice though these only represent people who have already detected head lice and have sought help. Similarly information is available from prescribing returns and treatment product sales and both give some indication of an increase over time both in terms of prescribed treatment and over the counter sales (Downs et al., 1999). However these may not be a true reflection of increased infestation within the community. Issues such as the level of correct detection/diagnosis (the presence of live lice) and the use of repeated treatments in the face of apparent or suspected re-infection are not necessarily addressed here and may influence statistical returns and therefore apparent infestation rates.

However, individual experiences of head lice and the way these are shared with others means that common perceptions about the extent of the problem and the risks associated with it are created between people and can be very influential. Radley (1994) calls this *"Lay epidemiology"*. Downs et al. (1999) discussed this in terms of *"Anecdotal prevalence"* and stated that this points to an increase in head lice prevalence. They claimed that this socially created perception is supported by a range of statistics from the Office of National Statistics, the Department of Health and the Royal College of General Practitioners. However, Aston et al. (1998) in their report for Consultants of Communicable Disease Control (The Stafford Report) stressed that with the absence of mass screening for head lice actual prevalence is probably much lower than people's perceptions and understandings; though it is not clear in the report how this conclusion was reached. Certainly people talking together create this perception but this is also influenced by other sources in society from advertisements for head lice treatments to representations of the problem in a wide range of media sources such as news reports in newspapers and magazines and in television dramas (Allmark & Tod, 2006; Watterson, 1993). More recently the internet has given people access to information about the problem which may also influence their perceptions about the extent of the problem as well as the decisions that they make about management (McMullan, 2006).

4.2.4 Accessing the Family

With the emphasis being placed on the family to detect and treat head lice trying to establish the extent of the problem of infestation in society is increasingly difficult. All aspects of head lice control take place in the family setting and this is largely unregulated in terms of where people obtain information about detection and treatment and how they use this. Each parent's experiences are set within the context of the family as well as society as a whole and it is this that the next part of this chapter explores.

Until the 1980s children of school age provided an easily available source of epidemiological data about the extent of head lice infestation. Over time the statistics that have emerged from this surveillance have provided governments and others with figures that have been used to make comment about and plan strategies concerning a range of health and social issues from poverty to health promotion. Difficulties exist however with such figures as school nurses often used different guidelines for the diagnosis of infestation. While some nurses used the identification of live lice as a positive diagnosis (this is the current government recommendation for diagnosis), others instead used the presence of nits (eggs) on the hair shaft. This was a positive diagnosis in the absence of live lice whether the nits were already dead or hatched (Downs et al., 1999). If these criteria were used there was always the possibility of false positive results and inaccurate reporting.

There is some evidence that health strategies and legislation have impacted on the way in which head lice infestation has been assessed and managed in the past and, as a result, this has influenced society's perception of the problem. For example, the 1907 Education (Administrative Provisions) Act introduced the school medical service and demanded that children were inspected on a regular basis by nurses and doctors in order that minor conditions could be treated. The Act was instigated as a result of poor standards of health amongst some children particularly those from poor backgrounds. At the same time there was an increasing public health emphasis on individual responsibility in the improvement and maintenance of personal hygiene and with this came a focus on the family and the mother in particular (Lewis, 1980).

As a result the 1907 Act established a clear policy link between public health, the inspection of school children and perceptions of family lives lived in poverty. Through contact in school, the child and the family became the centre of this public health approach. A Board of Education circular of 1907 illustrated this through its concerned with the importance of raising the level of moral duty concerning matters affecting child health within the home. The circular points out that *"It is in the home, in fact, that both the seed and the fruit of public health are to be found"* and this stands as a clear indication of the importance of the family for the health of society at large at that time. By 1910 this was being reinforced by Chief Medical Officer of the Local Government Board who emphasised that it was possible for public health to manage all aspects of community life but that this depended on changing domestic hygiene habits through health education and being able to identify those at risk of poor health in terms of their social and psychological characteristics (Porter, 1999).

The school nurse and health visitor played a pivotal role in this public health strategy. Post 1907 the role of the school nurse changed and in a local report by Rathbone (1909) the duties of the school nurse are identified as including the examination of children for poor clothing, head lice, body lice and any conditions requiring medical attention and minor ailments. Locally, the agreement of this role was made between the Liverpool Education Committee and the Liverpool Queen Victoria District Nursing Association of which School Nursing was a part and the recommendations placed school nurses as the professionals reaching diagnosis and making initial direct contact with families, many of whom lived in poverty. The Liverpool Corporation Act (1913) sets out the legislation underpinning the powers to act where any infestation was suspected in its section on sanitary regulations and infectious disease (Part IV, Paragraph 35, Section 33).

Health education using information giving, for example posters and leaflets, was and still is an important way of addressing head lice. Once they were found on a child in the school setting and families were followed up at home by health visitors (Mussen, 1926). In this setting parents were given further advice and support. They were encouraged to purchase steel fine toothed combs and the schools could assist with this if families could not afford them (Mussen, 1925). If it was not possible for children to be treated at home then they could attend cleansing stations where this would be carried out for them. Statutory notices could also be served on parents so that treatment or “cleansing” could be carried out compulsorily. Reports of these interventions were often widely reported such as this article in the Evening Express newspaper on 1st November 1951:

> *“Liverpool school nurses last year made 35,461 examinations of school children with regard to cleanliness and found 24,849 in need*

> *of attention. Statutory notifications had to be served on parents of 953 children after they failed to cleanse them following previous notification. The staff had to compulsorily clean 324 children."*

Families' private lives now had the potential to become very public.

4.2.5 The Reports of School Medical Officers

Through the 1907 Act and the activities of school medical officers, the child and the family became visible through the production of annual reports on the health of the school child. These included data on the physical health of children, often reported in terms of *"defects"*, school attendance, child welfare, (for example child employment) as well as service performance. Sections on infestation features regularly in these and are described in various ways. Available reports of School Medical Officers in Liverpool between 1923 and 1962 discuss infestation in sections titled *"Uncleanliness", "Uncleanliness and Personal Hygiene"* and *"Uncleanlines and Neglect"*. Under these headings infestation was not just about numbers but was also about views on family life and social circumstances.

During this period in history there were also other influential factors in the screening and detection of lice. For example, in the 1923 report's introduction to the section on *Uncleanliness and Personal Hygiene* reference is made to a recent outbreak of typhus fever which was fuelled by mild cases occurring in a number of local schools. In order to prevent this, a strategy is outlined for dealing with infested children who could transmit the disease. Experiences of epidemic typhus were still fresh in the memories of those addressing public health issues in Liverpool and the report illustrates this concern and the need to keep it high on the community health agenda. In later reports little reference is made to the direct links between lice and typhus though other documents re-establish this during the Second World War when it re-emerged as an important public health concern.

Epidemic Typhus is the disease most closely associated with lice infestation. James (1984) argued that it was the most important disease of the 19th century and comments that Chadwick's Sanitary Report of 1842 was largely concerned with the control of the disease (which is transmitted via louse faeces) which was directly linked with *"overcrowded slums and insanitary squalor"* (in James, 1984, p159). By the mid twentieth century, Stallybrass (1946a) the then Deputy Medical Office for Health for Liverpool similarly identified poverty, malnutrition, overcrowding, dirty and unsanitary living conditions and poor personal hygiene as factors that increased the risk of typhus transmission. These linked the louse not only to the disease but also to the experience of people's lives lived in poverty.

There is however controversy as to the role of head lice in the transmission of typhus. Zinsser (1935) states with some conviction that head lice and body lice are both vectors of the disease and this is supported later by Murray and Torrey (1975) who confirm that head lice could be infected with the organism that causes typhus. Excretion via the insect's faeces could create the potential for transmission (Slonka, 1975). This fact may well be of more importance in the future as body lice numbers decrease (Gaon, 1973). However, more recently, researchers looking at head lice regarded them as less of a threat and suggested that either transmission was unlikely, that they were not known to be vectors or were definitely not able to transmit the disease (Sanford-Driscoll, 1987). The picture was therefore one that was unclear and somewhat confusing.

Despite this confusing picture for head lice, the association of body lice infestation with typhus has been significant throughout UK history and this is reflected in this school medical officer's report. The relative importance of controlling the disease by understanding the wider factors that influence infestation are acknowledged in the report. In addition, the impact of the home environment is considered as 58% of those infested were sleeping four to a bed and bathing and washing facilities were often found to be limited (Hope, 1923).

The cleansing stations that had been established across Liverpool by 1926 served the needs of families who could not manage the treatment of infestation without help (Mussen, 1926) but the report noted that when Health Visitors followed up children in the home many children were often *"in a very dirty condition, a condition which could easily be remedied by soap and water"* (p42). The reference here to basic hygiene practices reflected the role of the health visitor at the time; one that focused on family based health education with the mother as the main target of this (Billingham et al., 1996). Lewis (1980) suggests that once environmental hazards as such were no longer seen as the major factor in the cause of disease there was a shift to the family as the setting where cleanliness and therefore health could be more effectively be provided and maintained.

Through the 1944 Education Act greater pressure could be applied to parents to address infestation through the threat of prosecution and in 1953 there were 65 prosecutions involving 65 children. Indeed the report of that time states that *"school health visitors"* (p29) felt that:

> *"....in their efforts to educate the mothers regarding this matter, the taking of prosecutions has made them very much more willing to accept advice."* (City of Liverpool, Report on the work of the School health Services, Semple, 1953, p29)

By 1959 school nurses are commenting that the general cleanliness of children in school is *"quite satisfactory"* with the number of case of infestation declining. However, they comment in this report that mothers were often difficult to contact at home as more and more were going out to work. A senior school nurse described such an instance:

> *"I have accompanied a nurse taking a child of five years home from school whose hair was infested with live lice, a neighbour told us that his mother would not be in until 6.00pm. A written note was left for the mother, asking her to attend to the child's hair, this was ignored, and the child was sent to school in the same condition the following morning."* (City of Liverpool Report of the Principal School Medical Officer, Semple, 1959, p32)

Later in 1961 this perception of neglect was evident again in relation to working parents with the Deputy superintendant School Nurse commenting on this as follows:

> *"The problem of neglect on account of both parents working still continues to trouble the nurse...The fact of both parents working, and no supervision by other members of the family, except school children, is no doubt the main factor in keeping the verminous rates high."* (City of Liverpool, Report of the Principle Medical Officer, Semple, 1961, p32)

4.2.6 References to Head Lice in other Documentary Sources

During the twentieth century the way in which public health was written about and referred to underwent a significant change in focus. There was a shift from the environmental to the social and with this an emphasis that stressed that the dangers of contagion that were about individuals and the contact they had with others in the community; this created an interest in the minutiae of the social lives that people lived. Hill (1916), a public health writer of the period, expresses a view that by the early part of the century the old, environmentally focused public health had gone and that it had been replaced with a new concern with the individual. Throughout the century this new approach to public health was discussed in professional journals and textbooks where attention was given to specific issues associated with particular, relevant groups in society for example, maternal and child health, the health of the school child, mental health services and care. Also, though the school remained the main focus of child health surveillance access to the child and hence the family could be also be obtained in other ways when children made contact with a range of health services.

The hospital environment became a place that provided such opportunities to assess the child and the family (Armstrong, 1983) and this is aptly illustrated in Mellanby's (1941) hospital based epidemiological study which described how children on admission to hospital were screened for head lice. He discussed how it was possible from this data to reach a judgement concerning the extent of the problem in England at that time. He pointed out that children's hair was checked by nurses on admission in order to prevent accusations by parents that children who left hospital with head lice had contracted them during their stay, not prior to it.

He made an interesting point in his paper about hospital records of evacuated children living in rural areas during the war. They showed a high rate of head lice infestation in comparison to children who were already resident in rural communities and up to 50% were found to be infested. Mellanby went on to speculate that this reflects a higher prevalence in the cities and towns from where the children came, suggesting that the lifestyle of children in urban areas was linked to the transmission of the parasite. He also pointed out that this might be due in part to the organisation of the school medical service and the fact that in the city a number of nurses followed children up, while in rural communities this was undertaken by just one individual and therefore there were closer relationships with families and a greater degree of service continuity.

In response to this increase in head lice and an overall increase in all infestation during World War II, the Ministry of Health (1940) published a memorandum entitled "*The Louse and How to Deal with It*" in which they set out information and guidance about how to address the problem of head, body and pubic lice. An equal part of paraffin and olive oil was recommended for the treatment of men and boys followed by fine tooth combing. It was recommended that hair be kept short and for women and girls that the hair was bobbed or plaited. Details of the treatment provided by Local Authorities is also set out in this document and consists of the application of a shampoo made from formaldehyde, alcohol, soft soap and distilled water. This was left on the head for twenty minutes and then the hair was fine tooth combed.

The City of Liverpool Education Committee later released their "*Memorandum of the Louse and some other Human Parasites*" (compiled by Gamlin, 1942) which sought to set out guidelines to address infestation at this critical time. The increase in infestation had previously been noted by those taking children into their homes during the Government Evacuation Scheme of 1939 and this local memorandum was an attempt to address this in Liverpool. It stressed the importance of mothers recognising the significance of infestation and discussed the role of teachers as health and personal hygiene educators at a time where cleanliness was vital to prevent the risk of infectious disease transmission. In relation to this the document emphasised that if personal cleanliness of the person and the home is addressed then:

> *"infestation should rarely ensue, even though stray causal infection might at times occur through dirty people infecting clean ones, as, at the present time is happening in schools, institutions, factories and in the army"* (p9)

The memorandum commented that increased infestation could be due to people crowding together in air raid shelters and that this:

> *"....resulted in a lowering of the standard of cleanliness on the part of a portion of the population" (p4)*

It then went on to point out that this situation brought about an increase in lice and scabies amongst school children and younger and older members of their families and again makes clear links between increased cleanliness of the person and the environment as the only ways of combating these infestations. To try and inform and guide those advising the public, particular guidelines for the detection and management of head lice in the home are provided. These included fine tooth combing every evening to mechanically remove any live lice. Then removing all nits (eggs) once per week (as these take ten days to hatch) by washing the hair and fine tooth combing it while wet.

Textbooks written for professionals interested in community and public health also provided insights into understandings about head lice. In Burn's 1947 textbook on advances in public health practice reference is made to the apathy of parents as one of the causes of the high prevalence of head lice during this post war period. He emphasised parental responsibility for a child being infested and recommended that health visitors provide effective treatment in the home environment. In the 1950s, Robert's book on hygiene explored a range of issues concerning infestation in general and head lice specifically. Most notable in this text are his discussions about treatment with DDT. This had been used extensively on troops during the war and though it was recommended largely for body louse infestation its use in treating head lice is also addressed in this text. He recommended that when treating head lice the following should be remembered:

> *"All unhatched eggs are close to the scalp and the lice must go to the skin for food; the insecticide should therefore be applied to the root of the hairs. DDT is used as a powder or as an emulsion containing 2% DDT."* (Roberts, 1952, p247)

He later commented that the use of methylated spirits, cresol, lysol and carbolic was superseded by the use of DDT, Gamma BHC, which is similar to DDT, Lethane hair oil and to a lesser extent pyrethrum. DDT was later banned in the 1973 due to high levels of insect resistance and fears about links with cancer.

Smart's 1954 account of lice for the British Museum does not address infestation from a public health perspective but many of the issues he explored are relevant to an understanding of it at that time. For example he identified some commonly held beliefs about head lice and these included views that the presence of lice was a sign of health: *"You are not healthy; you have no nits"* (p19). Other beliefs were that they were spontaneously generated from dirt, certain people were breeders, cleanliness was the primary defence against infestation and that brushes, combs and hats should not be shared. One other interesting point that he made was about the relationship of infestation to unwashed or un-brushed hair. He illustrated this with reference to the practice of some women to limit these as they sought to extend the life of their permanent waves due to the costs involved.

As late as the 1960s text books guiding teachers in the fundamentals of health education inform practitioners of the importance of having a raised awareness of infestation. Reference to other common conditions of childhood is made in relation to this and below. Davies demonstrated the importance of classifying these:

> *"Of the common skin affections that occur in school it is important to differentiate between those originally caused by dirt* [impetigo, scabies & head lice] *and the non-dirt diseases* [ringworm, alopecia, acne, warts & veruccas], *though, of course, clean people may catch dirt-encouraging diseases too."* (Davies, 1966, p66)

Despite rapid changes in social structure, science and welfare the association of head lice infestation with poverty, overcrowding and poor personal hygiene permeated the early and mid part of the twentieth century and continued to do so even in 1970s just as the last school-based inspections were ending. Donaldson's (1975) survey on head lice prevalence for the Health Education Council links higher levels of infestation with disadvantaged urban communities. It talks about a *"national repugnance that has led to a tendency to concealment"* and *"a fear that the external image of a community might be damaged by revealing such unsavoury information"* (p31). As the report concludes it does so with some patriotic fervour:

> *"What is needed is a determined attempt to rid the nation once and for all of this parasite."* (p31)

4.2.7 The Language of Infestation

Language is the medium that we use to construct meaning and understanding and the way in which it is used in many sources of the early part of the twentieth century does not always sit well with our current perceptions of what is acceptable and what is not when talking about head lice. The terms and descriptions used are by today's standards often labelling and stigmatizing and are in stark contrast to contemporary texts where, for example, the term *infection* is used instead of *infestation* and great effort is made to break the links with un-cleanliness by talking in terms of head lice preferring clean heads even though there is little evidence to support this view (Teale et al., 2008). Additionally, though the presence of head lice does not correlate with poor hygiene even today there is a considerable stigma attached to the experience (Straka et al., 1992). Recommendations about the cleaning personal items and the home environment following treatment (Chunge et al., 1991; Frankowski & Weiner, 2002; Mumcuoglu et al., 1991; Pollack et al., 2000) can also serve to place an emphasis here in much the same way as the specific use of particular terms and expressions.

Stigmatizing language is evident in the school medical officer reports mentioned earlier. In addition other references to infestation from other local sources include associations that may create stigma. For example in the proceedings of the Liverpool Medical Institution (1907) reference is made to the findings of a study looking at *"the condition of the children in the poorer areas of the city"* (p22). The proceedings connect this with lice and *"cleanliness"*. The cleanliness of clothing is mentioned particularly because for many children their clothes were seldom changed. Later, in a similar way Hope's (1931) locally based examination of health in Liverpool children *"found to be verminous"* identifies them in these explicit terms. He also links the absence of cleanliness and the presence of *vermin* with children in *"the lower* [poorer] *part of the city"* who have *"their clothes stitched onto them and unchanged for weeks/months"* (p128). These critical comments, made at these times are about families living in poverty. Though they reflect the needs of that age to address this public health issue the nature of the language used is about the individual and the life of their family and, as a result, the terms appear to our present day eyes as somewhat unacceptable. Mellanby (1941) stressed his irritation of this stating that:

> *"I deplore the tendency of many medical and other authorities to refer to a person infested with Pediculus by such euphemistic expressions as "unclean". If a child or an adult is lousy (even if nits only can be found) then he should be referred to as lousy or at least verminous."* (p42)

Other illustrations of the use of the language at later points in the twentieth century can be found in the 1944 Education Act where it discussed dispassionately the practicalities of dealing with individuals suffering from *"vermin"*. Enforced *"cleansing"* of people and their clothing was justified under the Act if there were grounds to suspect infestation and notices could be served on parents for their child to be *"cleansed"*. Local Authorities were bound by the policies of the 1944 Act to provide suitable premises and personnel for the *"cleansing"* to be carried out and Roberts (1952) points out that a fine of 20 shillings could be imposed on parents if the child became *"verminous"* again. Any such cleansing could include hair being shaved off and Sutkowski (1989) pointed out that by shaving a child's head and requiring them to produce a certificate of cleanliness prior to returning to school that the Act may have led to feelings of shame and ridicule and this may be the reason for the stigma attached to the experience today.

As well as the suggestion of explicit language and action, such texts also provide some insight into the expert views held about head lice infestation, the child and the family at this point in history. The 1944 Act raised issues concerning the role of parents in dealing with public health matters, which were viewed in part to be about individual responsibility. The realities however were that many of the factors concerning infestation were beyond parental control. Roberts (1952) acknowledges this when he states that:

> *"..bad housing, shortage of washing materials and the employment of mothers are factors still operating to maintain a high infestation rate.." (Roberts, 1952, p349).*

However, though these views are about aspects of the physical environment the role of mothers also comes under scrutiny. Working mothers who were absent from the family contributed to family wealth though in doing this they failed in their motherly duties and responsibilities. In the view of local and national government this served to undermine the health of the school child and the overall public health effort.

4.2.8 The End of School Surveillance

The surveillance activities of the School Medical Service continued until the early 1980s. Its activities were extensive with millions of children being examined each year (Roberts, 1952). Armstrong (1983 &1995) discussed the role of the Service (established in 1908) and commented that while it provided treatment facilities via a range of clinics it also enabled extensive surveillance to take place within the school setting and that this was extended into the home. Once access to the home was established conditions there could be assessed and reported on. In effect the monitoring of the family through what Armstrong (1983) termed the Dispensary. Reflecting this perspective, Herford (1957) quite openly discussed the opportunities for using the school child population as a rich source of potential public health research. The use of the child and the family for study is suggested as a way to examine various medical issues but also as a way of exploring medico-social concerns associated with "*problem families*", "*verminous children*" and "*delinquents*" (p71).

With the demise of school based screening there has been a need for other strategies to be put in place to address the problem in a different way. Today in UK the emphasis for the screening and management of head lice has shifted to the family and though it is parents who are constantly referred to in guidelines relating to this matter it is mothers who in reality deal with this issue (Mumcuoglu et al.,1991).

Children now are not excluded from school but the emphasis is on being positive and proactive in identifying head lice and treating them promptly (Teale et al., 2008). Letting others know when head lice have been found helps here. An illustration of this is a scheme at a Northampton primary school where parents who have signed up to it are sent a text telling them when someone in their child's class has head lice. It then asks them to check their child's head and be vigilant over the coming days. This approach is part of a national campaign called *"Once a Week Take a Peek"* supported by the manufacturers of the lice treatment *"Hedrin"* and the Medical Entomology Centre and seeks to empower and support parents in taking control of infestation.

Though school age children continue to remain the focus of screening this approach is informal and the emphasis is on families being encouraged to be vigilant, open and share information about family infestation for the common good. The Community Hygiene Concern, a charitable organisation, advocates a method of mechanical head lice treatment using wet fine tooth combing of hair that has been treated with conditioner or "Bug Busting". The approach is supported by the Department of Health and provides an alternative to chemically based treatments. It is primary school focused and is about encouraging community participation through the empowerment of teachers, parents and children (Community Hygiene Concern, 2001).

4.2.9 Social Hygiene, Head Lice & the "Problem Family"

From the early twentieth century (and to date) families took centre stage in the fight against the head louse with the responsibility for this sitting with mothers. They provided a natural focus for family health even though this was often linked to their social behaviour and responsibility (Lupton, 1995). As a result the health and social issues that have emerged from this are about all aspects of family life from poverty and child health to morality, family planning and immunisation (Nettleton, 1991). It was considered that one way in which to improve child health was to provide mothers with mother craft education that focused on domestic hygiene and management and child rearing (Jones, 199). This was to some extent in conflict with the views of social hygiene movement at the time that argued that some women could not learn how to become better mothers as they existed in an underclass and were biologically incapable of child rearing due to their low level of intelligence, their lack of social responsibility and their inability to provide their children with affection and care (Lewis, 1980). The presence of head lice at the time of school inspections was a way of identifying mothers who might fall into this group.

In the 1920s, 1930s and 1940s the scrutiny of mothers and family life focused on what were termed *"Derelict or Problem Families"*. These families were those who lived in poverty and *"for one reason or another* [had] *not kept pace with social change"* (Wofinden, 1944, p137). Invariably they tended to be large families who were viewed as poor, dirty and neglected and as a result were "verminous" (Burn, 1947; Wofinden, 1944 & 1946). The social hygiene [eugenics] movement emerged from the marriage of ideas about heredity that emerged in the late nineteenth and early twentieth century and the health and sanitary reform movement of the nineteenth century (Jones, 1986). It led to speculation about the social causes if ill health but the movement also sought to bear out middle class views about the threats to social stability from the poor of city slums. It was concerned with working class people who lacked physical fitness and were outside social control due to what was termed poor moral fibre (MacKenzie, 1976, p516). The public image of these perceived social circumstances was the *"problem family"*.

The moral and social behaviour of such *"Problem families"* and their links with low intelligence were established by the movement early on in the century, though these were later refuted (Howells & Davies, 1957). Its supporters wanted to improve the *"discipline, physique and intelligence of the working class by eradicating the lowest elements of it"* (MacKenzie, 1976, p513). Parents and in particular mothers of large families came under increased criticism in terms of their personal intellectual abilities, family relationships, social irresponsibility and moral standing (Burn, 1947; Stallybrass, 1946; Wofinden, 1944). The quote below illustrates the beliefs of the eugenics movement active in the mid 1940s with regard to these points:

> *"The fact that a proportion of the mothers of these families are known mental defectives, and that others certainly belong to the dull or backward group...........That a mentally defective woman is allowed to bear and attempt to rear a large family is a negation of social progress."* (Wofinden, 1944, p139).

The Deputy Medical Officer of Health of Liverpool (Stallybrass, 1947) at that time identifies clear links between these issues, the disintegration of family life and child neglect. He pointed out that this is demonstrated by a number of factors one of which being the presence of head lice in such *"problem families"*.

In a similar manner Burn's textbook on advances in public heath includes a chapter dedicated to what is entitled the care of the family which is concerned with:

> *"....a clearer recognition of problem families and of the factors involved in this darker side of family life, shown up sharply by the searchlight of war."* (1947, p203)

These factors included poverty, poor housing and problem families presented with certain characteristics that included poor mental condition of parents; the children of whom were *"neglected, ill-clad, dirty, verminous, out-of-control and of poor health"* (p203). The chapter goes on to look at how such families can be assisted by the state but it emphasises the role of the mother in maintaining family health; the following quote illustrates this:

> *"It is on the mother that the morale and life of the family chiefly depends, and many a mother in this group has a severely limited mental outlook"* (p204)

4.2.10 Head Lice, Intellect & Selection

Social inclusion or exclusion on the basis of social background and levels of infestation was not confined to families with children. During WWII infestation and intellectual abilities was explored by the Armed Forces as they tried to investigate links between scabies infestation and *"below average intelligence"* in home station troops (Hodgson, 1941) and later between intelligence and head lice in Women's Auxiliary Air Force recruits (Rollin, 1943). Rollins's conclusions are that head lice were more common amongst less intelligent recruits. The outcome of this is that a woman's trade would have been influenced by whether she had head lice or not. Naturally this examination was just one of a battery of recruit assessments which also included a psychiatric assessment and the study was seen as a worthy piece of research for the time. Despite this it has the potential to label and stigmatize and additionally it represents the wider social movements of that time that saw it appropriate for those in authority to make judgements about other members of society.

Even as late as 1971 writers continued to associate head lice with intellectual abilities as this quote from a textbook for medical undergraduates, health visitors and teachers demonstrates:

> *The problem of head-lice is once more increasing in significance in Britain amongst the least intelligent part of the community.*
>
> (Parker & Nelson, 1971, p78)

This is a text by professionals for professionals and reflects a somewhat unenlightened position. The section on parasitic infestation presents a focus on the relationship between all ectoparasites and poverty, dirt and neglect. It emphasises the need to deal with these sorts of infestations so that full functioning of members of society in terms of their "efficiency" can rapidly be reached. The professional and their understanding is emphasised as central to this even though an aspect of this is concerned with stereotyping.

4.2.11 Myths and Misconceptions & Alternative Treatments

Many beliefs about head lice are created within the family but these are also influenced by understandings within the wider community. As a result when trying to consider how people respond to such experiences it is important that personal understandings are take into account. Myths and beliefs concerning head lice are always linked with social understandings, for example that head lice are associated with poor hygiene practices and poverty (Clore, 1989). However, it is not clear how these associations develop and evolve or why some may be more enduring than others. It is also unclear how they originate in the first place though Sutkowski (1989) feels that today, early school based experiences may have be an influence here.

Myths and misconceptions can be classified in a number of ways with some appearing to relate to gaps in lay people's knowledge. One of the most extensive areas of belief is concerned with insect transmission and the insect's ability to survive adverse environments. Common examples of this are that the insect can fly or jump from one person to another, be transmitted by soft toys, shared audio headphones and cycle helmets, pillows, hats and brushes (Mumcuoglu et al., 1991; Olowokure et al., 2003) or that they are affected or unaffected by hair washing (Maunder, 1983) or the washing of linen (Department of Health, 2005 & 2007; Frankowski & Weiner, 2002) and can or cannot swim.

Professionally based, expert sources spend time trying to address such beliefs but these often create confusion. Some take the stance that they can be transmitted by these fomites while others dispute this fact (Chunge et al., 1991; Department of Health, 1995 & 2005; Pollack et al., 2000; Speare et al., 2003; Sutkowski, 1989). The importance of health care practitioners understanding people's misconceptions is stressed so that stigma and myth can be confidently and practically addressed (Sutowski, 1989). However, the variety of opinions and advice available does not make this easy and has the potential to create confusion for professionals and lay people alike.

Myths and misconceptions extend beyond transmission and survival to treatment (Pray, 1999; Koch et al., 2001). Magee's (1996) study of client compliance illustrates the impact of individual beliefs when considering head lice treatment. It shows that in treating head lice people adopt a range of practices where specific, chemical head lice treatment is unavailable or has not been considered. In her study the alternative approaches to treatment include the manual removal of nits and lice, head shaving, the use of insect repellents and the topical application of petrol and alcohol; one woman used fly spray rubbed into the head daily. These treatments are not based on scientific understanding but on the previous experience and the logic of others within the participant's communities. Individual decision making therefore has a social rather than scientific basis and is complex.

4.2.12 The Virtual Community as a source of support

Since Magee's study the opportunities for people to obtain wider access to a range sources offering advice, guidance and support about head lice has increased as the virtual community of the internet has expanded. Information is still shared extensively by word of mouth but is increasingly being shared via World Wide Web forums, emails and chat rooms. Websites abound providing non medical guidance concerning the treatment of head lice. These include advice on Bug Busting, a mechanical technique for diagnosing and treating head lice available via the Community Hygiene Concern website and other sites where the intention is to allow some sharing of experiences in much the same way that people would share experiences in a physical community.

Many of the web based forums available are run by and for lay people and they allow people to share personal experience and understandings with a huge number of others who are interested in what they have to say. Information and advice is regularly shared about a huge range of issues concerned with infestation from feelings about the insect to the discussion of various forms of treatment. On the UK based website *For Parents by Parents* the topics include the use of tea tree oil as an insect repellent and the Bug Busting technique to control infestation, the management of chemical treatment with children with asthma and alternative approaches to removing nits using cola soft drink and vinegar. The UK Based website *Hints and Things* has a slightly different focus and covers home remedies and includes the use of neem and tea tree oils, conditioner and combs and topical skin cleanser. Individual experiences are shared here too and in this way support is given for an experience that tends to have a higher priority for parents than healthcare professionals (Koch et al., 2001).

Other informal websites have emerged that seek to bring together experiences from across the world for example, *Web Learning Projects: Head Lice Home Remedies*. This forum clearly shows the range of understanding being applied to the management of head lice internationally and include such treatments as, tobacco juice, baby oil, mayonnaise and lime juice, nail polish remover, olive oil and vinegar and dog shampoo. Such forums have emerged across the internet and provide an alternative to the sharing of experiences that would have previously taken place within close knit families and communities.

To give a range of the sites offering lay advice and support the search term *"head lice home remedies"* currently reveals 23,000 potential sites. However, though these provide advice and support for people little research has actually been undertaken on the efficacy of the extensive range of remedies suggested. Schachner (1997) has looked at the use of petroleum jelly as a treatment and found it *effective* but it is unclear from the paper what *effective* actually means. Meinking (1999) states that live lice can still be found after treatment with olive oil, mayonnaise and Vaseline, though details of sample size and levels of infestation are not included in the paper and make these results difficult to assess.

More recently Takano-Lee et al. (2004) have reviewed the use of six home remedies to try and address the accuracy of lay perceptions held about them. The study looked at mayonnaise, petroleum jelly, salted butter, isopropyl alcohol and olive oil and pointed out that none of these killed all lice and eggs after 24 hours, but that petroleum jelly killed more that the others. There are, however limitations with this study in that it was not undertaken directly on people who were infested and therefore the lice could not directly feed on their host. The authors acknowledge that this may have some impact on their result however they attempt to balance this by using a large sample size under controlled conditions. They comment that healthcare professionals need to take great care when supporting such approaches to management but their study does not take into account the culturally and socially based logic that people use when reaching decisions about this treatment.

Essential oils are also use as topical preparations for the treatment of head lice and discussion about their use regularly takes place on the web based forums addressing the problem. Preparations containing these are available over the counter both as treatments and as prophylactics in the form of insect repellents. The essential oils incorporated into preparations include tea tree *(Melaleuca alternifolia)* [Nash, 2003], ylang ylang *(Cananga odorata)* (Mumculoglu et al., 2002), lavender *(Lavandula augustifolis)* (Veal 1996), anise *(Pimpinella anisum)* (Mumculoglu et al., 2002) and neem *(Azadirachta indica)* (Morsy et al., 2000). All essential oils show some usefulness in addressing infestation but the benefit is greatest when used in combination with other chemicals (Frankowski & Weiner, 2002; Mills et al., 2004).

4.3 Expert Medical Science & Head Lice

As head lice do not transmit disease their infestation tends to have a lower priority than the body louse with its links with typhus (Chunge et al., 1991; Downs et al., 1999; Priddy, 1983). It is none the less a public health problem, but this is largely due to the social distress that the parasite causes (Chunge et al., 1991; Koch et al., 2001; Teale et al., 2008). Though a social experience expert knowledge is, however, regularly used by health care practitioners to advise and support people in the management of head lice. This is largely based on understandings derived from research that provides an evidence base for professional and lay decision making and action. Medical science explores head lice from a number of different perspectives that include epidemiology, toxicology, parasitology and public health (Chunge et al., 1991; Clueroe, 1990; Curry, 1996) and these are all addressed in this section.

Most of the medical science documentary sources referred to in this section originate from studies undertaken in UK or from organisations reporting in the UK. However, there is some reference to international comment where this adds to understanding. Sources were discovered via a range of databases and bibliographies. The documents consulted largely date from the 1980s and 1990s and continue the historical pathway through the twentieth century begun earlier in the chapter. However, these late twentieth century understandings are updated with reference to documents written more recently. Many of the sources are peer reviewed research reports published in well established professional and scientific journals while others reflect the standpoint of organisations that have been influenced by a range of factors, one of which may be the evidence provided by medical science. All documents were accessed directly and therefore are primary sources.

4.3.1 A brief Head Louse biology

The detection and treatment of the head lice are to a large extent influenced by the insect's life cycle and biology and documentary sources cover this extensively in an attempt to set the scene for their research, opinions and judgements. The main points for consideration in relation to biology are set out below.

The head louse is a blood-sucking insect that lives on the human head in an intimate parasitic relationship with its host (Burgess, 1996; Maunder, 1983). Transmission is by direct and prolonged head to head contact (Nash, 2003). The insect lays its eggs or nits and cements them onto the host's hair 3-4mm from the scalp surface where they are incubated by the warmth of the head (Downs et al., 1999). The eggs take about 7-10 days to hatch into nymphs and the empty egg cases are left attached to the hair shaft and the nymphs reach maturity between 9-12 days after hatching (Pollack et al., 2000). The adult louse is between 2-4mm long and has a lifespan of between 20-30 days and each female louse lays between 6-8 eggs per day (Oliver, 1994).

Generally an infested person has fewer than 12 active lice on the scalp at any one time, though these will leave should the host experience a fever or die (Priddy, 1983). Head lice cannot jump, fly or hop. They move by gripping the host's hair with their claws; these also function to enable the insect to remain attached to the hair thus they do not fall off the head unless damaged. They are unaffected by washing, as Maunder (1983) comments *"washing the hair only produces cleaner lice"* (p16). However, combing or brushing can damage them and once away from the head they are largely immobile (Sutkowski, 1989) and usually survive for less than one day (Frankowski & Weiner, 2002).

4.3.2 Detection and Diagnosis

Correct diagnosis is a significant factor in the fight against head lice and an important first stage in treatment. It is confirmed when there is there is evidence of live, moving lice in the hair (Aston et al., 1998; Teale et al., 2008). However visual examination of the hair poses problems as both lice and nits are difficult to see (Cluore, 1990). Many people are unaware of what lice and their eggs actually look like and this means that misdiagnosis can cause continued spread within the community (Aston et al., 1998; Teale et al., 2008). In highlighting this point, a study using photographs undertaken by Kember Associates for the Lice Advisory Bureau demonstrates people's lack of recognition of head lice even when they claim that they know what they are (Ley, 2003). It is difficult for families to take control under these circumstances and this demonstrates a weak link in the treatment chain. The Department of Health have tried to address this through the use of leaflets such as *"The Prevention and Treatment of Head Lice"* (2005 & 2007) by including small diagrams of the insect at various life stages so that comparisons and appropriate diagnosis can be made. Additionally, in my own experience, it is not unusual for healthcare practitioners to carry cards with dead head lice attached to them so that people can see the real thing.

Difficulties in detection raise issues for transmission and treatment and these have been explored by comparing traditional visual scalp inspection with the detection of head lice using wet combing with a fine toothed comb. De Maeseneer et al. (2000), for example, found that when trained screeners using wet combing and traditional scalp inspection on a group of children, 22% were found to have head lice with the wet combing method and of these 8% were found to not have head lice using traditional scalp inspection. Additionally, 78%

of the same group were found not to have head lice on wet combing, of these 6% were said to have head lice using the traditional approach. The study concludes that traditional scalp inspection is a poor technique for detecting the presence of head lice as 30% of its positive results and 10% of its negative results are false.

This suggests that wet combing is a better way of detecting infestation. In addition the study highlights the fact that where visual identification is used for detection there are always a large number of lice free children within communities that are being treated and a small proportion of infested, but undetected, children who remain free to transmit the parasite to others in the community. As a result these and other writers recommend that wet combing with a fine tooth allows for a more accurate detection method that visual detection alone (Aston et al., 1998; Burgess, 1996; Droogan, 1999; Ibarra, 1988; PHLS, 1998).

Though the emphasis is placed on parents to detect head lice in the first instance, a number of studies suggest that, though the responsibility for this rests with them, treatment should only be commenced once a healthcare practitioner has confirmed diagnosis (Aston et al., 1998; Burgess, 1996; PHLS, 1998; Teale et al., 2008). There is an element of conflict here in that while the responsibility for detection is given to parents their decisions are not seen as reliable as those of professionals. As a result confirmation or verification by those with expert, medical science knowledge may be required before treatment can be undertaken. An alternative view of this however, may merely reflect professional, evidence based concerns about over treatment and the development of chemical resistance (Aston et al., 1998; Teale et al., 2008).

From another perspective, Pollack et al. (2000) points to the more practical nature of verification commenting that confusion can arise as to what is actually being seen and rather than head lice, what is removed by fine tooth combing are such artefacts as "*dandruff, hairspray, droplets, scabs, dirt or other insects*" (p2). With widespread unfamiliarity with head lice within the community and difficulty in actually identifying and treating any infestation delays can be generated offering opportunities for infestation to spread (Magee, 1996). From this perspective a partnership approach to diagnosing and treating head lice can mean that parents are empowered in their decision making and this increases the level of control they have over dealing with the problem.

4.3.3 Mechanical Approaches to Head Lice Management

Once the presence of active infection has been established decisions about treatment have to be considered and the debate concerning the different approaches to treatment is considerable. Ibarra (1992 & 1995) is a strong supporter of the use of mechanical, wet combing with conditioner, rather than the chemical approach to controlling and managing head lice. She stresses that this approach prevents the need to bring complex insecticides (particularly those in the organophosphate group) in contact with the skin. Her approach has generated considerable controversy with many writers commenting that this form of treatment should not be advocated, as it has not yet been shown to be scientifically effective (Aston et al., 1998; Nash, 2003).

Difficulties emerge in relation to this point of view as often the reliability of some studies can be brought into question and the effect of this is to generate conflict. For example, in one study by Roberts et al. (2000) chemical treatment (Malathion 0.5%) was demonstrated as being more effective than mechanical removal (78% eradication after 14 days with Malathion vs 38% with "Bug Busting") even though, in this small trial, over half of those parents using both methods failed to comply fully with the treatment regimes. Vander Stichele et al. (2002) criticised this study for its bias and also commented that the conclusion that wet combing as first line management of head lice is inappropriate and cannot be drawn from such a small study.

Other studies also compare wet combing with conditioner or *"Bug Busting"* (Ibarra, 1992) and traditional, chemical pediculicide [insecticide] approaches. Plastow et al. (2001), for example, have concluded that a mechanical approach is an effective alternative to the use of chemicals. However, in their study both treatment approaches were carried out by nurses rather than parents in order to test the effectiveness of the method. Though this study demonstrates the effectiveness of using a mechanical method for treatment the authors do raise questions about the commitment needed on the part of parents in relation to this. It is intensive and time consuming and approximately 30-40 minutes of combing is required each week for two or three weeks if eradication is to be achieved. The study can be criticised from a number of points of view, these include the use of different regimes for the treatments as well as different follow up strategies for the two groups. Also the study was undertaken in an area of high chemical resistance and this may impact on its outcome.

From a similar perspective Hill et al. (2005) compared two pediculicide preparations against wet combing with conditioner. The study concludes that a cure rate at day five of 57% can be achieved using the mechanical approach in comparison to a cure rate of 10% and 17% for the chemical pediculicides. The difference with this study was that parents undertook treatment following guidance and follow up from healthcare professionals. Roberts (2005) has criticised the study from a number of perspectives pointing out that false negatives may affect results here as viable eggs are not included in the assessment (eggs take seven days to hatch). In addition this study can also be criticised for its single use of pediculicide which is not recommended as best practice requires two applications seven days apart (Aston et al., 1998; Teale et al., 2008).

Despite the outcomes and controversy about the mechanical approach to treatment the position remains unclear though Aston et al. (1998) in the Stafford Report and more recently its update by Teale et al. (2008) recommend the use of chemical approaches in the first instance with support for mechanical means where chemicals have been ineffective or where parents wish to avoid the use of these. They stress that the standard of mechanical treatment needed to eradicate head lice for infested individuals many vary considerably across families and they comment that from this point of view its reliability as a method for addressing the problem at community level cannot be relied upon (p.15).

Though questions are raised within the research about the amount of time and effort required to treat using mechanical treatments, as well as its potential impact, a study undertaken in Belgium in 2002 demonstrated that when given some information about head lice treatments 29% of parents chose wet combing with conditioner, 19% pediculicide only treatment and 11% a combination of both demonstrating the importance of considering not just the effectiveness of a particular treatment but also the need to consult with, gain the views of and work with those using it (Vander Stichele et al., 2002).

Generally speaking there is no easy way to make sense of the views that exist concerning comparisons between the two approaches as few reliable treatment comparisons are available. Dodd's (1999) Cochrane Review does make reference to Bug Busting but concludes that there is no evidence to support physical methods of control. The Community Hygiene Concern (2002) questions this stressing that the emphasis given to the study undertaken by Roberts et al. (2000) does not represent a balanced opinion about the findings. They also point out that even at the important level of detection no recognition is given in the review as to the role of mechanical approaches.

Despite the controversial views expressed about wet combing as an alternative to chemical treatment discussion concerning this approach to treatment is often only mentioned in passing or not at all in other studies. Indeed a paper by Philips et al. (2001), which looked at the role of community pharmacists in prescribing treatment for head lice, did not discuss mechanical removal at all either in terms of detection, verification of infestation or as an alternative method of treatment. The paper focused solely upon chemically based treatments and offers no comment about offering alternatives to chemical approaches in order that parents are made aware that they have a choice. The paper does however raise interesting points about the growing willingness and acceptance of members of the community to self refer to community pharmacists either to buy treatment over the counter or to have it prescribed by them which perhaps reflects the changing role of these practitioners as important first points of contact and non-medical prescribers within the community.

In a similar fashion Burgess (2003) in his guidance to healthcare professionals about how to advise patients when over the counter treatments have failed made no mention of the use of mechanical treatments. Instead he focused on the further use of chemical treatments. He saw failure of these as resulting from one or more of the following: inadequate scalp coverage, failure to repeat treatment after 7-10 days or inappropriate use where the person does not have head lice.

There is still insufficient scientific evidence to support the mechanical method of treatment (Nash, 2003) and though current guidelines on the management of head lice rest on the use of chemical treatments primarily, Bug Busting is seen as largely unproven and merely complementary to these. This is particularly so when for example, parents require an alternative to chemicals or topical treatments have failed. Current Department of Health guidelines to parents about the treatment of head lice include both approaches so that choice is available though the extent of the commitment required is highlighted (Department of Health, 2007).

4.3.4 Commercial Interest

When considering the impact of treatment options critical consideration should always be given to the nature of the commercial interests of companies producing chemical head lice treatments (Petersen & Lupton, 1996). Economically chemical treatments can generate considerable commercial profit. For example, the annual cost of treatments prescribed during the period 1980 to 1991 demonstrates a 3.7 fold increase from 407,000 to 1,467,500 prescriptions, and sales figures from some pharmaceutical manufacturers have shown a 1.1 fold increase in over the counter sales of products between 1992 and 1996 (Downs et al, 1999).The market for insecticides in UK is extensive with figures for 1994/5 showing a market worth £14 million, rising to £29.7 million in the period 1997/98. In 1998/99 almost 10 million doses were applied with just over

6 million via the National Health Service (House of Commons, 1999). Though insecticides continue to be provided on prescription and are dispensed to the individual free of charge, many treatments are now purchased over the counter. The overall cost of this treatment, both NHS and non-NHS, was estimated in 1998 to be approximately £25 million each year in the United Kingdom (Public Health Laboratory Service, PHLS, 1998). With individual costs of proprietary chemical treatments ranging from £5-£12 these figures represent a considerable market but raise questions as to the challenge of low risk, low cost, effective Bug Busting and its lack of support within treatment guidelines and expert sources. This position represents the one answer perspective of science and Petersen and Lupton (1996) comment that in the face of powerful economic influences there may be a tendency to down play what are regarded as non-orthodox methods of treatment that have the potential to undermine profit.

4.3.5 Pharmacology in Context

People have used various chemicals to treat head lice through the ages and, from a pharmaco-ethnological perspective, this can be traced back to the discovery of the use of the Calabar bean [physostigma venenosa], the source of physostigmine, in 1840 (Mann, 1994). Physostigmine inhibits the action of acetylcholinesterase and this is a key feature in the mode of action of the organophosphate insecticides used today, which include malathion, and the carbamate insecticides such as carbaryl (Mann, 1994). A similar, but less effective pharmacological action is achieved through the use of tea tree essential oil and while it has low incidence of side effects it's role in controlling infestation is limited (Mills et al., 2004).

In addition the insecticidal properties of the pyrethrum flower, *Chrysanthemum cinerariaefolium,* have been known for over 100 years in Europe and for over 400 in China and Persia (Iran) (Meinking, 1996). The extract of the plant contains pyrethrins which affect the insect's nervous system and produce paralysis. The influence of these pharmaco-ethnological roots can still be clearly seen today with chemical treatments falling broadly into three main groups, organophosphates (Malathion), carbamates (Carbaryl) and synthetic pyrethroids (Permethrin & Phenothrin). Carbaryl is the only treatment that requires a prescription; all other treatments are available over the counter (Droogan, 1999).

Many expert sources that address currently available chemical treatments focus on the importance of providing a scientific basis for the decisions that need to be made about safe, prompt treatment and eradication. Healthcare practitioners are the main audience here and many sources try to provide this while addressing ways to reduce the impact any chemical use has on the individual. There are a number of issues concerned with the use insecticide chemicals that reappear throughout the scientific sources.

Treatment, in terms of application and dosage, is an important consideration, as poor application or repeated treatments can lead to resistance (Nash, 2003). Aston et al. (1998), in their report for Consultants in Communicable Disease Control (CCDCs) stress that it is important to understand the link between compliance, apparent re-infestation and resistance and to address this current recommendations are that chemical treatments constitute two applications seven days apart (Teale et al., 2008). This is regarded as one treatment cycle and should only be repeated with caution. Where chemical treatment has failed the report goes on to point out that mechanical management using wet combing with conditioner might provide an alternative.

The relative efficacy of the various chemical treatments available is another concern explored in a variety of sources where different chemical groups and regimes for treatment are considered and justified (Dodd, 1999; Vander Stichele et al., 1995). Dodd's Cochrane Review (1999) attempted to address this but came under some criticism. Initially it identified 71 relevant studies but this number was reduced to 4 in terms of their worthiness. As a result opportunities to compare using clear evidence based approaches are limited. Despite this the review concludes that no one pediculicide has greater effect than another. There has been criticism of this *"gold standard"* Cochrane review as being shallow and unbalanced and not distinguishing between what constitutes fact, expert opinion and speculation (Community Hygiene Concern, 2002) and this has created conflict and confusion (Dawes et al., 1999).

4.3.6 Insect Resistance to Chemical Treatments

Where chemicals are used the management of resistance to them can complicate treatment options and professional and lay decision making (Elgart, 1996; Ibarra & Hall, 1996; Maunder, 1992, 1993 & 1996; Oliver, 1994; Sadler, 1997; Vermaak, 1996). It also has a considerable impact on the spread of the infestation in the community (Ibarra & Hall, 1996; Sadler, 1997; Vander Stichele et al., 1995; Vermaak, 1996).

Insect resistance is complex. What often appears to be resistance to chemical treatments can for example actually be re-infestation following treatment and contact tracing, non-compliance with directions, improper use of preparations, re-exposure to lice or incomplete removal of live eggs (Witkowski & Parish, 2002). It is therefore important that treatment is effective at the first attempt and the potential for resistance reduced (Aston et al., 1998).

Compliance with this recommendation is important as repeating the treatment after seven days kills any newly hatched nymphs that may have survived the first application. Failure to do this may result in what appears to be re-infestation and may lead to treatment resistance (Aston et al., 1998). Compliance is complex as it is about the interplay of many individual and social factors that influence decision making. From a social and cultural perspective it is influenced by the fact that people often do what they think is acceptable or correct rather than what healthcare practitioners advise or guidelines and instructions might actually require (Lambert & McKevitt, 2002; Maclachlan, 2000; Williams & Calnan, 1996). However, Magee (1996) stresses that, from a practical point of view, it is also influenced by an individual's literacy and linguistic skills so if instructions cannot be read or understood it is unlikely that they can be accurately followed and complied with.

Parasite resistance creates a constant battle between man and insect (Cutter, 1996). It varies depending on the chemical being used but it is marked, for example to pyrethrum and the synthetic pyrethroids, though other pediculicides are also affected (Aston et al., 1998; Dodd, 1999; Willis, 1998). It is difficult to accurately assess in the United Kingdom but it is suggested that resistance is increasing here (Burgess et al., 1995; Downs et al., 1998 & Downs et al., 2002). This is supported by studies in for example the USA (Burkhart & Burkhart, 1999; Frankowski & Weiner, 2002) and in Israel (Mumcouglu et al., 1995).

4.3.7 Over-the-Counter Treatments & Resistance

People's concerns are with head lice eradication rather than resistance and though treatment is available free from GPs many choose to buy it at pharmacies. As a result, though rotation of pediculicides use can be used to help control resistance this is difficult to manage when treatments are freely available over the counter rather than controlled through prescribing (Vermaak, 1996).

In addition resistance can be influenced by unsafe and repeated use (Magee 1996). The presence of residual chemicals remaining on the hair at low but significant levels can create the rapid development of resistance from one insect generation to another (Mumcuoglu et al., 1995). Care therefore has to be taken to avoid this with treatment prescribing and the sale of preparations over the counter. This can be difficult to achieve as, in a survey of retail pharmacists by Pray (2003) the issue of repeated usage of pediculicides or the use of doses higher than recommended was experienced by two thirds of the pharmacists taking part. Pray makes the point that excessive use not only increases the risk of resistance but also the risk of side effects in the form of skin irritations and contact dermatitis. He points out that while the role of the pharmacist is to advise and counsel it is ultimately individuals who make the final decisions about how proprietary treatments are used within their families. As a result choices and decisions about this can be complex and not necessarily based on scientific evidence.

Prophylaxis with any chemical based treatment, particularly where there is the potential of resistance developing, is not recommended (Burgess, 1996), though some writers do point out that chemical or herbal-based topical treatments claiming to act as repellents, for example tea tree oil and Lyclear Repellent (R3535), are available over the counter; their effectiveness is however unclear (Sinclair, 1994). Good grooming is considered to be associated with prevention particularly where a metal fine-toothed comb is used on a regular basis but the evidence base for this is limited due to the high level of commitment involved (Teale et al., 2008).

Fundamental to the management of resistance is effective diagnosis and contract tracing in order to ensure that only those with live lice are treated and that where re-infestation takes place all those affected are treated effectively (Aston et al., 1998). This is a difficult area to address as though it is children who are largely diagnosed and treated for head lice they also infest the adult population at lower levels (Downs et al., 1999). The responsibility for diagnosis and the treatment of contacts therefore rests with lay people and their understanding of the problem. This means that assistance offered by healthcare practitioners such as pharmacists is essential if lay people are to be helped in making decisions and choices (Aston et al., 1998; Teale et al., 2008).

4.3.8 Alternative Pharmacological Approaches

The pediculicides mentioned above are the first and most common routes of chemical head lice management but they are not the only pharmacological approaches that have been considered by medical science. Topically applied Invermectin [an anti-helminthic drug] has been suggested as a way of treating head lice (Burkhart & Burkhart, 1999; Frankowski & Weiner, 2002). This drug had previously been used to treat scabies and was later found to be effective against head lice with eradication being achieved within 48hours. However, the treatment is neurotoxic and though effective it presents unacceptable personal risk (Youssef et al., 1995).

The antibiotic Co-trimoxazole, given as an oral treatment, has also been explored as an alternative treatment by Morsy et al. (1996) and Burkhart et al. (1998) on the basis that it kills head lice gut flora causing the parasites to disengage from the host's hair. Further work by Hipolito et al. (2001) confirms the effect of oral co-trimoxazole on head lice control, but in this study the researchers use it in combination with the topical application of permethrin. Their recommendations are that this combined form of therapy has the potential to limit resistance and deal with the repeated failure of first line treatment.

Despite the success of these treatment regimes the question of safety and the appropriateness of such levels of topical and systemic intervention, especially with the marginal benefits they offer, need careful consideration. While it is clear that they may have an impact on dealing with infestation, the question must be asked as to why such complex chemical control might be considered when a non-toxic, socially based treatment in the form of mechanical wet combing would probably be as effective.

4.3.9 Risk and Approaches to Treatment

Risk as an epidemiological concept is concerned with prediction and probability, outcomes and associations. Lupton (1995) argues that when people are placed in a position where they have to make choices associated with risk that decisions can be complex. She points out that this is well illustrated by parents making choices about interventions in relation to their children, for example immunisation. These choices are often made by parents in full knowledge of the issues of importance in terms of risk but these are tempered by their role in protecting and maintaining the health of their children. She emphasises that the interpretation of risk is closely linked to socio-cultural factors and that decisions about it are often made on the basis of subjective judgements. With head lice infestation this means that parents have to make decisions about whether they are willing to subject their children to chemically based treatments or whether there is a viable alternative where chemicals are not used.

Chemical treatment and risk is explored in a number of expert sources. This is particularly so when considering the inappropriate or repeated use of organophosphate chemicals. These are neuro-toxic and this raises questions about their safety when repeatedly used on children whose immune systems are immature (Sadler, 1997). It is suggested that as the organophosphates are commonly used to treat animals in the form of sheep dip that farmers' health can be affected through repeated contact with them (Jamal et al., 2002). In a similar manner risk and treatment is further complicated by such things as the implied links between organophosphate use during the Gulf War and Gulf War Syndrome (Dyer, 1997; Sadler, 1997). Though some doubt has been cast on this by Lawlor et al. (2007) who commented that while genetics may place a part in an individual's response to these chemicals this has to be considered as part of a much bigger biological picture.

Despite these concerns parents have to make decisions about whether they are willing to subject their children to chemically based treatments or whether there is a viable alternative where chemicals are not used. The Public Health Laboratory Service (1997), now the Health Protection Agency, advise on risk and suggest that with 0.5% Malathion lotion the amount absorbed is higher than that absorbed by *"well protected insecticide workers"* but well below the amount associated with acute poisoning. The risk associated with 1-2 doses is considered low, but repeated applications at intervals of less than a week for more than three consecutive weeks may increase the toxic effects.

In addition organophosphate treatments often contain alcohol and these need to be carefully considered when being used on people with a medical history of asthma or other respiratory disease (Burgess, 1996). There is also a need to ventilate the environment well during treatment and to ensure that the person treated is kept away from heat sources, as alcohol is flammable.

Though not as toxic as the organophosphates, synthetic pyrethroids are not without risk. They are derived from synthetic extracts of the chrysanthemum flower and it is therefore important to exclude allergies to this plant group prior to application.

Risk is linked to chemical treatments but Koch et al. (2001) also point to the risks of lay practices which use dangerous alternatives in the treatment of head lice. These include the use of fly spray, flammable liquids such as petrol and industrial strength pesticides, some of which have resulted in disability or death. However the use of essential oils is a popular alternative treatment but though thought to have some repellent properties they are not currently recommended for use (Aston et al., 1998). Calnan & Williams (1991) commented that the shift towards alternative therapies represents a questioning of technological interventions and a desire to return to what is viewed as "more natural" and "safer" in terms of treatment and healing. Despite this, concerns about the potential toxicity of essential oils and their function as pediculicides continue to be expressed. Herbal remedies remain unproven and may offer a "false sense of security" in that people believe that they are actually treating the problem when this is not the case (Pray, 1999).

Now there are other alternatives to traditional systemic head lice treatments that emphasis clinical effectiveness with reduced risk. Pearlman (2004) for example, explored the use of a dry-on, suffocating treatment when dealing with head lice. Such an approach is not unusual as lay people are reported to use mayonnaise; margarine petroleum jelly and olive oil which have much the same effect (Frankowski and Weiner, 2002). He uses a "non toxic" lotion (*Nuvo*) in his study which blocks the spiracles (breathing tubes) of the lice causing them to suffocate and die. His study looks at the treatment of *"difficult-to-treat head lice cases"* and claims a 96% cure rate with only 6% of parents reporting re-infection during the six month follow up period.

More recently Dimeticone lotion has been marketed for the treatment of head lice. This chemical also coats the insect and disrupts its ability to manage water and unlike systemic pediculicides is not absorbed transdermally. In a study comparing its effectiveness with systemic phenothrin both products performed well, 70% and 75% eradication respecively, but Dimeticone was more acceptable in terms of ease of usage and on safety grounds (Burgess et al., 2005). The other advantage was that unlike pediculicides insect resistance to the chemical is not an issue and its action is not affected by resistance to other chemicals. As result Dimeticone is seen as an alternative to Malathion lotion (Burgess et al., 2005).

4.3.10 Local Environment Issues

The environmental issues associated with infestation provoke extensive discussion in expert sources and relate to the expectations, beliefs and understandings of ordinary people as much as the guidance and advice offered by those drawing on an evidence base.

The understandings, comment and advice in this area often serve to generate confusion. For example, some writers stress that head lice cannot live for long once they are away from the body while others advocate the treatment of hats, brushes, bicycle helmets and pillow cases or anything that is considered a potential source of initial or re-infestation. As a result choices about what is the most appropriate action here are made confusing and complex.

Chunge et al. (1991) argue that there is a lack of evidence concerning transmission via shared objects and Pollack et al. (2000) supports this by stating that environmental transmission needs to be viewed critically and should be based on the insect's ability to survive for only a short period of time away from the head. A survey by Mumcuoglu et al. (1991) found that there did not appear to be any link between infestation rates and the sharing of brushes, hats and clothes though others identify clear links between a person's environment and infestation.

Environmental cleaning away from the host into the wider reaches of the home is often advocated with some of this advice being highly specific. Washing items in hot water for a minimum of 10 minutes, dry cleaning items or bagging them without use for a minimum of 10 days until all nymphs have hatched is one approach (Canadian Diseases & Immunization Committee, Canadian Pediatric Society, 1996/2002). However, more specifically Frankowski and Weiner (2002) suggest washing clothing and bed linen items at temperatures of 130 degrees Fahrenheit. At the opposite end of the temperature scale freezing items of bedding, clothing etc. is regarded as just as effective as heat though the insects may take a day or so to die depending on humidity and air temperature (Pollack et al., 2000). Beyond the infested individual's immediate environment the vacuuming furniture and carpets is recommended despite transmission via these sources being unlikely (Frankowski & Weiner, 2002).

Research undertaken by Speare et al. (2003) on head lice transmission rates from infected individuals to pillowcases at night concludes that this is low and though there is a risk of re-infestation this is minimal. Their advice extends to the fact that lice can be killed by any of the following means; immersion in water at 60 degrees Centigrade, by a hot machine wash or by 15 minutes in a clothes dryer. Despite these views, the Department of Health (1995, 2005 & 2007) does not recommend the treatment of bedding, clothing or hairdressing items, as the strength of feeling in their guidelines on control is that treated hair provides protection from re-infection by short-lived lice which might have fallen from the head. The guidance therefore advises against the need for further environmental treatment.

The views and opinions expressed about how people should cope with the immediate environment of a person infested with head lice are therefore fraught with confusion. As a result this impact not only on professional guidance but also on the decision-making and actions of ordinary people making it difficult to decide how this issue is to be addressed.

4.4 Summary

The documents included in this chapter provide the context for the stories if the women participants. They demonstrate something of the complexities concerned with what is considered to be only a minor social health problem that does not have too high a public health priority. The sources referred to give only a limited insight into the experiences of individuals, for example through autobiography or internet forums. There is no in-depth study of the understandings of people tackling the problem in the family setting. These poorly explored understandings where what this inquiry set out to study and discussion about these take place in Chapter 6 where the narratives of the women who agreed to tell their stories are considered in depth. Later in the thesis, Chapter 7 examines these understandings alongside the discourses explored in this chapter.

As a way of setting the scene for the narrative part of the inquiry, the next chapter examines the way in which hermeneutic phenomenological method was put into practice to collect and interpret the stories the women told.

Chapter 5

Discovering the Experiences of Individuals

Earlier, in Chapters 3 and 4, I addressed the first step of van Manen's (1997) approach (Figure 3 below) which asks that the inquirer *turn to the nature of an experience and move towards it with interest* so that the experiences of others can be taken into account when participants tell their stories.

This chapter explores the process by which stories about the experience of head lice infestation were gathered, analysed, interpreted and written about. Hermeneutic phenomenological principles directed this and the existential approach used drew on storytelling or narrative as a way of collecting experiences of interest and creating understandings about them. Mothers and grandmothers who had had this experience were approached and asked to tell their stories. These narratives were taped, transcribed and interpreted alongside other sources of the experience available in society. In this way I hoped to find the fundamentals of their understanding and provide an insight into this everyday experience in our social world. The collecting of these experiences constituted van Manen's second inquiry step where he asks that *the inquirer investigate experience as it is lived.*

Also included in this chapter is some discussion about how van Manen's remaining steps, three to six, were addressed. Thus, the way in which narratives were analysed is discussed including the creation of themes and how these relate to what already exists about the experience. These steps place an emphasis on reflection and it is through this that the essential features of the experience emerged as I analysed verbal and written dialogue. "Text" is the term often used here and it relates to the transcribed dialogues of the stories that the women told (von Eckartsberg, 1998). Van Manen's final step addresses the importance of balancing the context of the inquiry through the consideration of its parts and whole and this was achieved by considering the themes of the different groups of women alongside their combined experience as these not only provided the essential features of the experience but also part of its social and historical context. I applied all of van Manen's steps to two sets of text; one created by the young women and the other by grandmothers. I then undertook steps two to six on the combined texts all of the women.

Step 1

Turning and orientating oneself to a phenomenon which seriously interests us and commits us to the world

Step 2

Investigating experience as we live it rather than as we conceptualise it

Step 3

Reflecting on the essential themes which characterise the phenomenon under investigation

Step 4

Describing and interpreting the phenomenon through the art of writing and re-writing

Step 5

Maintaining a strong and oriented relation to the phenomenon through a strong focus upon it and its context.

Step 6

Balancing the research context by considering parts and the whole as guided by the hermeneutic circle.

(adapted from Van Manen 1997)

Figure 3 - van Manen's six step approach to Hermeneutic Phenomenological Inquiry (adapted)

An adapted version of Colaizzi's phenomenological analysis was used throughout to create the theme and theme clusters that emerged. I firstly analysed and interpreted the narratives of the young women. I then interviewed grandmothers and did the same with their stories. Finally I undertook interpretive analysis and hermeneutic phenomenological writing on both sets of texts and this generated the shared understandings of all of the women. This created a clearer picture of the meanings, understandings and actions of mothers and grandmothers and the essence of this that they all shared.

5.1 Introduction

In existential inquiry there are a number of ways of putting phenomenological principles into practice. The different approaches of Van Kaam, (1966); Giorgi et al., (1975); Colaizzi, (1973 & 1978); Van Manen, (1997) illustrate this. Of these Colaizzi and Van Manen take an hermeneutic approach that takes into account the many ways in which individual experience can be expressed, for example through the speech, art and writing that is a product of the social world. This means that narratives, as well as their context, are important when trying to understand people's shared experiences and understandings. The inquirer has to really know and reflect upon the text that is created from narrative, and this has to be undertaken with an appreciation of the context from which the narrative has developed. There always has to be a moving backwards and forward within and across narratives and texts as the inquirer tries to find understanding and link the *"parts and wholes" of an experience* eventually reaching a position where such understandings can be conveyed to others (Ricoeur, 1991).

As a result a good hermeneutic phenomenological account is one that makes the understandings of an experience clear so that we are able to recognise it as one we have had or one that we could have had (van Manen, 1997). This clearer understanding then helps us to see the experience from either a different point of view or one that we have, until now, been unaware. It also influences and alters our own perceptions, meanings and understandings and those of others. Understandings may not necessarily be apparent to the individual telling their story but these can become so through dialogue and the analysis and interpretation of the text produced by such narratives (Lopez & Willis, 2004) and it is only through this process that understanding takes place as the relationship between life and the story becomes a hermeneutic circle (Widdershoven, 1993).

In order to uncover the understandings of the women who took part in this study they told their stories and I then analysed and interpreted the texts that the dialogues created. The inquiry process that I used in my study was influenced by both van Manen (1997) and Colaizzi (1978), with Munhall (1994) providing me with an overall framework for existential inquiry.

The framework for the analysis and interpretation of their stories was an adapted version of Colaizzi's (1978) steps for phenomenological analysis which allowed the interpretation of the texts to take place. Themes emerged through this analysis and these provided a vehicle through which understanding emerged. Colaizzi's approach to thematic analysis (Figure 4 below) was one that I had used in a previous inquiry. It had helped me then to generate a clearer understanding of people's experience and I felt that it would equally enable me to do the same in this study. He also advocates the use of a personal phenomenological reflection and this drew me and my experiences into the inquiry process and enabled me begin at a very early stage to, as van Manen expresses it, *"turn towards"* the experience.

Despite positive feelings about this, I was aware that Colaizzi's phenomenological analysis was more about description than interpretation and so I used an adapted form of van Manen's methodological approach which made interpretation more explicit. In addition I felt that it was important to structure the inquiry so that hermeneutic principles could be maintained throughout and his approach allowed me to do this. Van Manen's six step approach to doing hermeneutic phenomenological inquiry therefore influenced the study's pathway from beginning to end (Figure 3). The approach helped guide the inquiry from initial personal phenomenological reflection to my final interpretations of experience and their discussion (van Manen, 1997).

Additionally, Munhall's (1994) framework for existential inquiry was the model that helped me ensure that the narratives of the participants were explored within a wider social and historical context (Chapter 2, Figure 2) and that reflection took place throughout the inquiry. The existential sources used here included personal experience, the experiences of the participants themselves as mothers and grandmothers, the experiences of others in society and those of experts. These were available orally, in printed text formats or electronically. In this way I was able to explore the individual and shared understandings that were generated by people's stories alongside the contexts in which they had emerged.

5.2 Collecting Real Life Experiences – Making Contact

It is ordinary people who provide the stories that create understanding. From this point of view I knew that it was important that those who took part in the inquiry should not only have encountered head lice infestation in the family setting but also be ordinary women who were happy to talk about their experiences freely and in some detail. Additionally I was aware that the way in which I contacted them and had conversations with them would be crucial in helping them to share their stories with me (Lincoln & Guba, 1985).

Perhaps the most important criteria for someone taking part in a hermeneutic phenomenological study is that they are happy to talk openly about their experiences and are interested in understanding their nature and meaning (Creswell, 1998). This is important as they have to be willing to undergo lengthy, taped interviews, and later be involved with the validation of any interpretation of these (Moustakas, 1994). Thus, when people take part in any qualitative inquiry it is more that merely telling their story, rather they become active partners in the inquiry influencing its process as well as outcome. In my study I wanted to uncover meaning and understanding about the experience of head lice infestation and those who took part in the study guided and influenced the way that this was achieved.

5.2.1 Snowball or Chain Referral Sampling

In considering these points and the fact that head lice infestation is something people can be sensitive about I had to consider a way of sampling that allowed me to identify those who were potentially hidden in the population but still willing to talk. I chose to use snowball (Guba & Lincoln, 1985) or chain referral sampling (Holloway & Freshwater, 2007) as a way of making contact with women who had experienced head lice in their family. This consisted of initially identifying mothers and grandmothers who were known to me and were willing to take part in the study and then asking them to refer me to other women who had had similar experiences.

It is not uncommon to use this sort approach to sampling in qualitative inquiry especially where such sensitive issues are being investigated or where a population may not necessarily be visible (Atkinson & Flint, 2001). It tries to take advantage of the social networks of people taking part and because of the nature of referral from one to another an element of trust is generated (Faugier & Sergent, 1997). This is particularly important when dealing with issues that may be difficult to talk about and where trust is needed to initiate contact (Atkinson & Flint 2001). The trust that develops between a participant and the inquirer can also act as an encouragement for any new participant when they are considering whether to join a study (Morse 1991). The social networks between participants allow them to consider their position in relation to the inquirer and the inquiry before agreeing to take part in a study. Additionally, word of mouth assurances about both of these from members of a person's social network are significant where people are being asked to reveal details of their personal lives (Browne 2005).

Despite the positive aspects of this approach it is important to consider difficulties that might arise, in particular the fact that the sample is based on those initially approached and this might introduce some form of bias (Atkinson & Flint, 2001) or might manipulate the profile of others taking part in the study sending the inquirer off track (Morse, 1991). It can be argued that this approach to sampling excludes people outside a social network simply because they may not know each other (Browne, 2005). They would not have the opportunity to take part in an inquiry and this would make it difficult to know exactly who was being excluded or the significance of this to the study findings. Additionally, the women who took part in this study acted as gatekeepers influencing who actually took part. Some women may also have chosen not to take part for a variety of reasons and the significance of their stories was therefore lost. As a result snowball sampling can create hidden groups whose voices are not accessible (Browne, 2005)

Where a study is small and initial contacts are known to the inquirer the range of people forming the sample can be limited. In relation to this the participants who took part in this study did not proportionally represent all potential groups in Liverpool society. Had I done this it would have meant that I would have had to use some form of categorization of participants by social or ethnic group. As a result this would have assumed that one or two people included in the study would have been able to speak for a larger sector of the population, a particular community, social group or culture and this could be seen as *"tokenism"* (Browne 2005, p51).

In this study what was more significant than categories of ethnicity and social class was that the stories of the women who took part sat within the accounts available from other social discourses about infestation throughout the twentieth century. Though some of these were discourses from wider society many focused on the experience in Liverpool throughout this period. Therefore it was important that the women's backgrounds and experiences were an integral part of this overall experience. As a result the women who took part had experienced head lice within their families during the twentieth century and they had been born and always lived in Liverpool. They were Caucasian and came from a range of socio-economic backgrounds. Their occupations included a manger, a clerical worker, a charity shop volunteer, a cleaner, a shop keeper, a computer operator, a woman who had never worked and a number who were retired. They lived in communities across the city.

5.2.2 Approaching Initial Contacts

In addressing these points I approached eight initial contacts in order to establish different referral chains. Four were mother under the age of fifty and four were grandmothers over fifty. All eight were known to me and had expressed an interest when we had talked about the experience; they were also willing to take part in the study. The other women who took part in the study had had no contact with me about head lice infestation prior to their interview. I talked at length with my initial contacts about their role and whether they would be able to contact others who fitted into my participant membership criteria. I worked hard to establish trust and to encourage these individuals [as well as all others] to see themselves as very active members of the inquiry process.

5.2.3 Contacting Others

Following this and on my behalf, my eight initial contacts approached other mothers and grandmothers known to them. I then contacted the new participants directly in order explain about the study and arrange to meet with them and hear their stories. In this way I met a range women who would not all have connections to the same initial contact but who met my participant membership criteria (please see below) and had a fundamental understanding of what was required for their role in the study. Morse (1991) argues that the central issue here is the trust that is fostered between the initial contact and the inquirer. If this is passed on to others then dialogue and the rest of the inquiry process is markedly enhanced.

5.3 Participant Membership

The women who took part in the study had to meet some fundamental membership criteria for them to be included and these were influenced by the fact that the goal of the study was concerned with the richness of narrative rather than generalization (Guba & Lincoln, 1985; Morse & Field, 1996). The participant group was in part homogeneous (Holloway & Freshwater, 2007) in that their experience was similar, though the criteria for membership did differ at the two stages of narrative collection in terms of the women's age and maternal roles.

5.3.1 Mothers

Initially the study looked at mothers who were lay people, had been born and always lived in Liverpool. They were below fifty years old and currently had children of school age. In addition they all needed to have had direct experience of identifying and dealing with head lice infestation on their own children. The other aspect of membership was that they had to be willing and able to openly talk about their experiences with me.

5.3.2 Grandmothers

Hearing the narratives of women below fifty years of age reinforced the importance of my intention to collect the experiences of older women as their stories were not just about shared experience and understanding but also the social and historical context in which these developed. I therefore next made contact with grandmothers over the age of fifty who were lay people and had had similar experiences to the younger women. They too had to have been born and always lived in Liverpool and had experienced the identification and management of head lice within their own families when their children were at school.

By including both groups at different stages of the inquiry I was able to gain access to an enormous richness of experience. I was able to explore the understandings of the younger women separately from those of grandmothers and, most interestingly, I was then able to look at the fundamental understandings about the experience that they all shared. From this I discovered insights into the experience that are meaningful for today while ensuring that these were set alongside the socio-historical experiences of others. This also allowed me to discover where understandings were shared and to come to what constituted the essentials of the experience for all of the women.

Table 1 - Criteria for Participant Membership

Mothers	*Ordinary, lay women*
	Born in Liverpool
	Lived in Liverpool all their life
	Aged under fifty
	Had children still at school
	Had dealt with head lice in their family
Grandmothers	*Ordinary, lay women*
	Born in Liverpool
	Lived in Liverpool all their life
	Aged over fifty
	Had dealt with head lice in their family when their children were still at school

5.4 The Number of Women Who Took Part

When using a narrative approach in an inquiry the number of people who take part is influenced by the fact that while each individual has distinct experiences that go on to create unique narratives, it is the shared or common aspects of experience with others that the inquirer sets out to discover. As a result this is influenced by a number of considerations.

Creswell (1998) states that in any study the number of individuals taking part is fluid and can be anything between 1 to 325 participants. However, a good range of diversity is considered by some writers to be difficult to achieve with very small numbers and that it is only with between 20 to 50 people taking part that sufficient accounts of an experience are possible (The National Centre for

Social Research). Consensus seems to be quite difficult to achieve but Polkinghorne (1989) feels that because the nature of qualitative inquiry is frequently about undertaking in-depth interviews, 10 individuals can represent an acceptable size where the quality and depth of the story is the fundamental consideration. What is important is that those who take part should be able to offer the broadest range of information possible in order that the inquirer can then go on to increase the number of participants until no new information emerges (Guba & Lincoln, 1985). Therefore the number of people taking part may be large or small but regardless of size it is the point at which it is viewed as *adequate or sufficient* that is important (Guba & Lincoln, 1985; Morse & Field, 1996).

This is not the only consideration however as decisions about the number of participants is also influenced by what can be achieved with available resources and time. An aspect of this is the importance of considering the depth or breadth of narrative that the inquirer is seeking to achieve. In addition the number of participants is also influenced by such factors as the aim and purpose of the inquiry, its usefulness and credibility (Patton, 1990).

Initially in this study the number of women who took part was determined by the point at which no new shared understandings emerged from the younger women. The number of older women who took part was again determined by the point at which no new shared understandings emerged from their accounts (Guba & Lincoln, 1985). As a result of this strategy the numbers of participants by age group are set out below:

Table 2 - Participants taking part in the Study by age group

Age group of participants	Number of women in each age group taking part
20-29 years	2
30-39 years	10
40-49 years	8
Total number of Younger Women	**20**
50-59 years	5
60-69 years	3
70-79 years	3
80+ years	1
Total number of Older Women	**12**
All Women	**32**

Though the number of women who took part was influenced by the point at which no new shared understandings emerged this served in no way to dismiss the highly individual aspects of the participant's experiences which provided additional context and perspective to the overall understanding generated by the study.

5.5 Face to Face Contact and Story Telling

Primarily the hermeneutic phenomenological interview is a conversation or pseudo-conversation and warmth, personality exchange and sympathy are essential if people are to feel relaxed, valued and respected as they share their experiences. (Cresswell, 1998; Oakley,1993; Oiler,1986). Here, good relationships and interpersonal skills are essential, but no less important are such things as the appropriate placing of furniture and the generation of a relaxed, private and comfortable environment.

It is the role of the inquirer to help people talk as freely as they can and to create rapport that encourages them to be partners in the inquiry process rather than trying to controlling their involvement as a means of achieving a research end (Oakley, 1993). Mutual disclosure is an aspect of this and for the inquirer this means a willingness to share their own feelings and thoughts (Douglas, 1985). These act to reassure and encourage participants that they can do the same without losing sight of the fact that the conversation is about their story and the creation of understanding. With these critical thoughts in mind I set out to make contact with and interview willing participants in my study.

5.5.1 First Contact

I made contact with mothers and grandmothers, other than my initial contacts, after those who had already taken part had spoken to them. I phoned them and talked briefly about the study and we agreed to meet in a setting that they chose, as long as it was quiet and we were not going to be disturbed. For many of the women this setting was their own home but some chose to visit me at my place of work where they felt they would find it easier to talk, away from the distractions of their family life. The choice of was theirs. Wherever it was, meeting them for the first time was important as this would establish the basis for the way in which we then interacted during the interview.

I began by introducing myself and explaining about the study and the participant's part in it. I was aware that I would hold a number of roles in their eyes, those of mother, health care professional and researcher and I was open about my own interests in the study in relation to these. Initially I was unsure about whether I should share all of this with my participants but felt that as I was to be part of what was said, to hide this from the women would be to undermine their active role in the discourse and make them more like passive research subjects (Holstein & Gubrium, 1997). I also knew that our interaction and responses during the conversation would depend on how we saw ourselves at that time and in that situation and how we responded to it and to each other and that this would influence what took place and what was created (Baker, 1997).

5.5.2 Investing in the Dialogue

Oakley (1993) says that from a feminist perspective finding out about people and their beliefs, perceptions and understandings can only be achieved through an interview relationship in which both parties are equal. She stresses that, in this situation the inquirer has to be prepared to invest themselves, and the things that make up their personal identity, in the relationship that emerges during an interview. This investment means greater involvement in the dialogue that takes place. It also means that the personalities and experiences of both inquirer and participant will influence the dialogue in different ways that will not bias outcomes, merely make them different.

5.5.3 Ethical Considerations during the Interviews

When we had chatted to each other, talked about the study and I had answered any questions they had, I gave each of the women an information sheet about the study and their part in it to take away with them. Though each had agreed verbally to taking part prior to their interview I asked that they read and sign a form in which they actually consented to take part on the understanding that they knew what was involved, their anonymity would be protected and confidentiality would be maintained even where their stories were used as part of the wider study that involved others (Please see appendix 1). It was important that they knew all of this so that they could give their considered consent (Moustakas, 1994). All were quite happy to do this. I answered their questions honestly and I enquired whether they would be willing for me to return to ask for their insights on my interpretations as authentication of these by them was fundamental to the inquiry's credibility (Smith, 1998).

I knew that finding out about the women's experiences was best done in an environment of trust, friendship and informality. It was important to create an atmosphere that facilitated this and it included me being comfortable with the idea of answering the participant's questions and responding to them as honestly as I could as I set the scene for what was to take place (Oakley, 1993).

5.5.4 The Interviews

I tried to make the process as relaxed as possible and without question all of the women were happy to talk and tell their stories and were comfortable with these being taped. I used a broad interview protocol to guide the conversation (Please see appendix 2) and I tried to encourage the women to tell their stories in as much detail as possible through the use of open questions. The interviews were therefore largely unstructured as these were situations where I was an enquirer who *didn't know what I didn't know* (Lincoln & Guba,1985, p269). We chatted in order to relax as a lead into the interviews. Then I used my protocol to guide the next part of our conversations, finally the interviews were closed with some relaxed debriefing and a vote of thanks (Moustakas, 1994). My role was to take part in the conversations but to try and activate each woman to consider her experiences in a much detail as possible and to convey their story as we talked (Holstein & Gubrium, 1997; Lincoln & Guba, 1985). I took part in the conversations and acknowledged that I was part of the dialogue taking place and the understandings that were created as a result. Though this took place, I ensured that the emphasis was always on the women telling me their stories in their way and I hoped that this approach allowed them to express the complex meanings, beliefs and understandings that they held as easily as possible.

My broad interview protocol gave some guidance during the interviews but didn't inhibit the participants from taking their story in any direction they thought appropriate. The choice of what to tell and what not to tell sat entirely with them and they could change this as they wanted. Many versions of an experience are always available to people and how they make choices about this is up to them.

This means that there are always many potential versions of stories about an experience and these are influenced by such things as personal interpretation and changing meaning, and the context in which these takes place. As a result, any story told at one point in time may be very different from one taking place one another occasion (Burr, 1995).

5.5.5 Participation and Control

The women were therefore in control of their stories and the reality that these created. Though they provided direction during the interview I did ask for clarification and explanation as I thought appropriate and I encouraged them to expand as much as possible on what they said. Thoughts and feeling that have been previously unexplored can often emerge when people are encouraged to do this. It is therefore important to be comfortable with this idea and be prepared for it happening. As a consequence I gave my own views and offered guidance or advice when it was asked for.

The impact of the inquirer offering views, opinions and advice during an interview does have an affect what takes place and this creates some discussion. Patton (1990), for example, argues that such disclosures influence participants unduly and therefore should be avoided. While Oakley (1993) holds a view much more compatible with hermeneutic phenomenological principles in that she feels that, within a relationship that encourages equality, interest and disclosure, it is natural for the inquirer to offer advice and views as such activities are part of the social construction of meaning and understanding.

As a mother and a health care practitioner I was comfortable with this but I was constantly aware that the way in which I responded and questioned here would have an unknown impact on the way in which the women's talked about their own experience and understanding as well as on the shared understanding that we created (Crabtree & Miller, 1992). We are story tellers by nature and our experiences in everyday life are connected to these. They are changed by life itself and most importantly by the way in which they are shared with others (Widdershoven, 1993).

The women all told me that they had enjoyed the interviews (as did I) even though they had been very focused on their stories and talked for between an hour and an hour and a half. The time always went quickly and it seemed odd that each relationship that had been so quickly established in that time should so easily cease to exist once the study was over.

5.6 Creating Understanding – Describing and Interpreting Experiences

During the face to face, conversation stage of the study the participants and I came together to create a shared understanding about the experience of head lice infestation. They told their stories and I took part in these and they became meaningful through this interaction (Widdershoven, 1993). However, it was only by analysing these discourses that understanding became visible. Thus each conversation represented two sets of life experience coming together and as a result meanings and understanding became a blend of these (Lopez & Willis 2004) with both being socially constructed and intersubjective in much the same way that all our social understandings are constructed (Holstein & Gubrium, 1997). Widdershoven (1993) argued that this activity changes life in some way for both the story teller and the listener. Meaning is changed as past and present views and experiences fuse, and through this process the story gets a new meaning. However, though this change takes place, it is only when some form of critique of the texts taken place that this shared understanding becomes evident (Ricoeur, 1969/1974).

Thus with each interview a different story was told and a new reality emerged about the experience and the aim of the inquiry was to discover the essential, shared features of all of these. This meant that the dialogues had to be brought together, analysed and interpreted in such a way that a meaningful understanding of the experience could become visible and be shared with others. This was the next stage of the inquiry.

5.6.1 Creating and using the Text

With the physical creation of typed texts an acknowledgment was made that interpretative analysis had already started (van Manen 1997). These were transcribed verbatim from the taped conversations and formed the basis of my interpretative analysis. Each text became a visual representation of what was said on that one occasion and therefore was a snapshot of what was in fact constantly shifting understanding (Lieblich et al., 1998).

It was important to become very familiar with the texts in order to be able to identify the essentials of the experience shared by all of the women. This was about constantly re-visiting them through listening, writing and reflecting (van Manen, 1997) so, I listened to the tapes on many occasions, sometimes whilst reading the transcripts and sometimes by just focusing only on what was being said. I also read and re-read the texts in isolation to the words spoken on the tapes. I highlighted significant statements and cut the transcripts up to try and reflect on what was said in different ways. With each contact with tapes or transcripts I wrote down reflections about what it was that I had discovered, as well as my thoughts and views as I made choices about emerging themes as these developed and changed (Colaizzi, 1978).

5.6.2 Looking for Themes - Structuring the Analysis and Interpretation

There are a number of ways of discovering the essential features or themes of an experience and in this study I used an adapted form of Colaizzi's steps for phenomenological analysis (Figure 4 below) as it allowed me to identify *"themes"* and later *"theme clusters"* from the women's narratives which represented their experience.

Analysis Step	Description
1	*Read all of the narrative texts.*
2	*Extract phrases and sentences that directly relate to the experience.*
3	*Reflect on commonalities and repetitions in what is said.*
4	*Try to spell out understanding and meaning of what is said and identify themes.*
5	*Organise understandings and meanings into clusters of themes.*
6	*Refer these back to the original narratives in order to validate them.*
7	*Look at how the clusters of themes relate to each other in terms of similarities and differences between and among them.*
8	*Reflect and generate a description of these.*
9	*Verify the descriptions by returning to the participant for their views about whether these are recognisable as the experience.*

Figure 4 – Colaizzi's (1978) Phenomenological Analysis (adapted)

Van Manen (1997) feels that by using themes as a focus for analysis some order and control is established when writing and this helps the inquirer to engage with and make sense of the text. The approach demands that careful thought is given to choices about the themes and theme clusters that emerge and this requires a great deal of reflection on the text as well as on the decisions being made.

The process is about trying to reach the central features or essences of an experience where these give shape to things that have no shape, identify the significance of what is said and get to the core of understanding (van Manen, 1997). It is also about *"a fusion between the text and its context, as well as the participants, the researcher and their contexts"* (Laverty, 2003, p6). By undertaking this, it is possible to reach a point where understandings, influenced by choice, decision making and action, become clearer (Koch, 1995).

The interpretive analysis that I undertook tried to capture these principles so that I could get to the heart of the women's experience and touch the very centre of what I was trying to understand (van Manen, 1997). This was a very creative part of the inquiry process for me. Almost like pulling back a cloth that had covered a previously unseen piece of art work. This began when I initially reflected on my own account of the experience and continued when I first listened to the stories that the women told. This was a time of considered reflection and was very different to the reflections I had made while taking part in dialogue with the women. Some initial perceptions, feeling and meanings were evident at this stage but it was only when the dialogues were transcribed and read (and listened to) in detail, on many occasions, that a number of themes began to emerge. I identified and separated these out and considered them alongside each other and in relation to the individual texts of the women's stories as well as the texts overall. New insights and relationships that were present within the texts emerged through this process and the understandings that these generated were reflected on again and again. *"Theme clusters"* that were concerned with the grouping of significant statements and themes (Colaizzi, 1978) emerged from this process and meanings and understandings came naturally together to represent the women's experience. I wrote about and reflected on these in order to reconsider thematic relationships within and across the clusters. I then chose thematic statements that best represented the themes contained in each cluster. These were then used to give structure to my phenomenological writing and reporting.

I listened to, transcribed, analysed, interpreted and wrote about the stories told by the younger women first. Later, and quite separately, I interviewed older women and undertook the same process with their narratives. Overall themes that emerged from the texts were established separately for both younger and older women. At this point, another, final analysis of all the texts was undertaken in order to establish the common themes that represented the understandings of both groups. These are set out in Figures 5, 6 and 7 below.

Thematic Statements	Theme Clusters
Being a mother and the family and social responsibilities that are part of this	*= Perceptions of themselves as mothers* *= Feelings of Guilt and shame* *= Experiencing Shock and Horror – The "Oh my God" experience* *= Views about living up to the perceived expectations of others* *= Perceptions of social responsibility and the "not nice family"*
Perceptions about the social acceptability of having head lice	*=View and feelings about the extent and meaning of the stigma of head lice* *= To tell or not to tell – secret or shared experience* *= What the experience means in terms of understandings of cleanliness and un-cleanliness*
The role of the school in the management and experience of head lice	*= Observations about the school nurse* *= The school as the source of infestation and focus for transmission* *= Labelling and bullying*
The experience of head lice across time and the lifespan	*= Knowledge and experience from mother to daughter* *= Remembering and relating to childhood experiences* *= Thinking about your own children*
Trying to understand about the insect and its host	*= Views about who gets head lice and why* *= The environment as a route for transmission* *= Statements about how to find them* *= Understandings about how to treat them*

Figure 5 - The Understandings of the Younger Women

Thematic Statements	Theme Clusters
Being a mother and giving care to your children	*= The guilt that you might be a bad mother* *= Good mothering is about care and cleanliness* *= The meaning of being a mother* *= Feelings about motherhood and its social responsibilities* *= Passing on knowledge and experience from mother to daughter*
The experience of head lice and images of deprivation	*= Meanings about head lice and their associations with poverty* *= Views and feelings that "not nice families" get them* *= Perceptions of social structure* *= Being labelled*
Understandings about the insect and those susceptible to infestation	*= Discovering that they were there* *= Deciding how best to treat them* *= Understandings about treatment approaches* *= Thoughts about how they are passed on* *= People's susceptibility*
The strength of stigma	*= Views about what other people might think about you* *= Associations with infestation* *= The meaning of having head lice and being clean or being dirty* *= A secret or something spoken about* *= Strength of feelings – Horror and shame*
Reflecting on the impact of early experiences and school life	*= Views about surveillance and transmission in the school environment* *= Thinking about the past* *= Perceptions and thoughts about the school nurse* *= Images of those who were infested* *= The experience of isolation and bullying*

Figure 6 - The Understandings of the Older Women

Thematic Statements	Theme Clusters
Being a mother and giving care	*= Being a mother and feelings of guilt and shame* *= The "Oh my God" experience* *= Understandings about the social responsibilities of motherhood* *= Passing understandings and knowledge from mothers to daughters*
Understandings about the insect and dealing with infestation	*= Understandings about who is more susceptible to head lice infestation.* *= Understandings about trying to find head lice in the hair* *= Reflections on approaches to treatment* *= Reflections on how head lice are passed from one person to another*
The meaning and impact of the social stigma of head lice	*= Understandings about stigma and the perceptions of others* *=Perceptions of school and the school nurse* *= Keeping experiences secret or telling others* *= Cleanliness and Un-cleanliness and perceptions of contamination*

Figure 7 - The Shared Understandings of all of the Women

The actual act of organising and reflecting on the texts produced addressed van Manen's third and fourth steps of method (*Reflecting on the essential themes which characterise the phenomenon under investigation* and *Describing and interpreting the experience through the art of writing and re writing)*. The reflection, analysis and interpretation were carefully considered and in-depth and generated detail that was not visible through mere description. An aspect of this was concerned with constantly looking at how each theme and theme cluster fitted with the next and with the context of the text as a whole. To establish some validation for the themes and the understanding that these created, I asked four of the women for their views on whether my account represented their experience and I then reviewed my interpretive analysis in relation to this (Annells, 1996). The overall experience had to be recognisable to the women and they needed to recognise themselves within the themes I identified. This addressed van Manen's fifth step *(Maintaining a strong and oriented relation to the experience through a strong focus upon it and its context)*.

A further point in relation to the validation of understandings is that I chose not to involve another inquirer in the study as I felt that the dialogues that took place between myself and the women created a shared reality between us. Had I chosen to involve another, particularly at the stage of interpretation, this reality would have become something different. I considered this carefully as I understood that the involvement of inquiry colleagues can help to increase critical reflection and questioning and this can generate new insights into the stories being told (Hall & Stevens, 1991). In addition, colleagues can provide an audit trail and increase the credibility of an account (Creswell & Miller, 2000). However, I felt that in doing this I would compromise the study in that another inquirer would come to the study with different perspectives, understandings and experiences and this would not include the essential feature of engaging in dialogue with the women about an experience that was shared. Additionally allowing another direct access to the women's transcripts and spoken stories raised issues about the ethical principles of the study and the nature of trust. I found that returning to the women provided sufficient validation for the account and created further discussion that allowed me to clarify aspects of it. This was further recognised as representing the experience by three other women who had not taken part in the study.

5.6.3 The Parts and the Whole

I reflected on and wrote about the themes, theme clusters and the understanding that emerged from these, taking care to relate these back to the original narratives. Whitehead (2004) points out that if the inquirer moves too far from the reflective nature of the hermeneutic circle that this can shift any interpretation away from the original text and I wanted to minimise this. I tried to address this by writing about each cluster of themes from the perspectives of five life-world categories or existentials (Heidegger, 1927/1962; Todres & Wheeler 2001; van Manen, 1997 & 2002). These are concerned with the body as it is experienced by us and perceived by others *(Corporeality)*; the impact and influence of interpersonal relationships, the impressions and experience of others and the social sense of meaning and purpose (*Relationality)*; the relevance of place and the space in which we and others live and move *(Spatiality)*; the passage of time and the dimensions of past, present and future (*Temporality)* (Todres & Wheeler, 2001; van Manen, 1997, p101) as well as the experience of emotions and feelings and the way these influence an experience *(Emotionality)* (Todres & Wheeler, 2001). These existentials provided me with a guide for phenomenological reflecting; interpreting and writing that helped me see the whole understanding as well as its parts. By writing in this way I hoped to maintain the hermeneutic circle with regard to the narratives as well as the other sources of experience that I had encountered throughout the study. In doing this I addressed van Manen's sixth step *(Balancing the research context by considering parts and the whole as guided by the hermeneutic circle)*.

5.6.4 Understanding in Context

Finally, all of these understandings were made available by linking them to the wider social and historical contexts from which they had emerged and writing about this. I linked these discussions to the sources that I had previously encountered but tried to focus on the emerging understandings that the women's stories created. Most importantly in this discussion I addressed the implications of the study for the wider world and healthcare practice in particular as it was in exploring this that the benefits of the study would become clear.

5.7 Trustworthiness

Trustworthiness is about whether a study is believable; whether it is worth taking account of; whether it is accurate or right (Creswell, 1998; Koch, 1996). It is something that is part of each stage of an inquiry and is concerned with everything from the ethical aspects of a study to the analysis of narratives and the interpretations of the understanding that these create for the wider world. The trustworthiness of a study is of interest to those who will read and use it to develop knowledge, inform practice and improve care; therefore it must be addressed to a sufficient level to generate confidence (Lincoln & Guba, 1985).

Ethical approval was sought for this study through Liverpool John Moores University but was not required for such studies at that time. Instead, I used the Code of Professional Conduct for my profession (NMC, 2002 & 2008 and UKCC, 1992) to guide me with regard to the interpersonal and ethical aspects of the study. These were applied at each stage of the study from my initial contact with the women who took part, through the managing and protecting of their taped narratives, on to the interpretive analysis and the writing that completed the study.

All of the women were volunteers to the study. I did not contact them directly until after they had been contacted by other participants when they were free to consider the study and could decide whether they wanted to take part. No coercion was used at any point and the women knew that they could opt out at any stage. I provided written information about the study and the participants' part in this and I ensured that their questions were answered honestly and openly. I asked for verbal and written consent only after I was happy that they understood what they were about to take part in (Moustakas, 1994).

I ensured that there was respect, trust, confidentiality and anonymity when interviews were taking place and the women's stories were being told (Mason, 1996). I gave of myself and was genuine in my interest for their well being as well as what they had to say. I encouraged them to see themselves as partners in the study and its process and I returned to them for their insights, views and opinions as I analysed their stories. These then influenced my further analysis (Smith, 1998). I also sought the views of three other women who had had the experience but had not been part of the study to ensure that the understandings within it were recognisable to them.

I reflected at every opportunity throughout the study and maintained a reflective journal. This included reflections on by behaviour and role throughout the inquiry process, as much as on the method and the dialogues that were collected and analysed (Lincoln & Guba, 1985). I undertook a personal phenomenological reflection about my experiences of dealing with head lice infestation and I then included this with the narratives of the other women in the interpretive analysis. This also made explicit the way in which I viewed the experience and the roles that comprised my identity.

To be of any value and benefit this study had to reflect the central principles of good healthcare practice just as much good inquiry practice. Therefore, at every stage I attempted to maintain rigour and an ethical and person centred approach to those taking part in the study in order that these principles were upheld. Tables 3 and 4 below set out the strategies I used to ensure rigour and ethical integrity.

Table 3 - Strategies for ensuring the rigour of the inquiry

Trusting relationship with participants
Verbatim interview transcripts
Recognisable descriptions
Participant validation
Reflective Journal used throughout the inquiry
Participant's own word quoted in the findings
Contextualisation of understandings
Inquirers approach made explicit

Table 4 - Strategies for ensuring ethical integrity

NMC code of professional conduct
Voluntary participation
Participant control
Trusting relationships
Equality
Courtesy
Mutual self disclosure
Confidentiality and anonymity
Empathy
Inquirer's involvement
Genuineness
Empowerment
Information sheet
Informed consent
Ethical approval applied for but not required at that time

5.8 Summary

This chapter has provided discussion concerning the way in which I used hermeneutic phenomenological principles to ethically collect and interpret women's experiences of dealing with head lice infestation so that an understanding of this could be made clearer.

The next chapter explores the understandings that emerged as a result of my analysis and interpretation of the women's stories.

Chapter 6

The Women's Understandings

This chapter explores the understanding that emerged from the stories that the participants told. It is structured around the essential themes or features of the experience of head lice infestation which were shared by all of the women. However, some separate understandings did emerge specifically from each group of women and these are included as appropriate. An overview of themes and how these are clustered is given in Chapter 5 in Figures 5, 6 and 7.

6.1 Introduction

Through reflection, analysis and interpretation of the texts created from the women's stories it was possible to identify a number of essential features or themes that highlighted their understandings of the experience of head lice infestation. Analysis and interpretation included listening and listening again to what the women said and writing and re-writing, in order that the themes and theme clusters hidden in the narratives emerged naturally. The five lifeworld existentials that are interwoven through a person's life experiences were used here as a way of guiding the writing; pulling it together and making it concrete. These existentials are the physicality of the body *(Corporeality),* the impact and influence of relationships *(Relationality),* the relevance of place *(Spatiality)* and time *(Temporality)* (Todres & Wheeler, 2001; van Manen, 1997, p101) as well as the experience of emotions *(Emotionality)* (Todres & Wheeler, 2001). They helped me relate theme to theme, cluster to cluster and eventually understanding to context. Ultimately they allowed the text created to reflect the experience of the women as it was lived by them.

It was difficult to write about each theme independently as each one is linked to the understandings that emerge from the others. So there is some necessary return to understandings throughout the accounts presented here in order that these can be explored from different perspectives. This helps establish connections between themes and brings the parts of the text together to create a complete and recognisable understanding.

To guide the reader through this chapter the thematic statements identified for each theme cluster are uses as major headings. These are then broken down into individual themes which appear as sub headings. Chapter 5, Figure 7 gives further guidance here.

Where participant's words are used within the text details of these can be found at the end of each quote. A letter or number indicates whether the participant talking is an older or younger woman respectively. Those over fifty are identified by a letter, while those under fifty are identified by a number. Transcription line numbers appear after each participant's identification details. By way of illustration *(P11: 314-315)* indicates that this participant was under fifty and her words appeared between lines 314 and 315 of her narrative transcript. Within the quotes dots between phrases are included to indicate the natural flow of the spoken word, while capital letters indicate words or phrases that were spoken with emphasis.

6.2 Being a Mother and Giving Care

This cluster of themes encompasses understandings about the experience of head lice that are concerned with motherhood and being a mother. Feelings about guilt, shame and the horror of the experience are explored as are understandings and reflections about the individual and social responsibilities of mothers in addressing head lice infestation. These are also concerned with the way knowledge and understanding pass from one generation to the next and from mother to daughter.

6.2.1 Being a mother and feelings of guilt and shame

In terms of understandings about motherhood this theme was about individual experience as well as how mothers and motherhood were viewed by others in society. The strength of feeling about the experience was such that many women could not believe that it was happening to them:

> *"I just had this feeling that it would never happen to me and mine."*
> (P10: 217)

> *"I just....I just didn't EVER think that you'd get them y' know."* (P11: 314-315)

> *I thought everything had changed and I didn't even know they still existed. Then your child pops up with them and it comes as a complete shock."* (P10: 264-268)

These were common expressions of the feelings that emerged throughout the narratives. The women clearly felt that as head lice existed in wider society it was the concern of others. When they discovered them on their own children their response was not just to their physical appearance on the body but also about the feelings they evoked concerning social diseases and their inability to control these from infiltrating their families.

These feelings were often so strong many women could not sleep thinking about head lice and they perceived the reservoir of infestation that existed outside their family as something they were unable to control:

> *"The first time I did over react 'cos I couldn't sleep and I was distraught over it really I really was tearful and yet now I mean I think had I been asked me to do this at the time I wouldn't have even wanted to talk about it.....I felt really upset."* (P11: 274-278)

> *"There wasn't a lot that could be done in school as they knew where they were coming from in a way and the mother had been approached but wasn't doing anything about it...you couldn't do anything."* (PG: 214-218)

Such strong emotions were associated with the fact that their children mixed with others in a society beyond the family. Here it was impossible to know who was infested and who was not. This created a dilemma for the women about how best protect their children from this hidden infestation. They often felt they knew where the source of infestation was but could do nothing to eliminate it, as this was about how other mothers addressed the problem within their families and they had no control over what happened here. One of the women highlights this point below in relation to school life:

> P12: *"....the school seems to know where the outbreak was coming from......"*
>
> Inquirer: *"How do you mean?"*
>
> P12: *"Well there's a family in the school that keeps re-infecting, but knowing how expensive the stuff is and how difficult it is to get......I mean that's understandable if they are......I don't like to say but a poorer family."*
>
> (P12: 95-101)

Despite this some women felt resigned to the fact that head lice infestation was a fact of life when you had young children and that there was no point worrying about it. Children came in contact with head lice just like chickenpox and other childhood diseases and infestation was viewed in this way:

> *"I wasn't too worried...I just rang the school.......there's always something worse....People put too much into it, see it as something terrible."* (P7: 121-123)

However, an overreaction to the presence of the insect was understood as, unlike chickenpox, it was possible to see something alive on your child's hair and this made an enormous difference in terms the women's perceptions, feelings and responses (P7: 32, P12: 152 and P19: 10).

6.2.2 The "Oh my God" experience

Actually finding live insects in their children's hair created strong feelings for the women about the insect and themselves as mothers. This was often expressed using emotive language:

> *"I was devastated.....I'd kept her so clean...I was so fastidious and when I found them I was so shocked, I couldn't do anything."* (PC: 30-32)

> *"I was absolutely APPALLED..........ABSOLUTELY APPALLED.......It was seeing something on the baby's head which was most upsetting."* (P10: 293-295)

> *"I was in shock when I seen it......people telling me that I had to delouse her, it was horrible."* (PA: 56)

> *"I was shocked I suppose because they were crawling.....I felt as though I was dirty."* (PJ: 63-64)

Shock and horror was felt at their discovery and one woman said that she *"felt like the world was ending"* (P6: 2). The fact that the insects crawled over their children was a particularly distressing feature of the experience:

> *"Horrible things crawling on you when you're asleep."* (P3: 9)

> *"Head lice can be seen sitting on the hair and crawling around. You could see them."* (PC: 15-16)

> *"They're horrible in blow up pictures and I think of them crawling around your head."* (PE: 83-84)

> *"I felt sick treating them in such numbers."* (PH: 23)

> *"Yeah living on your head. ......It just turns your stomach."*
> (P10: 210)

The insects were free to invade the body, feed and breed, and present themselves to the women almost suggesting that they were aware of the horror that they invoked once they were discovered:

> *"...they were living off his blood......laying eggs in his hair... there was something unsettling about seeing this insect crawling about in his hair."* (P1: 302-304)

This often happened so quickly that the women felt that the insects almost mounted an assault on their families. Their presence brought with it something from the world beyond the family and once there it became a battle to remove them and the things they represented. They often returned even when the women felt they had done everything they could to get rid of them.

Feelings of guilt that the women had not done a good enough job of protecting their children from infestation and identifying it in the first place was a strong belief (PA, PG, P3, P9, P10, and P11):

> *"But it was so upsetting 'cos my little girl was so upset and she had never been subjected to anything but love and care and she didn't want to go through this and I...I was quite ashamed of myself for letting her."* (P10:110-113)

> *"Felt I'd let neglected her.......felt this strongly...Used to think I'm doing something right......keeping her clean, I felt I'd let her down."*
> (P3: 201-203)

> *"Y'know what I mean so I felt a little bit guilty thinking y'know.....I'm obviously not looking after him properly because how could he have this and me not know about it?"* (P13: 306-308)

Despite this they felt that they were not aware of what they were looking for when it happened on the first occasion. This was a particularly disempowering experience as society expected them to have these skills and knowledge when in reality this was not the case. As a result guilt was mixed with a feeling that they were being unjustly blamed for not caring for their children.

The women expressed understandings that they had little control over what happened outside the home and many felt that they had not been as diligent as they might have been about regular screening in order to detect infestation earlier. For them this suggested that they had let their children down and therefore felt guilt and shame at not meeting the expectations of themselves and others in terms of what was expected for good standards of child care and mothering:

> *"I couldn't believe how infested she was, I felt guilty. How had I let this go unnoticed...She was walking....That bad."* (P9: 83-85)

The older women frequently made comparisons between their mothers, themselves and younger mothers in relation to childcare and mothering. They pointed to the fact that women now worked more extensively than in the past and that this influenced contact with their children and standards of hygiene which they perceived as leading to head lice infestation:

> *"Don't think everybody....particularly like my mum. Older mums were with children all the time. Don't have as much time for children now. Don't have time to be bothered like our mothers who were always at home. It's important as more time means that you notice more.....it's rampant now."* (PD: 189-193)

There was also an underlying feeling that modern mothers were selfish and were more interested in their own interests than those of their children. This was particularly evident when older women compared their experiences, and those of their daughters, with experiences of their own mothers when they were children:

> *"Mothers have more time now as they have washing machines driers etc……. Our mothers had to scrub and use tubs. Parents are more selfish now they don't care about the kids."* (PB: 121-124)

Older women used this as a way of making comparisons that led to a feeling that because younger women did not do things like check their children's heads regularly, as they and their mothers had done, this meant that in some way the care that younger mothers gave was not as good, not as child focused, not what society expected of women.

This extended to understandings about giving care and managing risk as decisions had to be made about treatment. For women who considered using chemical treatments this was fraught with guilt about the impact of using such potentially toxic chemicals on children that they had always sought to protect. The conflict for the women here was that, though they considered the risk of chemical treatment to be present this did not fit in with the need to deal with the infestation as quickly as possible so that normal life could be resumed and others would not know. Though all agreed that wet combing with conditioner was less risky they felt that this was time consuming and was difficult to adhere to when what they wanted was to remove them from the family as quickly as they could.

For older women chemical treatments posed less of a conflict with all remembering *Derbac* soap with some affection from when they themselves were children and young mothers. However, older women were comfortable with the understanding that regular checks and the use of mechanical means to treat any head lice discovered was an approach which was intricately tied up with the expectations of what mothers should do in terms of giving care. For them any chemical treatment was not an alternative to mechanical means but complimentary where mechanical means failed.

Within the understandings that emerged such views related to the women's expectations about the fundamentals of child care. This care was what every child deserved and was entitled to and the presence of head lice indicated families where this was not being given. The term *"not nice families"* was used by many of women in their narratives to identify such families as ones where parents did not give what was considered appropriate child care. One older woman's comments illustrate this:

> *"Kids who have nits are not being properly fed....those kids have nothing. Parent's haven't got much money but spend it on themselves and there are drugs going round. These children are more prone. The parents are selfish and don't care about them."* (PH: 154-159)

6.2.3 Understandings about the responsibilities of motherhood

How women perceived their responsibilities and those of others featured as a recurring theme throughout the narratives of all of the women. While parents were discussed in terms of responsibility for head lice management in reality the women stressed that this really fell to them as mothers. Younger women were more likely to consult with their partners about infestation but rarely were partners involved with detection and treatment. For older women it was mothers who bore the bulk of responsibility seeing the issue as one that was so much about their care that partners were frequently unaware that infestation was present. Indeed the story telling that took place was almost exclusively about personal experience and the experiences of other women:

> *"Though it is the responsibility of parents fathers have no responsibility. Mothers are responsible as they know everything about their kids."* (PJ: 42-43)

There was a strong feeling of personal responsibility for care, but in addition, if there was no control over infestations that were at large in the community then responsibility for these fell with other mothers in other families and it was here that other mothers came under further criticism.

These other mothers, whose children were perceived as being responsible for infestation, were seen as not doing their job properly [P6]. In addition, the fact that many were seen as not being worried by the presence of infestation and quite happy to send their children to school unconcerned about the impact of this on other children and their families was a major criticism:

> *"Some parents won't bother. They still send their children to school. Parents do nothing about it* [head lice]*."*
> (P2 153-154)

> *"Some parents don't give two hoots and don't care."*
> (PA: 23)

This was viewed as a lack of respect for others and the fact was often associated with families where children were uncared for. Mothers of such families were unable to care in an acceptable way and this was linked to their own knowledge, access to services or because they did not understand the implications of their actions:

> *"...They were all... They all had it because the whole class was infected because of one boy who wasn't being cleared up.......I felt sorry for him....His mum was a bit inadequate."* (P10: 75-79)

For some women it was about none of these and was more about behaviour that placed others at risk of infestation and the social responsibilities that were being ignored by those who were unconcerned about their behaviour and actions:

> *"I wasn't happy with the response from school that some mothers weren't prepared to do anything and I had......the lotions were burning and upsetting her........ For them to go through that and then do it again 'cos someone was irresponsible and wouldn't do it. It's the thought of not getting to the root of what was going on."*
> (PG 42-48)

Older women in particular felt strongly about this issue of social responsibility linking it again to the issues of working mothers and lack of time spent in child care. For younger mothers, though social responsibility was a feature of their understanding, this was often identified in terms of others and how their responses impacted on them and their family. There was some notion of seeking to blame someone for the presence of head lice in their family. This could have been about the fact that older women's children had grown and moved on while for younger women the experiences were very alive, current and highly personal. Their perceptions were therefore influenced by this and the way that they reflected on their experiences.

Underlying these feelings about parental and social responsibility were the participants understandings about their own experiences with head lice and the guilt and shame associated with the fact that they might be seen in similar ways by others who knew about their experience:

> *"It's like uncared for unclean houses so I felt that it reflected on me."*
> (P14: 33-34)

> *"My friend was really worried, quite sick, really wound up. She said "people will think I don't look after him or clean him."* (P7: 212-214)

> *"In junior school my best friend caught them. It was a big secret. She had dirty hair.....a nice family with good upbringing was seen as dirty."* (P5: 2-4)

It was a complex situation for many of the mothers when they discovered head lice. For many there was a strong feeling of personal, social responsibility that other mothers should know about their infestation. Yet in doing this they opened themselves and their families up for criticism and this meant that they would then be seen in a different way. Ironically, in not telling others that head lice had been discovered the women were almost behaving as they would hope others would not. However to tell was to be judged and this was the case even for women who felt that perhaps head lice was not viewed as negatively as it was in the past. For most of the older women the decision was easier; to tell was to lose too much. It was up to others to be responsible enough to undertake regular checks. As a result, while some mothers felt there was little conflict here, most women, across all age ranges expressed a view that this conflict was often difficult to resolve as there was so much at stake:

> *"My daughter didn't want to tell anyone, we joked about it. She looked at them and she was OK but she didn't want anyone to know. I didn't want a letter to go to school."*
> (P13: 12-14)

> *"The children knew but I mean I knew the mums really well but nobody, nothing at all it's kind of a taboo subject....I mean I didn't mention it to anyone did I?"* (P11: 26-29)

Despite these views the women's perceptions acknowledged that mothers were not necessarily in a position to accept responsibility for head lice detection and treatment. Where they did not have the knowledge and skills needed to make decisions and act they would not be in a position to accept this and may be unaware that this responsibility was theirs. These views, which appeared across all age ranges, were concerned with views that society had a responsibility to parents, in particular mothers, to ensure that opportunities to learn more and support mothers were made available.

An aspect of this was the role of the school as a community network. In some way schools were seen by the women as influencing maternal responsibility particularly in terms of passing on information about infestation; almost so that women's responsibility for this was removed. However, in order to do this each mother had to inform the school in the first instance once head lice were discovered and this raised conflict about how such revelations might reflect on their children and themselves as mothers. For younger women they had to be clear that what they were detecting were actually head lice. This was important as to inform the school and then find that they were wrong would mean that they had opened up their children and themselves to judgement even though this was only by teachers.

For older women, reflecting on their experiences, this was less of a problem as when they were children and young mothers school nurses examined children regularly for infestation and this was felt to be a way of passing control for informing others to someone in a position of authority; someone who could also act and enforce treatment. Here, even if mothers were regarded as remiss in caring for their children and managing head lice the school nurse was there to intervene on the children's behalf and it was up to the family to deal with the labelling that the mother's poor caring brought down on them. Indeed the older women argued that if regular checks were still taking place by school nurses the very idea of being labelled would be sufficient to ensure that younger mothers would be keen to undertake regular checks of their children's hair in case the school nurse discovered an infestation instead:

> *"If I had the authority I'd have the nit nurse back....Mothers won't take no notice and you need to get them to feel ashamed...We've been ashamed getting the card but people are not as ashamed now."* (PB: 231-334)

6.2.4 Passing understandings and knowledge from mothers to daughters

The sense of history and the passage of time in terms of changing social and cultural circumstances pervaded the narratives of the women and there was a strong sense of the interrelatedness of all of their experiences regardless of when these took place.

The women relied on the experiences of their own mothers to guide them in managing head lice and this was about their mother's perceptions and beliefs about infestation as much as their actions as advisors and counsellors when the problem was being addressed:

> *"My mother passed on her perceptions to me, I have all of the preconceptions that mum drummed into me. Mum thought only dirty people got head lice and I thought this too."* (P6: 162-169)

> *"My mother influenced my feelings... She checked regularly and didn't like crawling things... It's in me too. I knew what they were because she showed me on a comb. She killed them with her thumbnail and I knew exactly what to look for."* (PD: 213-218)

Mothers influenced their daughters either directly or indirectly. The women's own mother's perceptions and beliefs had a powerful impact on their understandings even when head lice had never actually been discussed prior to infestation. The unsaid was just as important as the said in influencing perceptions that remained with the women from childhood right through to motherhood:

> *"She was petrified of us getting them she mustn't...she must have associated something awful as she obviously had a fear of these things..............Yet me mum never spoke about it or her experiences or anything else she never did it was just like this awful Saturday night business."* (P10:208-214)

Older women were more prepared for screening, detecting and managing head lice that their younger colleagues. They were more aware of what the insects looked like and could remember experiences as children when they were shown what they were, even if they were not discussed other than to tell them not to tell anyone else:

> *"I knew what they were because my mother had shown me."*
> (PK: 24)
>
> *"I did what my mum had done."* (PD: 25)
>
> *"I was taught what to look for by my mother."* (PG: 57)
>
> *"The knowledge I got when I was younger from my mother and aunties helped diagnosis...I knew what they were."* (PA: 83-84)

The common occurrence of the insect within their families coupled with routine maternal check meant that though there was always horror attached to their discovery there was also a notion that infestation was something that their own mothers would expect and deal with in a matter of fact way and that, once the shock was addressed, they would do the same.

For younger women the discovery of head lice always came as a shock as infestation was never expected and they were less likely to check regularly because the problem was viewed as something that others experienced. This was compounded by the fact that they were often unaware of what to look for. This raised questions about whether they did not check, in part because of lack of knowledge or because they felt that this was an experience that they were never going to have. Their own mothers were important at this point as they provided advice & support once an insect had been found. The younger women felt strongly that they had been unprepared for their first encounters and this had an impact on their emotional and practical responses. For older women this was different as it was clear that their mothers had passed on information during their childhood about identifying the insect and dealing with it. This remained with them into adulthood preparing them for the experience and influencing their own emotional responses helping them to cope in a more pragmatic way·

> *"I'm not sure whether they know what to look for. I do wonder if half of them know what to look for. I knew because my mum showed me on a comb. She killed it with her thumb nail. She'd show you exactly what nits were like and exactly what to look for."*
> (PC: 176-180)

Some women therefore were very clear about what to look for, however for others the first time that they actually engaged in discussion with their mothers or other older female family members was when head lice were already present. Prior to this, head lice infestation had not been discussed and for younger women in particular this did not prepare them for their inevitable arrival and meant that information and guidance about infestation was only provided once the younger women were mothers themselves. However, all of the women stated that, upon discovery, their mothers would have been asked to actually identify the insect or to offer thoughts about treatment or prevention. Also at this stage the women's mothers would offer other views about the infestation in terms of their own experiences; where the insect came from; what to do about telling others; how to protect the children in the future. For all of the women the impact of their mother's, or another older female family member's influence was immense in terms of their own approach in dealing with head lice as well as their views about how they would then go on to talk to their own children about them. The movement of beliefs, perceptions and actions across generations was evident and the importance of these is illustrated in the following quote:

> *"I don't want my daughter to feel guilty or embarrassed about them the way I did. She's happy to tell anyone. Perhaps my generation are changing, I'm very aware. I don't want her to feel like me that you can't play with children down the street. You can't have secrets.*

> *I would be happy if my mum said things to her. I don't want her to carry any guilt or shame. We're not dirty or uncared for it's just something that happens though my grandmother still won't come round to mine if we are infected."* (P6: 211-219)

> *"My own mother influenced me as she was very persistent like me and didn't like crawlies.....it was so persistent in her too and she worked at it. I try not to think about them. It was just because it's the insect and you wouldn't know where they came from...from kids playing in the street...they only need to touch"* (PL: 113-118)

The influence of the women's mothers was considerable and they felt that having *"experience in the family was important"* (P4: 27) when addressing the problem. This suggested that this was a personal issue that needed to be addressed within the confines of the family and the family home. Once advice and help was sought outside it became necessary to tell others and then it was not possible to influence how people might reach conclusions and make judgements.

6.2.5 Cluster Summary

This cluster identifies the fact that mothering and care are bound up with individual experience as well as the social experience of others. This was concerned with how individual actions impact on the lives of others, how the past impacted on these actions and social and individual responsibilities in terms of the greater good.

The adjustment of the mothers when coming to terms with this invasion of family life was influential in the way in which the problem was addressed and the role of older women in relation to this was vital in terms of supporting, advising and guiding younger women as they made their own decisions.

Though younger women saw head lice as being less of a social problem than the older women, the overall horror of discovery transcended this and all found discovery difficult due to the associations that the insect had with care and the individual and social expectations of mothers and mothering.

6.3 Understandings about the insect and dealing with infestation

This theme cluster represents the understandings of the women about the insects themselves in terms of their discovery, reflections on treatment options and decisions, and insect transmission. Their beliefs about people's susceptibility to infestation and the relationship of the insect to the family home environment are also explored here through the women's understandings.

6.3.1 Understandings about who is more susceptible to head lice infestation.

Beliefs about the family and the view that infestation came from the wider community created understandings about who it was or what circumstances created increasing susceptibility to infestation. This was about more than just head to head transmission. The women believed that the insects sought out or preferred clean heads. Hair that was regularly washed and cared for created an increased susceptibility:

> *"I didn't feel dirty 'cos I know they go for clean hair so it's a compliment in a way isn't if they do go on your child's hair."*
> (P12: 56-57)

Yet these good standards of hygiene and the appearance of head lice caused women to question their assumptions because good hygiene also equated to the fact that their children should not be infested. These beliefs were at odds with mothers being unsure exactly where head lice came from though they felt that people who had poor hygiene and did not wash had increased susceptibility. As a result they were therefore the major source of infestation:

> *"Clean hair attracts them but someone has to have dirty hair to start with. When I was a child it was always the dirty kids who were skitted at because they didn't wash."*
> (P8 53-56)

> *"It could be on a dirty kid and the clean kid will always get it. It's like impetigo clean and dirty, the same."*
> (*PJ*: 161-162)

> *"My grand-daughter does her daughter's hair every day. She found them in her hair and a letter came from school saying someone had them. They only live on clean hair. There might have been a breeder in the class. They're horrible little things."* (PL: 98-103)

> *"Where do they come from? It's a myth that they only go to dirty heads." (P18: 14)*

This meant that the women identified links between head lice and un-cleanliness when the infestation was about other people but, when they experienced infestation in their own families this was about cleanliness and good hygiene. It was almost as if the insect sought this out in their children in preference to others whose standards were less acceptable. This created some conflict for the women who had to rationalise these perspectives in relation to their own experiences. It generated distress: though their children's heads were clean their beliefs implicated those who were considered to have poor care and hygiene standards. This meant that if others knew about their infestation they may judge and make assumptions about them on the same basis. This also added to the horror of the experience which was about their children being indirectly exposed to the body of someone with poor standards of hygiene as the insect walked from person to person. This was something that the women found difficult to come to terms with in relation to the experience. One woman expressed her belief about the issue of head lice preferring clean heads, thus:

> *"Tend to think that only go to clean heads but people still thought of as being poor and uneducated as the ones who get it. Views come from a lack of education and the concepts you hold. I don't agree with them going just to clean hair. They will go to any head but perhaps it's someone's way of making someone feel better because they've got nits."* (PG: 73-78)

Fundamentally the women sought to try and identify others in their community who would be likely sources of infestation or to discover reasons why their children seemed more susceptible than others. Ideas about these two issues centred on the belief that people could be breeders of head lice and be infested or be more vulnerable to infestation often without being aware of it. The breeder was viewed as someone with particular characteristics which varied depending on the circumstances. The term was often used to rationalise repeated infestations or situations where it was unclear where the infestation had come from or where infestation raised emotions that were difficult to deal with:

> *"They only live on clean hair there can be a breeder amongst the class and everybody contracts it."*
> (PI: 151-153)

> *"Breeders, they can sweat,* D *used to breed them because his head sweats a lot."* (PA: 213-215)

> *"The doctor said that I could be a breeder. I was mixing with a family that weren't very clean. The children had thick curly hair...matted it never got combed....* [Her daughter] *had hair down her back she was alive we had to cut it. My own head was alive."*
> (PE: 202-207)

> *"They just came from an individual who's a breeder. You just need to have contact with someone next to them. They can jump can't they? There has to be contact."* (PA: 33-36)

> *"Breeders they're children who sweat a lot and get them a lot. Were little boys and girls are running around in warm weather and their heads sweating..... Tend to breed in warm places. I can imagine it to be raging more in the summer than the winter running around and getting hot."* (PK: 33-37)

> *"My daughter must be a breeder as I've never seen so many."* (P11: 132)

Those who were viewed as *"hot and sweaty"* children were regarded as being more prone to being infested and potentially a *"Breeder"*. There was something about the fact that their body temperature created the sort of environment that supported head lice and allowed them to breed:

> *"He's a very hot child as well and I think that that would incubate them."* (P11: 272-274)

> *"Breeders they sweat I had two girls and a boy and P used to breed them because her head sweats a lot. The others might have contracted them but P, I had to do her regularly she was very hot and sweaty. I assumed that if her head was hot they're breeding."* (PL: 246-250)

This was also connected with *"itching and scratching"*. Both were signs that could identify a susceptible individual. The difficulty was that scratching was not always associated with infestation. As a result, a false positive identification of infestation could be no more than a reaction to merely thinking and talking about the insect:

> *"One daughter sweats a lot is always itching and scratching I ignored her. If the other itched & scratched I'd say "come here" and I'd have a look at her. I'd look behind her ears...is that true? The back of the neck, where it's warm. Her hair was so infested she was*

> *so bad and she hadn't even scratched. I wanted to put a cross on the door if anybody came."* (P9: 218-224)

> *"I'm petrified that she gets it again....makes you scratch when you're talking about it!"* (PH: 184-185)

However, at other times, scratching was seen as something that the mothers would look for in terms of potential infestation in their own children. Often the presence or absence of scratching depended on their perceptions at that time and helped them justify their actions. They believed that scratching could be merely due to an irritated scalp but, where head lice were present, assuming this to be the case could mean that infestation might be missed. Therefore for all of the women scratching was a sign that indicated that head lice could be present:

> *"The head itches when she has been in contact... you do itch"* (P8: 6)

> *"I just looked and erm... K was scratching her head I thought she must have a dry scalp we said oh my God she's got nits."* (P10: 286-288)

Though these views spanned the generations of women, younger mothers mentioned these signs more often almost in a way that suggested that these were being used as a method of monitoring and as the first stage of diagnosis. For older mothers however these signs of infestation featured less in their understandings perhaps because of the greater emphasis that they and their mothers placed on routine and regular direct examination of the hair for the presence of lice:

> *"I wouldn't have routinely checked her. No I didn't....The only times were when a letter came from the school. The second time she was itchy hot and sweaty and I thought it was that."* (P8:35-39)

Other people were prone to infestation because they were pregnant, unwell or run down, had a poor diet or were poor:

> *"I heard when I was younger that that anybody who's been sick or ill was more prone. You're more prone when you're ill...I don't know whether that's right."* (P4: 8-10)

Poor health in general was linked to the increased susceptibility to infestation but there were additional perspectives to this. For example, where illness had preceded death this was seen as the reason for an increased number of head lice present on the body which later left the head once it cooled:

> *"When she died in the coffin they all came out of her hair. My elder sister had to get the undertaker he gave her meths* [methylated spirit] *and cloths to get them out of her hair. She had red hair. There was nothing in her bed only came out when they brought her back from the funeral place. I had no idea. He [the undertaker] must have seen it before. They just bred all at once....When you're run down tend to get head lice."* (PB: 289-297)

Poor diet was also an influencing factor in whether people got head lice or not. However, this was not merely about diet but was also concerned with poor families and the limited knowledge and understanding that mothers might have had about diet and health. The assumption here was that poor understanding of basic nutritional needs was linked to inadequate mothering that had a negative impact on health. For older women this was linked to such things as the amount of fruit eaten by children which perhaps illustrates their understanding that people who had limited incomes or mothers who had poor nutritional understanding were most likely not to give their children fruit and therefore increase their susceptibility to head lice. As a result:

> *"Someone undernourished just passed it on to someone fit."* (PK: 59)

While this suggested that poor physical health and fitness was an influencing factor in terms of susceptibility it was equally about the tendency of head lice to go to those who were healthy in preference to those who were unfit. As a result people who were fit as well as those who were not both had an increased susceptibility to infestation. This juxtaposition of views appeared difficult to reconcile. However it allowed the women to adjust their rationale to fit in with their perceptions of the experience depending on whom and what was being discussed.

Often this view was linked to the perception that children from poor families were more prone to infestation and with this came poor diet and therefore poor health. This perception also reflected the women's views about poverty being linked with poor child care, poor maternal responsibility and poor general hygiene.

Pregnancy, as a change in the body state, was another physical experience that led to increased susceptibility:

> *"Being pregnant you're a bit low, I'd scratched and ended up at the skin hospital with infected sores."* (PH: 112-113)

This was often because a woman could be run down or unwell during pregnancy but was also concerned with changing hormone levels and the understanding that often pregnant women perspired heavily and became hot. This rise in body temperature was seen by the women to create the right environment for the insects to live and breed. In the light of this some of the mothers viewed pregnant women as breeders who could pass infestation on in the community without being aware that they had head lice.

Aspects of the social and physical environment also influenced susceptibility with the women believing that girls rather than boys were more susceptible as they tended to play more closely and had longer hair. While warm weather encouraged their spread and increased breeding; as a result they were more common in summer than winter. Older women believed that there were epidemics of head lice during the warm summer months and that this increased risk as well as made people more susceptible to infestation at the same time.

6.3.2 Understandings about trying to find head lice in the hair

Beliefs and understandings about actually identifying the insects in the hair are important as these influenced the process of treating infestation. In addition positive identification is essential so that women can make appropriate choices about this. For the women in the study this was mostly concerned with their beliefs about the ease or difficulty that detection posed. For a number of women the fact that they did not know what to look for was part of the horror and lack of control that they felt on initial discovery:

> *"The children were little and I didn't know what they were. I asked my Mum what they were. Oh my God....Oh my God...We got the stuff and I had to keep them away from the rest of the family. I'd never seen them before. I thought what's this 'cos I never knew what they were. I just felt so dirty in myself."* [P2: 2-6]

Detection was a crucial stage for the women as failure to identify the insect meant that they exposed their children to increased infestation and potential social ridicule. The difficulties of this, particularly for women who had been unaware of what to look for at their first encounter, meant that they often saw the insect as an invader rather than something that was a common childhood problem. Many talked about the insects as though they had almost human attributes seeing them as *"crafty", "hiding in the hair", "hiding their eggs amongst the dandruff" and that "they hide in thicker hair".* They saw detection almost in terms of a battle between themselves and the insect.

Identification proved difficult for many of the women based on the beliefs that they had about the insects.

The actual structure and the colour of the hair was one aspect of this with the women identifying hair colour as having a major impact on whether they could see head lice easily or not. However, views about hair colour varied and this created a complex picture regarding identification that depended on such things as prior knowledge and experience. Most of the women felt that pale or blonde hair made the insects easier to see and that dark hair made it particularly difficult as the insect were often dark in colour. This belief was not this simple as women believed that the insect actually took their colour from the colour of the host's hair using a camouflage effect to prevent detection. They pointed out that if this was the case it would be difficult to see them even on pale hair:

> *"Blond hair is difficult to see they looked just like the colour of his hair."* (P13: 6)

This was compounded by the belief that over time the insects changed colour and that today they were easier to see than they were in the past because they had become so much darker. For one woman this was also linked to her beliefs that infestation was almost like influenza in that there were different types of head lice that kept adapting and changing. In later themes in this cluster this view was also associated with increased resistance to chemical treatments.

Hair type was also associated with ease or difficulty of discovery. Fine hair was seen as easier to detect both head lice and nits (eggs) while children with thicker hair posed more problems for detection because the insect could hide more easily and remain unseen until numbers increased. In addition curly hair was viewed as physically more difficult to work through when manual detection with fingers or fine tooth comb was used:

> *"On blonde hair they're easy to spot but on bushy hair they're difficult to see. One girl had wild curly hair so it was probably difficult for her mum to go through her hair."*
> (P6: 135-138)

> *"You can't always see them when you part the hair thick hair is really difficult..."* (P19: 73)

> *"They were in my daughter's hair. I happened to find them she had fair hair and you had to notice them...fine hair is easier than someone with thicker hair."* (PG: 204-207)

The actual identification of head lice and nits [eggs] in the hair *"Where there's a louse there's a nit"* (PB: 5) was something that was concerned with the extent of the women's knowledge about what the insects and their eggs looked like. Many said that on the first occasion they were unaware of what to look for and this added to the shock of actually finding a live insect living on your child's head:

> *"I found the insects on one of the girls there was a party with lots of children....I didn't go looking but I noticed two lice on her. I hadn't seen them before and I didn't know what they looked like I'd never seen them before and it was the middle of the summer it was red hot so I thought they were just flies like flies they tend to land on you little flies and then I thought no and I went to the chemist and they advised a shampoo."* (P11: 203-210)

Many women had learned how to identify head lice and nits when their mothers showed them the insects as children. Memories of these experiences were strong and while not being able to give detail about the insect's appearance all knew the general size, shape and colour of the live insect and its eggs. They knew important pieces of information, for example that the nits were attached to the hair and, unlike dandruff and skin scales, were difficult to remove. As previously mentioned older women were more likely to have had direct childhood experience with the insects prior to their own experience as mothers and were aware of how they could be dealt with the problem:

> *"I don't know if they know what to look for...they must know but I wonder. I knew what to look for as my mum showed me she passed this on to me and I knew what nits were like knew exactly what to look for."* (PC: 312-315)

Importantly, younger mothers consulted with older women in order to identify or confirm identification of infestation and used their experience and expertise as a source of learning in preparation for the next time. By doing this rather than consulting with professionals or others outside the family the experience remained a secret until mothers had decided on the action they would take and whom they would tell:

> *"I didn't know what to look for I must have had some idea as I phoned my mum and mum in law and I found the eggs and she said look at the hair and if they don't come off they're nits. So I asked her how do you know the difference between cradle cap and dandruff and she said if it sticks then that's what they are* [nits].*"* (P9: 304-309)

Rather than trying to see the insects amongst the hair it was easier for the women to use fine tooth combs to detect head lice but this presupposed that they knew how to do this. All of the women had learned how to do this from their mother or older female members of their family; none had been given guidance by anyone outside the family in relation to developing these skills. The skills emerged from within the family and were honed within the home environment where older women's guidance and experience helped younger family members develop confidence in addressing the problem:

> *"There were no shampoos when we were little mum went through our hair with a comb she would do it for hours and hours and would do all the family. She'd patiently go through our hair and she used to kill them. They were on a piece of paper I can just remember."* (P20: 243-247)

> *"The first time I asked my older sister to have a look. I thought something was wrong so I asked her. She said mum used to ask her to look through our heads and she said she'd get us by the window in the light and go through every Saturday night. Me mother had it a lot more than we do. Me sister did it instead of me mum because her eyesight was better....she'd use a fine tooth comb."*
> (P19: 103-109)

There was a belief that regular fine tooth combing was the only way to control head lice, though this belief was stronger amongst older women. Younger women used it too but often they only undertook it regularly around the time following infestation. For some this meant that they did not have to ask for prescriptions for head lice treatment or buy it off the shelf and this helped maintain secrecy and did not set them apart from others because of infestation.

It was when the women reflected on their experiences as children that it was here that much of their understanding about this approach had developed. Women, regardless of age, had watched their mothers as they fine tooth combed their hair and that of their siblings. This had been a regular, weekly hygiene activity for the majority of the older women and it evoked the feeling of "the hunt" as they talked about it; the final moments being the cracking of the insect between their mother's thumbnails:

> *"I got excited cracking them up. Mum put white linen down and they came out on the comb we cracked them 'til they clicked. They were often already dying off but we finished them off."* (PA: 165-169)

Though an act of de-lousing this activity represented family orientated activity for the women who remember sharing the time with their own mothers and their siblings. Though a physically uncomfortable experience for many it also represented an act of maternal care and was remembered fondly. In contrast, fine tooth combing for younger women managing head lice with their own children was perceived as a more pragmatic activity which represented an attempt to remove an invader and re-establish their normal family life. It was a time consuming activity and they felt that time spent doing this could be better used for other interaction with their children within what were busy lives.

6.3.3 Reflections on approaches to treatment

While fine tooth combing, with or without conditioner was regarded as a method of detection, it was also viewed as an approach to treatment and meant that chemicals did not have to be used on the hair. This approach had been used to some extent by all of the women and was linked to fond childhood memories when their own mothers used it to control head lice. In reality, however, they found this approach time consuming due to the length of time it took to complete a treatment cycle and to treat every child on each occasion. It had been used regularly by some to detect head lice while others had used it sporadically at times when they perceived a higher than normal risk of infestation or when trying to eliminate head lice. Though wet combing was common practice it was not the only treatment that the women had encountered or used and alternative approaches were common. However, the general approach was to use fine tooth combing in combination with the use of chemical lotions, soap and shampoos:

> *"You always had your hair washed with Derbac and mum would do it with a fine toothed comb."* (PE: 72-74)

> *"My Mum looked through my head and washed it regularly with Derbac soap each week."* (PC: 183-184)

Often the chemicals used were not those traditionally associated with the pharmacology of head lice control but were seen as part of an overall regime that had been established by word of mouth from other mothers at that time:

> *"Mum was very particular that I didn't go in with them. She put paraffin on our heads. Derbac was still in seventy years ago but it couldn't clear them and paraffin was put on them. At the time*

> *paraffin cured it. Mum then did our heads every week. Fine tooth comb and black cloth and fine combed it. She put them on her nail and killed them then cleaned her hands with a damp cloth."* (PJ: 145-151)

The use of chemicals was common to a greater or lesser extent across all of the women. They had an expectation that chemicals would resolve the problem quickly and perhaps also protect their children from further infestation:

> *"Derbac soap could put a coating on the hair."* (PL: 73)

Though this was important for all, younger women sought to deal with the infestation as quickly as possible and this was a reality for them as chemical treatments had developed so that this was easy to achieve:

> *"I got some Prioderm and I put it on for an hour and she was back to school by Tuesday."* (P4: 79)

In terms of decision making about treatment choice this was an important consideration. However, though their expectations were high the women's views were that proprietary chemicals did not live up to these:

> *"I used Derbac. I followed the instructions and left it on longer and when I went through their hair they were still alive even with the lotion. I had to get them out and there were still so many I expected them to be dead."* (P12: 201-205)

Repeat infestations were often the result of such experiences and the women constantly had to wrangle with their understandings about the treatment options available to them. Consequentially the experience and the choices and decisions that the women made became more complex.

Overall they felt that they had little control over detection and treatment on the first occasion of infestation but that this improved with further episodes as they learned more. For those who wished to use and rely only on proprietary treatments the experience was about a balance between the efficacy of treatments, choice, risk to their children and the judgement of others. The women wanted to rid the family of the problem but to do this quickly meant that they had to risk re-using chemicals on their children.

> *"Chemicals, they worry me, but it depends on how often they're used really. I don't know how you deal with girls with long hair.......it worries me what it's doing. I used to use Lorexene. I only used it a few times. I started to look through their heads instead."*
> (PC: 162-166)

The positive aspect of chemical usage was that no time had to be taken off school and no one would know that the family had been infested. However, when these treatments did not work as expected the women experienced a lack of confidence in their abilities to actually kill the insects and their eggs. This created distress as they considered their remaining options for treatment and the implications of this for future treatment choices:

> *"As a grandmother my daughter told me S was always scratching. I had a look and she was alive, they were thick. I got the lotion and it was no good. They're saying that the strain now is immune. Since, I've used a sapper and electronic comb that kills them."* (PE: 86-90)

This also meant that for many women the reappearance of the insect meant that, as they had already treated their children, the re-infestation must have come from another source outside the family. As a result, they felt that there must be someone who could be blamed for both the initial infestation and any repeat infestations following treatment. Though the women talked about resistance to the chemicals that they used to treat the problem, they never considered that it may have been their non-compliance or incorrect use of these that were the reasons for the insect's reappearance:

> *"I was doing my little girl's head sectioning combing it to get the tats out. They were just walking everywhere. I did her hair and it was clear for a week and she went back to school and then was as bad as ever. I'm still having to do her hair."* (P18: 36-39)

Additionally, all the women talked about the smell of the lotion and the fact that it lingered on the hair and may be recognisable to others. They felt that repeated usage this increased and brought with it the potential to draw attention to their children. This singled the children out and set them apart making them vulnerable to the judgements and ridicule of others. As a result though fine tooth combing was the treatment that offered the women an odour free option what the women really wanted were chemical treatments that were safe, rapidly effective and did not have an after smell that could be identified by others and used to label themselves and their children:

> *"When you smelt the stuff you knew people had them."* (P3:69)

> *"Full Marks" has no smell and it's so easy. The shampoo is a nit repellent."* (P3: 82-83)

> *"Shampoos are good but they make the hair stinky. They have some protection for a couple of weeks and you can do it again. It's tedious combing the hair. Shampoos are good....quick."*
> (P18: 58-62)

> *"We kept it a secret. It was always done on a Saturday so that we didn't go into school smelling. Mum would use the comb and lotion and we'd stay in on a Sunday. It was school on a Monday and by the next week end we'd be full again. The lotions were very strong then but they smelt very strong too."* (PK: 142-147)

The important issue was that their children could not be singled out or targeted for unwanted attention by other children on the basis of the way they smelt. Many of the older women remembered this as something that had remained with them from their childhood and recognised it as something that had regularly identified children as different. This difference often meant isolation and social exclusion from school life for those children who had recently been treated:

> *"It's a minor issue but it does raise the levels of anxiety partly because the lotions smell it evokes memories."*
> (PF: 162-163)

> *"Years ago it was taboo and was never talked about then. We had the nit nurse... the welfare nurse and if you had nits you had to go to Everton Road* [Clinic]. *They'd do you with the head stuff and so you'd sit in the class and everyone knew where you'd been."*
> (PE: 205-209)

Chemical treatments also generated a range of perceptions in terms of their access and usage. In order to get them the women either had to access their GP for a prescription or they had to buy them at the chemist. If they wanted them free of charge a prescription was the only option but many women complained that the often had to wait for an appointment with the doctor and this created distress and conflict. They had to decide whether they should keep their children at home until they could get hold of a prescription, so that others would be unaware that they were infested, or whether they should send their children into school and risk others discovering the infestation and judging them for not keeping them away:

> *"She was blonde and it was difficult at first......I went to the doctor but I couldn't see them to get a prescription. You don't have to keep*

> *them off school if they've been done so I just went to the chemists and bought some lotion."* (P12: 45-49)

Additionally, if the women decided to buy the treatments from a pharmacy this meant that they might have to declare their infestation in full view of others and they might be judged because others believed them to be dirty and not caring for their children. There was no guarantee that the staff would offer advice or guidance in a private place and no pharmacist actually confirmed head lice infestation visually when the women bought the proprietary preparations. The women found this difficult as they wanted advice, but to talk openly about such issues and for their child to be examined in the presence of others, was highly embarrassing and unacceptable. As a result the women felt that they were in a position where choices had to be made about proprietary lotion use but they were unclear as to whether the choices they made without guidance were the right ones. The stigma attached to others knowing about infestation therefore disempowered the women and generated feelings of vulnerability:

> *"I went to the chemist and kind of waited 'til everybody had cleared the counter 'cos there's still a st.......I felt there was a stigma attached to it because you associate it with dirty hair...... you know dirty kids kind of."* (P11: 184-187)

For women who had found it difficult to pay for treatment their only option was to wait and go to their GP for a prescription, *"If you want it free then have to wait 'cos of the GP"* (P12: 212). These women had to wait for an appointment and the GP had to examine their children in order to confirm their diagnosis. They felt that this experience set them apart from others who could afford to pay for chemical treatments and so they were doubly stigmatized. The women felt that all treatments chemical and mechanical should be easily accessible for all and should always be free.

For many women the option to choose not to use proprietary head lice treatments to deal with head lice meant that they chose mechanical means instead. As a result they had to give a commitment to treat their children over a number of weeks and for many women this also meant that they could reduce the perceived risk that the use of chemicals on the head posed. Interestingly while the women's perceptions were about the speed and efficiency of proprietary treatments they worried about repeated application of lotions that had to stay on the head for any length of time and this created some level of anxiety. As a consequence many were happy to use alternative approaches in dealing with head lice. Essential oil based proprietary treatments such as tea tree oil had been used by a number of the women to treat their children; these were seen as less risky in terms of the impact that they had on their children. While some used essential oil based head lice preparations others used the essential oils alone and though it was unclear what the guidelines for their use here were concerns about toxicity appeared to be less of a consideration. Much of the information about their use came from non-professional sources both relatives and friends and from books, magazine articles or from websites:

> *"I'm not happy with lotions and potions they are all chemicals. I try to use complimentary therapies as much as possible. I don't use chemicals on my daughter I generally don't like them really especially if you're getting them again and again. I got the information form an aromatherapy book and I did ask friend and family. I did find it worked but she still got repeated infections."* (P6: 136-141)

These views are interesting and express the women's understandings firstly that essential oils are not chemicals in the same way as proprietary pesticide preparations and secondly that they do not pose the same risks to health. Though information about standard, evidence based chemical treatments is available, the women were happy to use therapies on which there has been little scientific study; the most common being tea tree oil:

> *"I used tea tree oil because I find it good at preventing them. She stopped getting them when I used tea tree but her hair had been*

> *plaited too so it was a combination of things. I know of others who have used tea tree too to treat them."* (P6: 152-155)

> *"Tea tree oil is good you can go into health food shops and get this. In the "Body Shop" they have a head lice kit it's got a tea tree oil shampoo and you can use this on a regular basis to prevent them."* (P13: 152-155)

> *"There must be a big break out at home because in the local health food shop there's a big display about tea tree oil."* (P9: 45-46)

Their perceptions were that, in some way, essential oils were gentle and as they were plant based, natural and would not have the same impact on their child's health as chemicals that were produced in large quantities from synthetic compounds. They perceived less risk with essential oils and this may also be associated with their beliefs that they could buy them without fear of revealing the reason.

Essential oils however, were not the only topical treatments for head lice that had been considered by the women and though there was no consensus here these gave some insight into the range of beliefs that had an impact on decision making. Alternative treatments included bleach, hair dye, alcohol and vodka in particular, vinegar, peroxide bleach, a well known brand of *"leave in"* conditioner, other brands of wash out conditioner and paraffin:

> *"Vodka is good you know alcohol you just rub it in and leave it there."* (P12: 176)

> *"I've heard that hair dye kills them......My mother was a hairdresser and she told me that..... I've never tried it as I don't like hair dye."* (P1: 134-136)
> *"I do use conditioner it stops the eggs sticking to the hair."* (P5: 98)

> *"Alcohol.....it has a drying effect and they put it in the lotions too."*
> (P9: 85)

The decision to use these alternatives was often as a result of word of mouth with family and friends based on their perceived effect when they had been used by them on previous occasions. For many women, both young and old, these alternatives provided sources of treatment that were cheap and often readily available in the home. However even these alternatives to treatment were not without hazards:

> *"She put vinegar on her head and she burned her head."*
> (P10: 115)

An aspect of treatment was the quest for an effective repellent. The women felt that treatments should offer some protection from future infestation. However, they were aware that this probably wasn't the case and that repeated topical or mechanical means would have to be employed to keep their children head lice free:

> *"There's a new product it's a spray I don't know whether it works but I felt better about it as they didn't have them any more .....It made me feel better."* (P1: 101-103)

When there was no alternative but to use proprietary head lice lotions decisions had to be made about whom to treat. The women generally treated all the children even when only one was infested. Adults too would be treated but not to the same extent as the children; adult females rather than adult males for example. Control and eradication of the insects from the family and home was what the women sought and by treating those at apparently greater risk this could be achieved at least in the short term:

> *"In most cases if one person gets it everyone's going to get it, you might get rid of it but it will come back again."* (PF: 235-236)

6.3.4 Reflections on how head lice are passed from one person to another

Understandings about transmission of head lice from one person to another were generally that this was as a result of close head to head contact. As a result the women understood that the reason why children were most likely to be infested was because of the way they learnt and played together:

> *"The main focus is the school when they're playing together rarely put their heads together but on a table and given projects they have their head in. Now children have their hair tied back in my day it wasn't. Tying hair back now is harder it could be when her hair was down that she got infested."* (PC: 237-240)

However, though this sort of interaction was regarded as being about the lives of children the fact that they then carried head lice meant that they brought the shared life of others outside into the home. For many of the older women, though this was their understanding, they expressed surprised that head lice were still a problem. Their perceptions reflected a view that head lice were less common now due to improved levels of hygiene and better living conditions. However all women felt strongly that the main source of infestation from within the community was the school and while this continued to be the case there would always be those children with head lice who mixed with others and passed them on:

> *"School has a large part to play it spreads them around I don't know you're more likely to pick them up there."* (P5: 23-25)

All of the women sought ways to limit transmission to their children. Hair styles for children focused on keeping the hair short or tied back in some way to reduce contact with the hair of others:

> *"They stopped when we put her hair in plaits they stopped being transferred then. I was glad because I didn't have to keep checking her head with nit combs and newspaper."* (P17: 67-70)

However there was one occasion where potential contact with other's hair could not be avoided. This was when the women went themselves or with their children to the hairdressers. Salons were viewed as sources of infestation because equipment was understood not to be washed between clients and this meant that head lice could be transmitted by brushes, combs, hair curlers and other pieces of equipment:

> *"Then it came to me that the hairdressers could be the source of it because she's been a few days before 'cos nobody else in the family had it you know but erm I was really upset."* (P10: 121-124)

> *"A lot of people thought they got it from hairdressers....older people getting them from hairdressers. Hairdressers in the past refused because of head lice. They could pass it on with the rollers though blow drying's OK. Some don't wash or sterilize rollers so anyone could be using them s'pose they can't wash them every time."* (PD: 167-173)

This was a point of vulnerability for the women; a constant concern in their minds that meant that they might be actually present as their children were being infested and yet have no not control over this. The prospect that there was someone whose infested hair had been styled before their child or themselves was ever present. Though this troubled the women they did not ask for equipment to be washed as this was something that was not acceptable in a salon. However the potential for transmission meant that there was someone to blame if infestation was subsequently discovered and this meant that responsibility could shift from mother to the hairstylist.

Once again, this time in relation to transmission, perceptions about the insects preferring clean heads rather than dirty ones re-emerged. The beliefs that clean heads attracted them, that they only went onto clean hair and that their origins were dirty heads but they sought out clean hair in order to survive and breed were common. In relation to this it was important to keep away from those who might be infested and the women tried to categorise such people in order to guide their children. These groups included children who were dirty and uncared for and children from poor families, though this contradicted the view that it was a common childhood complaint that everyone was potentially open to experiencing them:

> *"It's much easier to get them if the children come from poor families."* (P16: 64)
>
> *"Someone who is undernourished will pass it on to someone who's fit."* (PL: 112)
>
> *"My mum always told me to keep away from certain kids they were the ones she thought were dirty."* (P6:203)
>
> *"You can catch them from anyone. Anyone can have them."* (PI: 135)

Overwhelmingly the women perceived the major way in which head lice were transmitted was by some sort of contact with other children in school. Some were specific about those who might be more likely to carry and pass on infestation in the school environment but generally these views were unspecified:

> *"I have no idea where they came from in my daughter's perhaps one girl in the class with longish hair or someone they played with in the street."* (PC: 64-67)

Despite this the women felt that there was usually a source of infestation within school and that this unidentified child was from a home where no one cared for them or took the time to keep them clean. This child became the focus of the women's attention as an innocent individual who provided society with the chance to see how others mothered. They were a source of infestation for their own children and therefore to be avoided until treated.

Though these views were evident some of the women were unsure about the origin of infestation. They understood that the insects were passed from one person to another but how this happened and who was involved was sometimes unclear:

> *"I don't know where they came from. I know you can catch them from other people but I don't know where they get them from. If you can catch anything from someone you do feel that you don't want to get it yourself like a cold. It's a fact that it can be passed on."* (PD: 233-238)

Though close social contact was what actually brought the experience into the home the women's perceptions were that other forms of contact in other environments could also transmit the insect. Travelling on the bus was seen as an experience that was fraught with the potential to catch head lice because as people sat still it was possible to see them on someone's head and this made the women more conscious of the potential for other forms of head lice transmission. Indeed the fact that head lice could be seen in this way was to indicate to the person watching that this was someone who should be avoided. Those who had seen them on others also remarked at the fascination of watching something move in someone's hair without that person being aware of their presence and its implications. It also gave them the opportunity to protect themselves and their children from the risk of infestation that those who were unaware carried:

> *"I was sitting behind someone on the bus one day and I just noticed that there was something on the woman's hair in front. When I looked there were quite a few of them....uhg.... she obviously didn't know but it made me itchy all day."* (P20: 29-33)

Most women had these anecdotal tales and from these it seemed an easy move for them to speculate how head lice could spread in environments where people were in close but not intimate contact. These beliefs centred on the understanding that head lice just walked from one person to another and made their way to their hair:

> *"You can pick them up on a bus you don't need to have your heads together."* (PJ: 63-65)

> *"You could see them and they could just walk from one person to another."* (PL: 145-146)

Though these understandings are not scientifically accurate the women used them to indicate that accidental transmission was possible by such indirect routes and as a result blame could be placed on an unidentifiable person who was the source of infestation. This eliminated the need to justify why the infested family member had caught something that suggested that they had been in very close contact with someone who should be shunned and avoided. It also meant that the infestation could not have come from anyone inside the family.

Beyond direct contact with people some of the women talked of other potential sources of infestation in the environment and while these were not as evident in all the stories the fact that they were present did give interesting perspectives into the understanding that some of the women held. For example, some women thought that head lice could be contracted from trees and grass:

> *"I was tossing* [rolling over] *on the grass and I picked something up and my mum had to clean my hair and get it cut."* (P3:110-112)

> *"Sitting next to someone they could pass them on like that but they could be linked with grass but you couldn't really get them like this it could be coincidence."* (P14:231-234)

From *"sand nits in West Kirby"* (P8: 3), *"derelict houses"* (P6: 37), *"old bomb sites"* (P18: 96), from *"dust on your shoes"* (P7: 132) *"dirty soil like impetigo"* (PB: 61), from *"windowsills"* (PF: 226) from *"straw and mattresses"* (P13: 76) and from sand and mud:

> *"Playing in the sand you get them from there with all the stories going round I keep them out of the sand and I don't let them go near mud."* (P2: 135-139)

These varied beliefs often emerged from the experiences that the women had as children and perhaps represented their own mother's attempts to talk simply about something that they wanted to make less important. In addition, they may also have been used as a way of giving children a socially acceptable explanation of infestation that they could easily offer to others if asked. These understandings were enduring and were taken into account when the women had to make sense of where their own children had come in contact with head lice. If they came from the environment beyond the home then this was a common social and physical environment shared by others. So in suggesting this the focus of the infestation shifted away from the family and the home and was more about sources of transmission that were inorganic and thus did not carry all of the associations with social diseases that contact with infested people brought.

Many of the understandings the women expressed through this theme were concerned with how they related to people and things in the environment. The interaction between these created complex understanding and explanations that the women were happy to generate and use. The importance of other people's views when helping women form their own beliefs about head lice during childhood or in early family life was undeniable. This was evident within all of their stories and is illustrated, in relation to this current theme, by the following:

> *"When I had children we lived in flats and I wouldn't let them go out because I knew they were in the environment. My ideas came from listening to other people in the school yard and this directed the way I felt ....it was listening to others....I was so naive so young."* (P2: 42-46)

6.3.5 Cluster Summary

This cluster of themes uncovers the understandings of the women in relation to the insects themselves from their beliefs about who is susceptible to infestation through the practicalities of actually detecting their presence and eventually make decisions about treatment options. Understandings about transmission are also covered within this cluster of themes.

6.4 The meaning and impact of social stigma

This cluster of themes is concerned with the way in which the participants and others in society view the experience of head lice infestation and the extent to which this impacts on personal perceptions, beliefs, choice and decision making. The themes are about the understandings of stigma, the perceptions of others, the associations that are made with head lice, and the implications of telling others about infestation.

6.4.1 Understandings about stigma and the perceptions of others

The women's beliefs about stigma were complex and associated with a wide range of understandings about head lice infestation. These were often at odds with each other and focused on the women themselves and the others in society with whom they interacted. The view of one woman encapsulates this:

> *"There's still stigma attached to it even though I'm educated and experienced I still felt ashamed though I would never impose this on others I would reassure others. But as soon as we got them I felt the whole world knew I was a bad mother. You're mad to feel like this...... even with scabies people feel the same way....dirty.....it must have come from the outside and there must be someone to blame. Maybe it's to do with itching as scabies is the same."*
> (P16: 274-283)

Across all women poverty, deprivation and infestation were common factors linked with the stigma of head lice. This was not just about those who might infest others but was also about self perceptions which, though perhaps considered illogical by others, were no less very influential in their overall perception of the experience. Talking about these factors was something that the women found difficult and they hesitated and chose their words carefully when disclosing these beliefs. It seemed that as they considered what they said they opened themselves up to being labelled by others as well as perhaps seeing themselves as other see them:

> *"Well I think it's to do with erm........I know this sounds a bit. I sort of think scabies and nits and things like that .....It's like uncared for houses and so I felt this reflected on me that he wasn't being properly looked after."* (P15: 302-305)

> *"An' you put it down....I know it sounds awful ....Put it down to like poverty......... an' like uneducated people."* (P11: 381-383)

The most powerful aspect of the stigma associated with head lice was the profile that a family with head lice presented to society. All of the women shared perceptions about these families and these included families where mothers were disorganised and did not care for their children. Where they were poor and lived in poor, disadvantaged conditions. The families were viewed as uneducated and dirty and older women believed that those who had lots of children presented a typical profile. Also where parents had drug and alcohol problems and were frequently drunk the likelihood that the children were infested increased. Many of the women used the term *"not nice families"* to describe their perceptions; the term bringing together the fundamentals of their beliefs. These images illustrate these understandings:

> *"I can close my eyes and see a particular family they were rough and dirty and stood out a mile....the house and the way they were dressed....There were lots of kids like I was lucky I came from a house where mum cared and made clothes and we were the best dressed. Lots of kids like that had no shoes and were more prone to them but the mother didn't do anything....It's down to the responsibility of the mother...the mothers never bothered smoking and sitting in the house... I don't know whether kids were sleeping in the same bed because this is how they're passed on they were tough as well because like they were they had their heads shaved."* (PC: 183-194)

> *"I remember getting my hair cut off and mum saying that I had to keep away from certain kids dirty kids even when they were clean. She didn't want us to associate with them as the mother wasn't doing her job properly......her children didn't have nits."* (P11: 275-279)

Such families were seen to be set apart from society in some way and to share a common outlook on life that was inwardly focused on their own lifestyle and needs and did not recognise the importance of social responsibility. They presented a reservoir of infestation that could be passed on to the rest of society and they were to be avoided as a result. The importance of this profile of the family with head lice was that it represented a need to locate the focus for infestation outside the family in the wider community. As a result these *"not nice families"* were to blame for the women's experience of head lice. However when they discovered infestation this was to see themselves and their families in the same way and this meant that others would assign them the "*not nice family*" label and this would open them up to judgement. It was this that created conflict in terms of how they rationalised the experience and acted:

> "*When I had to tell her* [her friend] *I made excuses...I felt reall dirty that she'd* [her daughter] *had them and then passed them on...I felt terrible....I think it's about what other people think.... when I told her I thought she'd judge me I felt it that way it was just the way I felt, but I felt guilty and dirty....I still feel they're to do with being dirty as they only live in dirty heads so what do you do?*" (P3: 292-299)

Many of these understandings had been passed from one generation to another and their impact endured the passage of time. Women could remember the way in which the beliefs of their mothers had influenced their own even though these were part of another time and a different society:

> "*I have all these preconceptions that my mum drummed into me...me mother never had nits when she was little but there were nits in the school. I had long hair and had it all cut off thinking they'd be prevented. Mum thought it reflected on her as only dirty people got nits and I felt that too. Mum went mad when we got nits and she told people not to come round to our house.*" (P15: 192-199)

They knew such beliefs didn't apply to them and yet the stigma associated with these images was so strong that they often justified this by talking in terms of the insect's preference for clean heads and the fact that such experiences were common to all during childhood. Some justified these views by saying that though stigma was an issue in the past it was no longer present now as infestation was not about previously stigmatizing factors. Older women justified their beliefs by saying that stigma had been much stronger when they were children and young mothers but that now this was not the case and that women today saw the experience differently and dealt with it in a more matter of fact way. Despite these justifications for the uncomfortable understandings that the women had they pervaded all of their stories, appearing in different guises but all sharing a common foundation of views about those who had head lice.

As a result of these beliefs the women were uncomfortable revealing to others that they had head lice in the family for fear of being labelled. They realised that others would share the beliefs that they themselves had and, as a result knew exactly what others would be thinking. The stigma of being infested was to draw attention to the women and in social places, where others were present; this was for them to actually see people, up close, making judgements about them and their family. They recalled going to such lengths to avoid this, for example *"waiting until everyone goes in the chemist so that I can ask"* (P11: 173). Another woman expresses her feeling thus:

> *"In the shop I panicked; yes it was the fact that she had them that reflected on me. I thought what have I done wrong?"* (PA: 102)

Sharing with a member of pharmacy staff for example, or any other person involved with health care was seen as less of a threat in terms of the risk of being labelled and in talking to them the women preferred privacy. However the fear that privacy would not be available and the embarrassment that any revelations generated were sufficient to make women think about other ways to address the problem. An alternative to this was where the women could access treatment without having to consult with someone outside the family. Shops where treatments were available off the shelves met these criteria though the fact that others might recognise the treatments packages was also fraught with embarrassment but was easier to manage.

Privacy and secrecy in the public arena were important but these also created conflict with close social relationships. By keeping the experience hidden within the family this allowed the women to reduce embarrassment and control stigma but this had to be constantly balanced against the relationships they had with others. This was particularly difficult where other children known to the family were involved. If their families were not informed this reduced the opportunity for their mothers to make choices and decisions about detection, treatment and prevention. However, this could have a negative impact on established relationships and result in social exclusion and loss of friendships. Careful consideration about how infestation should be addressed was difficult in such circumstances and often dependant on the experience, advice and support available from other family members, in particular their own mothers:

> "*My daughter was embarrassed and didn't want others to know but I reminded her of the past with friends not wanting people to know and she was happy that a girl who had spent the night that her mum was told she was OK with that though she didn't want her partner to know.*" (P5: 58-62)

Stigma associated with the experience of head lice was not just about the perceived responses of others to those infested but was something that was reinforced by pictures of the insects, the smell of the lotion and the fact that it was possible to be unaware of their presence while they and their eggs could easily be seen by others:

> "*The hardest part is getting rid of the eggs as you can still see them…I do get paranoid…I can be sitting next to someone and just look at their head...if someone's sitting next to me I'd say excuse me I've got to get off this bus.*" (PA: 301-305)

Even to scratch one's head was an indication that head lice could be present in the hair and this could cause others to reach the conclusion that they were infested and therefore exclude them or their children in some way:

> "*Your head's itchy and you feel as though others are watching you. If you scratch your head you worry about what others think about you…..She's got a dirty head…..*" (PD: 268-271)

and

> *"You're inclined not to go near people if you think they've got anything like that."* (PD: 271-273)

An itching head was something that made the women *"feel dirty"* [P8]. Whether this was because the presence of the insect was suspected or because others might see them scratching and believe this to be the case is unclear. Certainly the women recalled how they and their mothers had frequently told their own children to stop scratching their heads for fear that others might think that they were infested. Scratching would also be a reason to check a child's head just to make sure that they were head lice free:

> *"....And then when you have had head lice you're obsessed every time they scratch you drag them out and try to look."* (P9: 225-227)

Scratching, head lice and the stigma attached to these are evident when the women commented that they scratched their heads at the mention of head lice and nits. They acknowledged that what took place was unconscious and yet at the same time they offered an apology as a confirmation to others that they were not infested and should not be stigmatized. This action and the words spoken with it was more about the unsaid than the said:

> *"I don't know where it comes from its just horrible but everyone just starts scratching at the mention of nits."*
> (P13: 4-5)

The association of scratching with head lice infestation was not just concerned the women's individual experiences but was also shared with others in the community and it was felt that this was used to actually identify children who were potentially infested especially where it was known that they had been in contact with others who were. School was the main social setting where this was likely to happen. Here staff could not physically check the children's heads so instead the women talked about how they used scratching as a way of identifying those who might possibly be infested. This then allowed them to contact individual parents privately and kept the circle of people who knew about it to a minimum. Teachers were also seen in the same light as health care practitioners in that they would not judge but were there to act in the best interests of the family:

> *"The school phoned up and asked me to come and collect her as she was scratching as there was head lice in the school but she hadn't go any obviously they were in her class but the teacher helped prevent them....There had been a child with nits so they knew they were there and she [daughter] was itching so they wanted me to come and check."* (P14: 168-173)

The stigma about being discovered with head lice in some social place was a particularly distressing aspect of the women's understandings; school and the hairdresser being the main locations. In both settings head lice could be openly discovered by others and this meant that seen as a social outcast and someone to be excluded or avoided. Hairdressers held a particular fear for the women as it was difficult for them to examine their own hair and be sure that they were infestation free prior to an appointment. Their concern was not just with how infestation would be dealt with in this environment but also whether they would be told if it was discovered. There was embarrassment associated with this and should they not be told there was the possibility that the hairdresser would judge them without giving them the opportunity to explain. As a result a trip to the hairdresser was not always the relaxing and pampering prospect generally perceived:

> *"I was afraid when I went to the hairdressers that I had anything and that they didn't tell me....I wasn't afraid of catching things maybe because of my earlier experience of someone else* [school nurse] *discovering them....You don't check your own hair you don't hear about people having them when you're older."* (PG: 214-218)

> *"I didn't know I had them then I'd gone to the hairdressers they were dear and very posh and she told me I was really embarrassed I wanted to get out as I was feeling dirty and thought you must be dirty… I was embarrassed that they were telling everyone that I had them I had to do my hair I couldn't do it properly."* (P16: 356-362)

Interestingly the mother of one of the women had been a hairdresser and she had said that if someone came in with head lice her mother would have told them. She would have continued to cut and style their hair but would have disinfected all of her equipment afterwards. Despite this her mother told her that she had never actually encountered them.

6.4.2 Perceptions of School and the School Nurse

School was an equally fraught experience for the women particularly when the *"Nit Nurse"* visited. Until the end of the twentieth century children were examined by a school nurse for head lice and for the women this was something that they had all experienced as children. What would start as a shared experience of *"you know you'd all line up and the nit nurse would come in"* (P11: 42), would quickly become an isolating experience where those who were infested were singled out and labelled:

> *"When we were younger we all had to get checked you got a white slip of paper and a smelly head and they called after you. It was frowned upon as being dirty, living in a dirty home, being dirty yourself. It's silly when people know different. Children were cruel they'd come back smelling and got called names. Mothers would say "don't play with her she's got a dirty head….they don't check heads now."* (PK: 335-342)

It was often not the treatment that created the feeling of exclusion but rather the card, letter or slip of paper that those who were infested received and then took home to their parents. When the women were young such children were easily identified because of this:

> *"I mean you knew those names that they were going to the school nurse so you were identified. The teacher may not have thought you were by just giving a letter but you were."* (P17: 279-283)

> *"But I remember the children pulled up by the school nurse they were identified sort of it wasn't meant to be publicly but we knew and you'd see children from. It was always poor children you know. The word stigma was attached to you if you got that note from the nurse."* (P10: 321-326)

If the women (as children) were the ones receiving the notification, their own mother's response was of embarrassment and dismay that the family had been singled out in this way. Not only were their mothers open to criticism from teachers and school nurses, but the fact that children in the local community were also aware of their infestation meant that other, local mothers knew too and the family would be seen in a different way and excluded. Children were told to keep away from those who had been found to have head lice in order to prevent them being brought into the family and this meant that the women's mothers knew that the risk was that their children would be isolated and humiliated should they become infested too:

> *"I was terrified because once someone found out you had them you could be alone because mothers would warn them against playing with you. You were singled out in the class in the playground and the teacher looked at you differently."*
> (PK: 305-309)

In addition to this, for some children the stigma was not just about the discovery of infestation or the receipt of notification but also about changes in their physical appearance. At the very least the women all shared memories of children commonly coming back to school with very short hair. However, for many, memories were of shaven heads or heads covered with scarves. These childhood physical images acted to warn others to keep away from them. This exclusion was concerned with the associations that others held about those most likely to be infested rather than the infestation itself which by then had been treated. Their appearance meant that they became targets of humiliation and because each child was identified as being infested the family shared this also. These images illustrate this:

> *"At school if your head was alive your hair would be cut off and shaved to your head. You just accepted that kids would be like this I wouldn't do anything against them but they just stood out y'know."* (PC: 221-224)

> *"It was horrible children chanting so and so's got biddies she's had black, wavy hair and it was all cut short. She must have had them badly and they'd cut off all her hair. I was shocked and I remember thinking that she was poor."* (P8: 321-325)

Despite the school head inspection and its consequences creating so much anxiety and humiliation as it isolated infested children, the women overwhelmingly mourned the demise of school nurse head examinations; they felt that it was this that was largely responsible for a perceived increase in infestations. Predominantly women, school nurses were a group to be feared as they chose whether children [and their families] would be singled out. When head inspections took place the women hoped that they would *be "passed over"* (PJ: 67) and relief was felt if this happened. As a result routine head inspections by their own mothers were not only about keeping a check on infestation but also about ensuring that their children passed these vital school nurse inspections:

> *"The school nurse generated stigma when you had them and she found them I was worried what if they were found I was afraid of this."* (P5: 322-324)

> *"I was never afraid of the nit nurse because they only took someone away if they were doing wrong. They used to keep a check on the kids. My head was fine I wasn't frightened and I wasn't afraid of her with my daughter either."* (PC: 305-309)

Understandings about the school nurse frequently centred on the social responsibility of other mothers who might not be aware of or be unable to act to deal with infestation. Here the school nurse was seen as someone who could draw attention to a problem that may not be recognised by other mothers and in doing so would be able to enforce action and treatment for the benefit of the greater good of the community:

> *"I didn't know what the nit nurse did I just remember a clinic up the road from the school. The nit nurse would look in your head and you'd go back to class and this family of tough nuts would come back with their heads shaved. It was the only way to get rid of them they had to do something."* (PL: 283-288)

> *"During the war in junior school the nit nurse would come and if there was nothing there then she would pass me by 'cos mum used to take good care of my head. Any children that had head lice were sent to the clinics and had their head shaved it was the only way you could get rid of them if the mother wasn't going to do anything."* (PC: 234-239)

However, the actions of school nurses were also viewed as a means of punishment for mothers who failed to care for their own children or who did not meet the social responsibilities required to protect others in the community:

> *"I disagree with doing away with the nit nurse. She did a good job. She caught those who had it and then they were sent to have their heads dealt with."* (PK: 156-158)

They were seen as policing the family and the mother's actions. Their loss meant that mothers became solely responsible for the detection and treatment of head lice and it was not possible to be sure that those other *"irresponsible"* mothers were responding to the problem as they should. The women feared that other mothers would not act in the right way or may not tell others of their own infestations for fear of being labelled and stigmatized. Infestation rates would therefore increase and there was no one there to intervene. Suddenly the school nurse who had taken responsibility for this had gone and the women questioned whether mothers would be able to act in the socially responsible way that had been demanded by the school nurse in the past:

> *"I think stopping them's [school nurse] bad. Parents don't give two hoots and it's not fair to the ones that look after their children."* (PA106-109)

6.4.3 Keeping experiences secret or telling others

The stigma that the women attached to head lice was a strong influencing factor in whether they were likely to tell others that there was infestation in their family. The perception of others was important to the women. They felt that it was a social responsibility to inform others, for example, school that they had discovered head lice, but whether they actually did this became a complex act of decision making during which they had to consider a great deal. Though they always wanted others to be socially responsible and to tell when their child was at risk of being labelled, their own decisions about this were not as easy to reach.

The subject was a taboo when they were small and they remembered being told by their mothers not to tell anyone if head lice were found:

> *"I don't think we were encouraged to tell anybody because it was erm..... You know we didn't tell people at school I don't think erm..... Like now you're encouraged to aren't you...... Me mum didn't want us to it was thought of as being dirty."* (P12 256-260)

Often head lice checks at home meant that even if they were found the children might be unaware as the routine of fine tooth combing the hair was the same whether lice were present or not. As a result it was easy for mothers to keep this to themselves:

> *"My mum was very good looking after our hair she did it regularly every week at the first sign she would deal with the situation. Maybe she never said anything to me perhaps she felt she was letting things slide or if I said anything outside there's be a stigma because mum was so keen on it."* (PJ: 248-253)

The women felt that negative feelings about head lice infestation had been much stronger in the past than they were when they had experienced it as mothers themselves. They believed that shame was more evident when they were children, as was guilt and embarrassment and this influenced their own mothers in telling others.

As adults they remembered considering childhood experiences when making their own decisions about whether to tell or not. Outside the family, though they had been encouraged not to tell anyone as children, they thought it was a maternal duty to do so and this created some conflict. By telling people they would be judged as mothers and would feel guilty yet they felt guilty if they did not. Telling others would also expose their children to bullying and labelling and guilt was associated with this also. The women felt that they could not win; as a result many never told their children that they had head lice for fear that they would tell others, nor did they volunteer information to anyone outside the family:

> *"If other children found out the children get called names erm...Children can be cruel. My friend said I wouldn't tell as they get taunted at school."* (P15: 163-165)

In doing this they went against what they expected other mothers do in such situations. Consequentially, telling others was perceived very differently depending on whether it was their own family or someone else's that was infested and whatever decision was reached was ultimately fraught with some guilt and shame:

> *"Even now I would wait for someone else to say before I said my children had head lice I wouldn't volunteer the topic in conversation"* (P1: 273-275)

The women's actions were therefore different with most keeping the experience secret. Of those who did tell they did this and justified their actions, in terms of their understandings that head lice infestation was a common childhood condition, was not about dirt and that the lice preferred clean heads. Exposing themselves to criticism and social judgement was therefore justified as a public service.

6.4.4 Cleanliness and Un-cleanliness and perceptions of contamination

Understandings about cleanliness and un-cleanliness were viewed by the women as fundamental to care giving and these influenced the women made sense of infestation. These had two main dimensions; one was concerned with themselves and their own experiences of cleanliness and un-cleanliness within the family, while the other was about these in relation to others in the world outside the home. Their understandings were complex and represented a constant conflict between perceptions of infestation with its associations with dirt, poverty and poor standards of care and the rationalisation and normalisation of the experience as one that was common to all families regardless of care standards. This created a paradox of understandings about cleanliness and un-cleanliness in that all views were held legitimately about the experience that was perceived as an assault on the women's abilities to be caring mothers and protect their families from the world beyond the home.

Though the women's beliefs about cleanliness were about the social stigma of head lice, these were often only initiated by direct, visual contact with the insect and this influenced the way that they viewed and responded to the experience overall. Overwhelmingly they did not like actually having to see the insect in their children's hair, though they knew that this was something that was a feature of the experience and had to be dealt with in a matter of fact way. However, discovery still filled them with horror:

> "*They're horrible.*" (P9:100)

> *"I don't like them they come across as something dirty because it's crawling…dirty because of them themselves…like fleas. I've heard that you don't catch scabies through dirt. I see it all as dirty and horrible and I don't like it."* (P4: 205-209)

An element of this was that the women themselves felt unclean and the physical presence of the insect was a statement about them as mothers. The insects identified them as dirty and they themselves saw that this was about failing to care for and look after their family:

> *"I felt dirty in myself when I saw them on her head. I felt dirty."*
> (P2: 103)

> *"I felt dirty, horrible an' not right. I was disgusted 'cos I'd kept them so clean. Later the kids got them again they're just dirty."*
> (P14: 35-36)

> *"I felt dirty horrible. I went around and stripped every bed I put them in Dettol. I felt they'd spread and I felt that I hadn't been cleaning up and that it was my fault."* (P3: 142-145)

They felt contaminated with other people's dirt. The insect fed on other's blood and lived in close contact with another's body and therefore always carried something of them. Those who did not have good standards of hygiene exposed their children to this and the responsibility for this lay not with innocent children who became infested but with their mothers. However, it was the child that was visible and represented what was taking place within their families. Once head lice had entered the women's homes the problem had to be addressed to remove any transferred stigma. Though treatment was viewed as an unpleasant or time consuming it was a necessary task as it was the only way that the insect could be removed and decontamination could take place:

> *"I was only upset because when I was little it was people who weren't particularly bothered about hygiene that got them; dirty people who had head lice it was the people who didn't wash. I suppose the people you'd expected. You know you always had people in your group who were...... you know.....that sounds awful....who were....whose personal hygiene wasn't as good as it should have been. With hindsight it wasn't their fault it was just that you were somehow contaminated with that."* (P1: 23-31)
>
> *"Somehow you just feel like a dirty person who's contaminated by having these things crawling in your hair."* (P17:331-332)

At a personal level this could prove difficult as they realised that where there was a head louse there was a nit (egg) and this meant that even if the insects were removed, if nits remained and were not dead, insects would reappear again and again. Despite this the women believed that, though this was a possibility, re-infestation was really something that took place outside of the family through repeated contact with those who were already infested.

Effective personal treatment was therefore essential and had to be swift and secret but, importantly, treatment of the home was vital to fully decontaminate and to make themselves and their families clean once more. The women talked of the importance of thorough washing of bedding, clothing, brushes and combs in order to prevent re-infestation but their understandings extended to the need to remove the insect associated with those who they saw as being reservoirs of infestation outside the home.

They felt unclean when head lice were present and treatment of the home environment was regarded as a way of re-establishing normal standards of cleanliness in the family as well as a way of washing away the impact of others actions in the home. They felt they needed to *"draw a line"* (P10) or *"make sure"* (P17) that standards of care in the family had been re-established:

> *"I don't remember having any guilt I just remember stripping the beds and the pillowcases as I just wanted it clean."* (P4: 184-186)

> *"I washed all the sheets everybody's sheet and pillowcases and I vacuumed all the beds. I had to feel clean. I had to do it. I kept checking the pillows and the comb just to make sure; just doing everything so that they didn't come back and I could draw a line."* (P1: 245-251)

These understandings were often at odds with what the women said in terms of justification for presence of infestation and their views that it was a normal experience for families. They stated that though they felt the need to decontaminate they knew that, because the insect had chosen their child this confirmed that they were clean as they *"only go to clean heads"* (P14: 171). The meaning of being dirty or being clean was therefore more than just about standards of hygiene it was concerned with perception of one's self as a mother and about what the insect represented to others beyond the family in term of care and mothering and that this would never change:

> *"Someone else could have seen my family could have judged me. Initially I was embarrassed as they could judge me as a person really. If they* [her children] *weren't clean then I wasn't clean."* (P15: 226-229)

> *"It's still about dirt it's still there now like it was years ago. You'll never get rid of it it's still there the stigma's still there."* (P2:317-319)

Overall older women felt that stigma was a thing of the past and that younger woman dealt with it in a different and rather matter of fact way:

> *"Women aren't as ashamed of it now they put it down to somebody else in the classroom; responsibilities are different now. No one would mention it years ago but people are more open now; it's like chickenpox. It wasn't like this when I was a child then it was to do with how you lived; to do with poverty then but not now."* (PB: 306-311)

This however was not supported in the women's stories as they expressed mixed views, sometimes talking about it as a common, childhood complaint that everyone experienced while also talking in terms of their perceptions of those who were the source of any infestation and the embarrassment of dealing with infestation themselves.

6.4.5 Cluster Summary

This cluster of themes reveals the women's complex understandings about stigma and labelling and the way in which personal understandings interact with those that sit in society at large. This is in part concerned with perceptions of themselves as well as their own perceptions of others when infestation in present and the belief that others will judge them and their families because of the associations that are linked to the presence of the insect in the family.

6.5 Chapter Summary

This chapter has explored the themes that emerged when the women told their stories about their experience of head lice infestation. It has provided description and discussion of how these are linked within and across the theme clusters. Each theme has been explored and illustrated with reference to what the women said and the five existentials of spatiality, temporality, corporeality, relationality and emontionality thread through each theme cluster.

The account demonstrates the complexity of understanding that is inherent in such every day experiences and clearly shows the essential features of the experience that are common across time and individual life-spans. The impact of culture, history and society during the twentieth century can be seen to influence the women's understandings but central to these are those that are shared and transcend culture, society and time.

The next chapter draws on the essential features of the experience that emerged from the women's stories and makes links between these and the other sources of understanding about it available in the wider social world during the twentieth century.

Chapter 7

Bringing the Discourses together: Discussions and Implications

This chapter discusses the relationship between private understandings and the social, historical and expert discourses that have shaped the women's experiences of head lice infestation.

7.1 Introduction

Understandings about head lice infestation pervaded family and social life during the twentieth century and their presence was used by the women and the State to gauge mothering standards and to scrutinize the family and family life. Understandings about infestation are therefore complex. As a result, the women's stories cannot be written about without reference to other discourses available in the world that shaped their understanding and provide social commentary, comment and context. Many of these come from wider society and represent social, historical and expert discussions, policies and research. In bringing all of the discourses together it is possible to see how their different perspectives are entwined. Some validity is also established for the women's memories and stories. The five lifeworld existentials are again threaded through this chapter to create links between the different perspectives explored and to bring the parts of the inquiry together. Critical reflection takes place and a clearer understanding is constructed; this is explored below.

7.2 Mother's as Providers and protectors of health

Mothers are responsible for the maintenance and improvement of child and family health. This was an understanding identified in both the women's narratives and the social and historical discourses studied. This responsibility was viewed from different standpoints in the various accounts but essentially all were concerned with the way in which individuals and society responded to the presence of head lice in both the family and wider society. For society it provided the opportunity to closely observe or comment on families and family life and assign responsibility and blame for the presence of infestation. The responsibility given to mothers was reflected in their narratives and they recognised the implications of these for their role within their own families as well as in society at large.

Within the social and historical discourses consulted mothers are viewed as providers and maintainers of family health and Jones (1994) argues that during the twentieth century this was a common and strongly held belief. With an emphasis on child health and domestic life there came a greater emphasis on the behaviour of the mother in terms of the way in which they managed family hygiene; an aspect of this was that they were urged to take greater responsibility for their family's health in order to protect the health of the nation (Lupton, 1995 p43). Jones (1994) emphasises that social policy and public health attempted to apportion blame for poor health and social and material conditions to mothers during this period in history. In addition she states that, in reality, this diverted attention away from the major structural, economic and social public health issues of the times towards the family and more specifically mothers; the documentary sources consulted reflect this view (MacKenzie, 1976; Rathbone 1909; Semple, 1959 &1961; Wofinden, 1944).

The women who told their stories understood their responsibility from three broad perspectives. One was concerned with their personal role in caring for their own children and the way this might be perceived if others knew about infestation in their family. This was always considered alongside their understandings of whether other mothers acted responsibly to protect their own and other children from infestation. Thirdly it was concerned with societal responsibilities and the demands of the State that mothers become providers and maintainers of health and hygiene. This third consideration meant that the presence or absence of head lice infestation became a way in which women's acceptance of and responses to their responsibilities for childcare and child health could be measured and evaluated by society at large.

Mother's responsibilities for improving individual and public health extended beyond the family into other aspects of social life. Oakley (1993) points out that, as a result of women providing family centred care, this impacted on wider social and economic activity during the twentieth century. By using head lice detection as a screening tool to examine the standards of mothering during this time it was possible to use this for wider social surveillance. When the women participants talked about their mothers making regular checks for head lice this was so that their children would always present with no infestation when examined in school. The reason for this was so that mothers would not be judged as not meeting their maternal responsibilities and failing to provide good child care. This also prevented direct access to the family by the school nurse. Those who did not act to examine their children were seen to open themselves up to intervention by the school medical (later health) service and in the women's eyes deserved the stigma and social exclusion that this attracted as the service sought to protect other families from those viewed as socially and morally irresponsible (Burn, 1947; Stallybrass, 1946; Wofinden, 1944).

It is argued by Sears (1992) that during the twentieth century the focus of public health policy moved away from environmental concerns to focus on a number of other issues that included immigration sexual activity and family values. With this came a concern with hygiene in the home and individual responsibility. Many of the social and historical documentary sources explored reflected this view and commented particularly on mothers as providers of family health while at the same time blaming them for health issues over which they had little control (Burn, 1947; Semple, 1961; Stallybrass, 1946 & 1947; Wofinden, 1944). This juxtaposition for women was not uncommon and is illustrated by the outcome of a Medical Research Council report in 1924 which blamed the inefficiencies of mothers, not poverty, for the poor nutritional and health status of miners and their families at that time (Petty, 1985). The fact that women were responsible for managing household budgets, often in times of adversity and disadvantage further increased their responsibility in providing for family health (Nettleton, 1995). Indeed, even when women sought to improve the health of their family by increasing income through work within or outside the home this too was criticised because it took them away from their primary role as child carers and rearers (Semple, 1959). The women participants felt this too. This resultant lack of care was seen to be manifest as child neglect; one aspect of this was the presence of head lice. This understanding is also present within the social and historical discourses consulted and reflects a feeling at that time: society blamed women for increased infestation and poor care while at the same time it placed them in poverty for which they were also culpable.

Nettleton (1995) has pointed out that what people believe about health is influenced by prevailing political, social and medical ideologies and that their individual understandings will reflect those held within wider society. The women's narratives illustrate this through their understandings about infestation and time taken away from family life when women work. They viewed time spent searching and destroying lice as acts of mothering and the extent to which this was done was a measure of the maternal care that they and other mothers provided. Many were critical of women who worked as they were perceived as not spending enough time caring for their children. This represented poor mothering and infestation rates were seen to be directly linked to this lack of child care. The relationship between the time spent with children, head lice rates and measures of mothering allowed society to apportion blame for poor care and poor standards of hygiene to mothers. Perry (1985) has argued that in addition to this, mothers were also held responsible for many of the other social and structural issues that undermined community health over which they had little control.

7.3 Social Networks and Lay referral

The main providers of healthcare are therefore women, usually mothers and grandmothers, and most informal health care in the family takes place between those linked by family, kinship or neighbourhood ties. Those with extensive experience of certain aspects of life are consulted more often on the understanding that their credentials to advise are based on their experience and the relationship they have with the person consulting them (Helman 1994). Therefore informal consultations about head lice regularly took place between younger women with limited experience and their mothers with a great deal.

Many of the understandings about motherhood and care that the participants shared were therefore linked to their relationships with other women. According to Freidson (1970) when individuals identify a change in health status they seek out the support of others to whom they are culturally related; this is known as the Lay Referral System. Within such groups, for example a family, individuals with more power can often influence the way in which health concerns are addressed. The differences in age structure within the women's families meant that grandmothers held this position of power due to their own extensive experience and folk knowledge (Radley, 1994). They were regarded by the women as immediate and important sources of advice and support in dealing with an infestation that had to be kept secret. They also brought with them their own socially and historically influenced understandings of the experience which then changed the perceptions and understandings of younger women.

Consulting with older women in the family who had previously had the experience of head lice was common place and very influential as it helped the women to make decisions and act. Prior to this taking place the women also remembered their own childhoods and the way their mothers introduced them to the insect through experiences that largely constituted being subjected to routine examinations. The presumption here was that firstly, as children, they would see these family activities as matter of fact and while this reduced infestation it also made it easier to manage and keep secret any infestation discovered. In doing this the women were able to protect their families from the criticism and judgement of others. Secondly women used such examinations to show their children what the insect looked like and demonstrated how it could be found and killed and this gave them valuable experience which they could later draw on when they became mothers themselves. Oakley (1993) has pointed out that throughout childhood more is learned about domestic life and the role of women within the family environment than at school.

Towards the end of the century this became more important for the women as responsibility for detection and management increased following changes in policy and the removal of school head inspections. As a result informal networks within the family were often the only source the women had for confirmation of diagnosis and advice about treatment options. Older female family members became more important here as they were closer and trusted more than professionals. They understood the experience from "the inside" in terms of the need to respond quickly so that secrecy could be maintained and stigma reduced.

Keeping the experience within the family and using older women as consultants enabled the women to discuss their feelings and to gain reassurance about how they should feel and respond to the experience; this was achieved within the safety and security of the family environment. Older women provided practical advice and support and understood the nature of the associations and the stigma attached to infestation and the importance of keeping the experience within the family. Decisions about who to tell or not tell were undertaken through discussion and were as much about treatment and management of the insect as they were about the management of their own perceptions and the perceptions of others. The experience was essentially maternal and the women's responses and decisions reflected the level and quality of mothering that they felt they could provide based on their own knowledge and the family support that was available. Such encounters with other women in the family generally took place at the point at which there was some concern about infestation and always took place in the privacy of the home where the potential for the criticism, comment and the judgement of others was contained and controlled.

7.4 Lay and Professional Understandings

Despite the importance of these family networks and the lay understandings that they created for the women the majority of documentary sources of the time do not consider these. In the socially orientated sources such as the early local school medical officer reports at the beginning of the century, though the family and family life are viewed as having a major impact on child health these are only commented upon in terms of their shortcomings to deliver socially acceptable care. Textbooks of the period take a similar perspective. This lack of concern with lay understandings is also evident in many expert, clinically orientated sources from clinical guidelines to entomological and epidemiological research (Elgart, 1996; Ibarra & Hall, 1996; Maunder, 1992, 1993 & 1996; Oliver, 1994; Sadler, 1997; Vermaak, 1996). In these documents, personal experience is commented on only as an aside to the more fundamental scientific discussions that take place. The expert discourses are aimed at healthcare practitioners and the writers present their findings in a manner that is about providing safe, evidence based treatment and, as a result, they do not explore the experience from a personal, social perspective and fail to take this into consideration when planning care and treatment.

An example of this is the conflict that was evident between expert discourses and the women's understandings about the source of initial and re-infestations. The women believed that infestation always came from outside the home; it never emerged from within their family. It was another person who was responsible for introducing head lice into their family. When the insects reappeared after treatment the source of this apparently new infestation was also seen to come from someone else in the community. Coupled with this was the belief that chemical treatments did not work properly; they created resistance and their failure meant that they provided no ongoing protection for their children from others who were infested. This is in sharp contrast to the expert sources which state that when head lice returns so soon after initial infestation and treatment it is more likely to be due to non-compliance or inadequate and inappropriate use of either chemical or mechanical treatments (Magee, 1996; Teale et al., 2008). The other possibility for re-infestation that emerged from expert sources is that a member of the family is carrying the infestation, has not been treated, and is therefore re-infesting the family. Neither of these were options that the women considered.

The implications of these understandings are that when healthcare practitioners provide advice and treatment based on clinical guidelines these may not encompass the whole experience. It is therefore essential that they have some understanding of the social and cultural issues surrounding head lice as, should treatment fail and re-infestation happen, women seek to blame someone or something outside the family. This is the case even when inappropriate use or non-compliance is the cause. Proprietary treatments can therefore attract blame for recurrence and with this there is the potential for healthcare practitioners to become targets for this also. Consequentially, any future advice they may give may well be seen as questionable or unreliable.

Milburn (1996) comments that lay people's understandings of health can be very different from healthcare practitioners and so to consult with sources that only give an expert, research based point of view is to see just one part of what is a complex experience played out within the family setting. Freidson (1970) agrees and points out that where lay people do not share many aspects of a healthcare professional's body of knowledge about an experience the decisions that they reach many be very different depending on whether it is another lay person or the professional who is consulted. This is important as healthcare professionals are encouraged to offer evidence based advice and yet the experience of head lice infestation is personal and social and if these perspectives are hidden, unavailable or ignored professional support may not meet individual needs. Understanding beliefs in relation to all aspects of health is important, particularly with regard to how decisions regarding health and health seeking behaviours are made. Lay people's decisions are based on a diversity of understandings and the research of Blaxter, (1983 &1985); Herzlich, (1973); Pill and Stott, (1982); Calnan, (1987); and Popay and Williams, (1994) illustrate the complexity of this. As a result knowing how health beliefs originate and are maintained, and where or to whom people go to for advice and guidance helps when considering the most appropriate approach when addressing a health issue (Radley, 1994). In addition it is only by having insight into the nature of the perceptions, meanings and actions of lay people that public health practice can be developed and targeted to offer appropriate, sensitive, person centred support that seeks to increase self esteem and personal confidence (Lupton, 1995).

Though lay understandings about health issues were important in supporting mothers addressing infestation, in reality if women chose to access healthcare practitioners for advice and support what they said they wanted was the benefits that an evidence based approach gave them in terms of quick and effective management of the problem. As their experiences were always fraught with guilt and the fear of being labelled they wanted infestation to be dealt with as rapidly as possible so that others would never know what had taken place. From this perspective, though expert discourses did not take these views into account what they did was to provide healthcare practitioners with knowledge about treatments that allowed the women's needs to be met as quickly and safely as possible. The women's demands were therefore met and this helped them regain control. A rapid response also reduced guilt and stigma and promoted a speedy return to normal family life.

Though the use of proprietary treatments was a way in which head lice could be addressed quickly by the women a professionally confirmed diagnosis was required if the women needed a free prescription for treatment. This created some frustration at not being able to gain rapid access to General Practitioners in order to do this. As a result though professional knowledge and evidence based treatment was required and available there were barriers in obtaining it. Furthermore, because confirmation of infestations had to be made before a prescription (Aston et al., 1998) was given this stigmatized the experience in that those who could pay went to the pharmacist directly and received rapid treatment while those who could not had to wait for an appointment to see their General Practitioner. Many of the women commented that buying chemical treatments was expensive and that some had found them difficult to afford particularly where they had a large family. As a result cutting costs was an option and this meant that preparations were used sparingly and this encouraged recurrence and resistance. At a time when government policy was emphasising the importance of individual responsibility for decision-making and actions about head lice increased professional control over access to treatment seemed to undermine this and to create inequalities as it did so (Dines, 1994). It also placed the professional back in control, making the experience a medical rather than a social one.

The use of proprietary chemical treatments brought with it other concerns where healthcare practitioners were required to provide advice and support. The women felt that risk needed to be considered when potentially toxic chemicals were to be used on their children; though they felt that as contact was short term the benefits outweighed the risks (Public Health Laboratory Service, 1997). However, they looked for confirmation of this view from healthcare practitioners. The evidence based discourses and clinical guidelines explored supported this understanding and women accessed and drew on these indirectly through the knowledge of healthcare practitioners when trying to make treatment decisions. However the development of non toxic, non resistance forming chemical preparations that were quick and easy to use was a demand that the women constantly made. These are now available and provide a safe and non-resistance forming alternative to other chemical treatments and the use of wet combing (Burgess et al., 2007).

Towards the end of the century mothers were being given greater levels of responsibility for the detection of head lice. However, public health guidelines continued to state that professionals needed to continue their role in confirming a mother's suspicions of infestation prior to prescribing or giving treatment (Aston et al., 1998). As a result, though mothers took a much greater role in managing the problem, healthcare practitioners continued to directly control their actions where access to proprietary treatments were concerned. At the same time responsibility was difficult for the women to accept as those who were younger felt that they were often unprepared and did not really know what to look for. This then placed them in a position where it was difficult to readily seek professional confirmation of infestation and access treatment. In such circumstances their mothers would be the first person they turned to.

7.5 Lay Epidemiology

Many issues emerged when the women considered how they made decisions about dealing with the problem of head lice and some of these were concerned with the way in which they made an assessment of the risks that others who might have head lice posed to their children. This was complex as those carrying infestation were hidden in the community and this meant that it was difficult to establish their children's risk of firstly coming in contact with someone who might be infested and secondly actually becoming infested by them. The only way that this could definitely be decided upon was when the women knew who actually had head lice. Therefore when school health notifications of infestation were used during the twentieth century to identify children found to be infested, mothers were able to accurately identify those who carried them. This gave them some idea of the extent of the problem in their children's school and also in the community. Importantly it identified particular, infested families and women used these to establish a profile of the sort of family who they thought would pose most risk to their children and who they could go on to blame for infestations.

The decisions and actions that the women made about the risk of their children becoming infested were linked to their beliefs and understandings about the cause, transmission and management of head lice. This is known as *"lay epidemiology"* (Frankel et al., 1991) and is a method by which people reach decisions about a range of health issues that can influence their health behaviours and beliefs (Milburn, 1996). Through their narratives the women articulated a lay epidemiology shaped by knowing who had been given notifications of infestation or who had attended cleansing stations for treatment. However, latterly in the century though notifications continued to be given to children, there was a shift in the sort of information that informed this lay epidemiology. Once school head examinations ceased during the latter quarter of the twentieth century this came via indirect contact with parents through school letters that informed parents when head lice had been reported by other families. The difficulty with this approach was that it was unclear how many children might be infested and who they were. It also rested on the contentious point that successful control of head lice within a school depended on mothers being open and informing them when infestation had been discovered. If mothers felt that they could not share this information then this made it difficult for others to assess risk.

When lay people make judgements about these sorts of issues they are influenced by a number of sources that range from close family members to the media, the virtual community and the guidance of healthcare professionals (Allmark & Tod, 2006). At the end of the century the perception of the extent of the problem was being influenced for the first time by access to the World Wide Web where such health concerns could be explored with others from across the globe. There was limited use made of this by the women in this study and those who did access the World Wide Web tended to be younger. As a result it was not a major source of support in comparison to their mothers. Their discussions did however demonstrate that it was possible to gain access to other sources of information and to discuss head lice openly with others while anonymity was maintained.

Those who accessed head lice discussion sites shared their experienced within an environment where criticism, judgement and labelling was, to a large extent, absent. Though valuable in terms of the opportunities this allows for the sharing of experiences within a virtual community it does mean that infestation in one culture or country may not reflect the experience here in the UK in either qualitative or quantitative terms and lay epidemiology may be based on knowledge that therefore does not relate directly to an individual's own life.

The media was perhaps more important than the World Wide Web during this time though unlike today, it was uncommon for chemical treatments to be advertised on TV or in magazines or newspapers. Despite this, discussion did take place about the problem particularly in parenting and women's magazines but advice and guidance varied in relation to this and it was not necessarily evidence based. Images in magazines were also created of head lice being an extensive problem where risk of becoming infested was high. Examples of the various views available in the popular press and media are illustrated by the following texts. In *Best* magazine (Issue 23/99, June 1999), a reader's case study is used as the vehicle to offer guidance and advice about dealing with head lice to readers. The writer of the article, a doctor, responds with guidance about using combing with *"nit combs"* to treat them but the article also suggests the use of tea tree oil. It also gives advice about treating the family home environment even though both of these were not part of recommended practice at that time. From a different perspective, *Woman's Own* magazine (28 June 1999) provides advice and guidance about the availability of a homemade remedy that was now available commercially. Though such sources were available they were not accessed and used by the women to the same extent as the guidance they sought and received from their own mothers and this means that informal close familial contacts remained the main sources of support, advice and guidance.

While the risk to physical health was minimal for those infested with head lice its impact in relation to psychological and social health was considerable. In this sense, for the women, risk was not just about lifestyle but also the choices that were made as they responded to diagnosis and treatment. Personal understandings about susceptibility and perceived risk to one's family from others carrying head lice were important considerations. For women faced with head lice infestation any source of information about the problem had to be available without drawing attention to their own families. Therefore, in their stories older female family members played a vital role in this by offering experience, giving support and providing advice which stayed within the family. From their mothers the women learned more about the extent of the problem and the particular ways in which head lice presented in the wider community. These included cultural perceptions myths and beliefs that included understandings that some people were more prone to head lice than others and might actually breed them and that there were cycles of epidemics related to the environment, climate, body temperature and patterns of social contact.

Lay epidemiology however is not just concerned with social aspects of risk as it also extends to views about treatment options when dealing with a health problem (Frankel et al., 1991). While the women wanted rapid, effective treatment they were unhappy about using chemicals on their children and though they did not know what the actual risks associated with these were there was negativity in their views about the fact that they had to use chemicals which killed a living thing and came in contact with their child's body. To try and address this some women chose a combined approach to the problem, using chemicals and fine tooth combing. They saw this as a way of reducing risk even though it was time consuming and laborious. While the use of fine tooth combing alone was an option this was for those who did not want to use chemicals or where chemical were contraindicated (Aston et al (1998), in their report for Consultants in Communicable Disease Control). Advice was to control risk to chemical exposure by following the guidelines on the proprietary chemicals and applying them so that eradication was complete and rapid.

In the context of an established infestation, the women felt that though fine-toothed combing assuaged the guilt of repeated use of chemicals this was balanced against it being slow, arduous and demanding a much longer term commitment. The impact of this was that the experience was much less about their earlier representations of mothering and more about convenience. The women did not consider their poor use of the chemicals to be a risk factor in re-infestation and insect resistance and where women lost control over the infestation they blamed others. On such occasions manufacturers of head lice treatments were targeted and the women saw them as producing products that did not treat to the extent that was expected. This increased risk in terms of the chemical contact required to remove infestation. The emergence of the suffocating, low risk chemicals now available such as Dimeticone, may well have an impact on these perceptions as these are very low risk in terms of toxicity. However in giving advice and support about their use it has to be stressed that a treatment cycle still involves two applications (Burgess et al., 2005) as the chemical has to be left on for eight hours, only kills the insects and not the eggs. If not completed re-infestation will occur and women's faith in them would be affected.

7.6 Stigma and social exclusion

Head lice create stigma and many other conditions of the skin are similarly linked. There is a fear of contact with others infested and the social and physical contagion that this might bring (Chamlin et al., 2004) and the skin is the organ that separates and protects the individual from others in the world. It represents the barrier between the person and the bodies of others and the presence of a visible parasite that has fed on someone else makes the links to any perceived images of others carrying infestations concrete. As a result the women's stories were filled with understandings about how the experience of head lice related to their responses as mothers. All recalled strong emotions at the time of discovery. These were about disbelief, guilt and shock when they were faced with something that was living, feeding and breeding in their children's hair. However, these responses were not just about the physical appearance and presence of the insect they were also about the associations attached to these.

The stigma associated with the experience was, in part, created by the women as they considered their views and perceptions of others infested with head lice. However it was also about themselves and their fears of the judgement, labelling and social exclusion of others that disclosure could bring. As a result they feared the response of people beyond the home. This was therefore about individual understandings but also the way in which society has a part in creating these. The women not only held individual beliefs about the experience but these were shaped by the shared beliefs and understandings that they had access to. One way of looking at this is that this involves common sense theorizing where thinking becomes a socially shared activity that is best illustrated through people's stories (Radley & Billig, 1996). The social representation of the stigma of head lice infestation that emerged from the women's stories shows how this can take place.

Though the individual accounts of their experiences provided personal insights the influences from wider society played a major part in the construction of stigma and within the documentary sources explored these elements are clearly present. The documents offered views and opinions about perceptions of the experience of head lice and those infested that had little to do with personal experience and were more about the perceptions of other groups and organisations within society (Davies et al., 1966; Roberts 1952; Semple 1961; Wofinden 1944). These were evident in a number of socially focused documents from early Liverpool school medical officer reports and public health policy directives, to those representing the views of eugenicist writers. Furthermore they were evident in local and national government reports and legislation and text books used at the time to inform later public health practice. The images associated with the stigma of the experience found in these were of families who lived in poverty and mothers who provided poor care for their children and exhibited little responsibility for the health of their own or other women's children. Children in such families were dirty, malnourished and presented as suffering from neglect, while mothers were uncaring and irresponsible and lacked the knowledge and skills to be good at childcare. In addition they failed to spend time with their children and did not respond to them as others in society expected. Such families were seen to have almost created and perpetuated infestation by the way they lived and the way mothers within them provided child care. Porter (1999) illustrates how these perceptions permeated all sectors of society and public health claiming that the term *"maternal inefficiency"* was coined during the early part of the twentieth century to represent inefficient mothers who she claims were viewed as biologically programmed to behave in this way and were incapable of child rearing due to their low intelligence and inability to give affection (p179).

Clearly, notions of *"maternal inefficiency"* remain in popular discourse as the women described a very similar profile of the individual and the family most likely to carry infestation and therefore to create most risk for their children. The two profiles are remarkably similar and clearly demonstrate the intertwining of social and historical discourses with the understandings of the individual. The women in the study came from different points in history and had encountered different social experiences. Yet they shared fundamental perceptions of those who might carry infestation with other women as well as organisations, authorities and groups within society at large during that period. As a result the roots of the stigma of head lice stretched back throughout each woman's personal history and life-span not only in terms of their own experiences but also the way these were influenced by the understandings that came from society as a whole.

The ways in which people construct these sorts of understandings and meanings that explain the world are complex and they are the result of the social relationships that they have with each other; it is not possible to separate these from the rest of social life (Gergen, 1985). Moscovici (1984) has discussed the way in which people construct shared ways of interpreting and explaining experiences and how individuals use this to explain the unknown or to make sense of situations where their knowledge is limited. He calls this way of constructing social understanding *"social representation"* and the understandings of the women and the discourses available in the social world illustrate this. The understandings that emerge from this process are shared through the use of language and though each individual shares a particular representation with others they will never understand all aspects of it. Jovchelovitch and Gervais (1999) have argued that *"social identity, group norms and cultural traditions"* (p248) play a major part in the way that social health beliefs and understandings are constructed and this influences the way in which people respond to experiences and act to address them.

Socially constructed representations influenced the women and affected how they responded to the discovery of head lice. They talked at length about how their perceptions of others made them reluctant to reveal that they had infestation in their family. They did not want to be labelled and understood that by keeping the experience within the confines of the family and the home this enabled them to maintain secrecy. The women's negative images of others with head lice were also reasons why they ensured that their children did not have contact with those who were infested as they were people with whom they did not want their family to associate. The stigma they talked of was complex and in Scambler's words was *"felt"* and associated with shame and a need to maintain secrecy. At the same time there was a fear of Scambler's *"enacted"* stigma if others discriminated against them on the basis of how they came to be perceived (Scambler, 1989 & 1998). He called this the *"Hidden Distress Model"* (1998, p1054) and stressed that this response to an experience can affect personal identity and self esteem as well as making it difficult for health care professionals to offer the support and help that people need in order to address the problem.

Overall the women just wanted to have some control over what happened to their children. However, they realised that once they went outside the home into the community this control diminished and passed to other women who could dictate what happened in their lives. To catch the insect from another person was to bring a part of that individual into the home and to associate with them and what they represented physically and socially. These other mothers did not meet their own standards of care and hygiene and with the arrival of the insect in their home these adverse aspects of care arrived also and this unwanted influence had to be removed.

Though stigma and people's responses to it are socially constructed, Kurzan and Leary (2001) have argued that there is also a socially focused evolutionary perspective to this. They suggest that people are stigmatized because they possess a particular attribute that indicates to others that they should be avoided. These decisions are not individual but are shared and are concerned with identifying and managing attributes that may have a negative impact on group living. As a result individuals with such attributes become socially excluded. Parasitic infestation is one such attribute; head lice infestation is very easy to see. The parasite sits on the skin and lays its eggs on the hair, the shells of which are adherent and remain attached until the hair is cut or they are pulled off. In addition scratching may also indicate that infestation is present. These act as indicators to others that a person is infested with head lice and may also carry other infestations which may be harmful. While the understandings of the women reflect a social constructionist dimension, the impact of this alternative perspective, based on human being's abilities to solve problems associated with social life, must not be forgotten in term of the stories they told (Kurzban & Leary, 2001).

The links between typhus and infestation were clearly evident throughout the early to mid-twentieth century and reference is made to this in the documentary sources (Stallybrass, 1946a). Though head lice do not transmit typhus it is easy to see how people made the connections between the parasite and the disease and therefore saw those carrying head lice as bringers of illness and death. Accounts of the experience during the Second World War provide insight into this for example the Ministry of Health *"Memorandum on Louse born typhus fever"* (BMJ, 1941) and the "*Memorandum of the Louse and some other Human Parasites"* compiled by Gamlin for the City of Liverpool Education Committee in 1942. Additionally, some of the women's individual experiences of having to live in close contact with others in air raid shelters or during evacuation provide a more personal perspective:

> *"My mum was always afraid of me getting them when we were in the shelters."* (PC: 149)

From another viewpoint the evolutionary perspective of the stigma of head lice may be something actively created by the social hygiene movement and social and public health policy at the time as a means of influencing and directing society about who should be excluded and why, based on beliefs about preventing the decline of the British population and control of the poor (Jones, 1994). These views are also represented in the documents studied (Burn 1947; Stallybrass 1947; Wofinden 1944 & 1946) and when pulling sources together it is possible to gain a feel for the complex nature of the experience and the controversial understandings that it created.

7.7 Surveillance and the spaces between people

Much of the experience of head lice is therefore not about disease and its spread but more about how people see and relate to each other. It is about the nature and risk of close contact with other people, the social stigma perceived by others and the way that this was established in part by the response of the State. This filtered down to individuals such that women emerged as fundamental in maintaining standards of health and care in families and the way they dealt with the problem was concerned with their relationships with influential others who provided guidance, support, as well as to some extent control. Armstrong (1995) has talked about the rise of surveillance medicine in the twentieth century as a move away from environmental health considerations to a position where it begins to re-focus on the spaces between people within communities. From the early part of the century there was a recognition that the danger of ill health and the transmission of contagious diseases was about people and their points of contact. It was people who carried head lice into the community and passed them to others. As a result screening for infestation increased the attention given to the ordinary day to day activities of social life. With this came a focus on education for health and screening of the community which sought to identify the diseases that emerged as a result of social contact (Armstrong 1983). Lupton (1995) has pointed out that this created a need to identify and segregate people as *dirty* or *clean* (p38) and that surveillance, particularly surveillance of the child helped in achieving this. The poor were stigmatized as unclean and their homes viewed as places of disease and this brought with it an emphasis on personal hygiene and hygiene within the home.

Attendance at school provided opportunities to do this by screening children and head lice was one of the foci here. Opportunities arose to openly screen them and this provided insights into the private lives of families and the home environment in which each child lived (Armstrong 1983). Not only could children be regularly examined for head lice but under the 1944 Education Act they could be compulsorily cleansed and parents could be prosecuted for failing to comply with treatment. This conflicted with the social policy view of the family at the time that was about viewing family life as a private matter in which the State had little interest. However, Muncie and Wetherell (1995) point out that where families were seen to problematic or difficult to manage in some way this strategy was abandoned in favour of some form of active intervention.

It was with the 1907 Education (Administrative Provisions) Act that school nurses began to undertake health screening alongside medical officers and in all of the narratives the school nurse, *"Nitty Norah"* or *"the Nit Nurse"*, was an aspect of the women's experiences that was discussed at length. From the point of view of maternal responsibility and control the women telling their stories had conflicting views about the school nurse. At some times they perceived her (there were few male school nurses) as guardian of the family protecting their children from others who silently carried head lice infestation. While at other times they talked about their fear of school nurses as it was they who could single out children and their families and label them to such an extent that they were actually physically changed and labelled by having their hair cut short. When heads were shaved this became a ritual transition from inclusion to social exclusion; Williams (1987) has called such an experience a *"degradation ceremony"* (p137). When this took place the loss of hair resulted in a child being clearly identified as different and physically labelled as a result. Children undergoing this therefore became easily recognisable to others as having a deviant status and their physical image served to remind all of their position and the position of their family in society.

The relationship between mothers and school nurses was complex. For the school nurse this was, in the first instance, about the power to screen and treat infestation while being able to undertake surveillance on the intimate life of the family (Lupton, 1995). This is confirmed in the documentary sources where it is set out in legislation and local guidelines for practice as well as in nurse's comments about their role and relationships with school children and their families. Health reformers strove to educate for improvements in domestic hygiene and childcare during the early part of the twentieth century in preference to focusing on the physical environment. However, the use of regulatory practices to manage such social health issues as head lice continued up until the end of the century (Lupton, 1995). Jones (1994) has argued that health educational and screening strategies were used during this time to emphasise the culpability of women for poor health when they failed to provide socially acceptable levels of cleanliness and hygiene within the family. School nursing was concerned with educating for health and improving lifestyles in relation to this while health visitors educated young women in skills of motherhood and child rearing. However, school nurses involvement in family health also extended to influencing mothers and directing their actions as providers of family care and promoter of family health. In doing this it was possible to manage family health from the inside while at the same time, in screening particular aspects of child health, including infestation, this could be observed and measured. The school nurse was able to make judgements about children and their families and was in a position to legally direct and dictate how care and treatment within it was administered and managed. For the women in this study health professionals were seen to have immense influence over how their families were affected by the discovery of head lice and how they were treated in the name of the greater good.

The School Medical (later Health) Service, through the school nurse, increased control over family health on behalf of the state. For the women who talked of their experience of head lice this was about relinquishing control of their families and potentially having to deal with the stigma of public detection. In the short term when a child was treated for head lice in a clinic setting the physical label that was associated with the experience remained with them until their hair grew back or the smell of the treatment lotion disappeared. The label extended from the child to the family and in the long term the associations of this physical representation stayed with all those involved and influence their perceptions of the experience later in life. At the heart of this was the social sacrifice and stigmatization of the few for the benefit of the many.

Despite these complex understandings the women felt that with the loss of school nurse head examinations there was no one now controlling the actions of other families who may not care who they infested. Her removal by the State signalled to the women that head lice were no longer a problem in the community. However this conflicted with their views when head lice became a personal experience for them. At that point they felt that, as a direct result of the absence of the school nurse's inspections, the number of people within the community with head lice had increased. As a consequence there was more risk of catching them than there had been when regular school based checks were made. All wanted the return of the school nurse as they felt that they functioned to protect their families from infested others despite no epidemiological evidence to support this (Aston et al 1998; Teale et al 2008). As the responsibility for checking children and treating infestations in the later part of the century increasingly fell to the women alone this meant that they had to depend on their own knowledge, understanding and skills to protect their children from others and be able to detect and treat head lice. As a consequence other sources of knowledge in the form of trusted and experienced members of their families became very much more important.

7.8 Decontamination and the return to normal family life

The experience of infestation took place in the home environment where secrecy could be maintained with other close family members. For the women in the study an aspect of this was concerned with a need to remove all traces of the experience from the family home once it had been dealt with. This was important for the women as it was concerned with returning to normality. The women talked about checking pillow cases for lice, washing bedding and clothes, disinfesting brushes and combs and vacuuming the house to ensure that there were no live lice or eggs in the environment. Once contact had been made with the insect this meant that the attributes associated with the person who had infected the family had to be removed. All traces of this other, infested person had to be removed from the family home in order that home life could return to whatever constituted normality.

In many ways this was the final stage of the experience for the women; the end of a process which began with the shock and dismay of discovery and the disruption of taken for granted behaviour and beliefs which changed the their perceptions of themselves, their families and others beyond the family forever. They identified a need to address the change in family life that the insect brought with it and in the way that they viewed themselves. This was achieved through a variety of means that allowed them to rationalise the experience and re-establish something of family life prior to infestation. Bury (1982) identifies a similar response to health change in relation to an individual's responses to chronic illness. He calls it *"biographical disruption"* and talks of how the experience of chronic illness disrupts the everyday lives of people and the knowledge that underpins this (p149). While head lice infestation does not fit into this classification directly its impact on the social and psychological health of the individual and the family in the short term is considerable. The experience itself is short lived in comparison to the experiences that Bury studied but there are strong parallels with the process in that the women responses were as a result of their attempts to come to terms with, address and understand a health experience that brought with it so much horror, social stigma, self criticism, loss of self esteem and distress.

It is important for healthcare practitioners to understand the complexities of this part of the process and, though not underpinned by scientific evidence, the actions of women in this situation were based on something more that rationality and were more concerned with a return to life where they had some control over the health of their family. As a result it represents a passage through the experience which provides closure to a traumatic event and in relation to this may well be as important to the experience for the women as the treatments that healthcare practitioners provide. Despite this there is limited comment about it in the documentary sources reviewed and though there is support by a number of writers for the sorts of decontamination actions that the women talked about, confusion is evident in that there is no agreement as to best practice (Frankowski & Weiner, 2002; Speare et al., 2003; Department of Health, 1995 & 2007). The advice from the Department of Health is that it is not necessary to clean and remove all traces of infestation from the home environment (Aston et al., 1998; Teale et al., 2008). This is based on the understanding that lice only live for short periods once they have left the head, been treated with pediculicide or become damaged as a result of fine tooth combing.

Therefore, for the women, this was an important personal consideration that was about the removal of contagion, a return to normal family life and closure on the experience. However in expert discourses this is addressed in an objective manner that considers the accounts of people's actions merely as points of scientific interest rather than in terms of their social significance. This contradicts the view of Popay & Williams (1996) who have argued that if a comprehensive view of an aspect of public health is sought this can only be obtained by having insights into lay knowledge and understanding as these have a major role in the way people think, understand and act.

7.9 Summary

This chapter has pulled together the discourses about the experience of head lice. It has considered and discussed the relationship of the women's understandings to the discourses available in the wider society. This has brought together the different facets of the experience to create a clearer picture of the complex understandings that interact to influence this everyday experience.

The next chapter looks at the implications of the study and explores its strengths and limitations. It also draws the thesis to a close.

Chapter 8

The Implications of the Study: Discussions and Final Comments

This chapter looks at the implications of the findings of the study in terms of their impact on the development of public health knowledge. It explores its strengths and limitations and finally draws the thesis to a close.

8.1 Introduction

This study set out to discover the hidden understandings of women experiencing head lice in order that these could be made available for others to experience and reflect upon. It has identified the essential features of the women's understandings using hermeneutic phenomenology. In addition this provided an opportunity to investigate how these were embedded in the experiences of others in the wider social world (Somer & Quinlan, 2002). It is important to know what these understandings are as they shed light on the way in which ordinary people view and make sense of the experience and how they are influenced by factors which are often beyond their control. There are implications for the findings of the study in terms of both academic and professional knowledge and healthcare practice. These raise questions about the value of the study in the real world and some assessment of its strengths and limitations allow this to be assessed. Discussion concerning these issues is considered below.

8.2 Implications for Public Health practice

8.2.1 Qualitative Epidemiology

It is important to ask what the implications are for trying to discover more about mother's understandings of head lice in the twentieth century and to consider how relevant these are for the twenty first. Berridge (2000) has argued that in relation to this public health history has been ignored in terms of how experiences are perceived and the implications that these have for future health, policy and practice. He commented that quantitative research concerning twentieth century health experience is available but argued that because this has been the dominant research approach it means that there is much that has not been written down about people's beliefs, understandings and perceptions. Oakley (1993) has stressed that there is no point in gaining knowledge for knowledge sake and that this must have a social end and make some difference in people's lives. Knowledge in the form of the people's stories and narratives adds to the quantitative epidemiology already available and offers alternative views of an experience which add to the development of good practice. Lay understandings are therefore vital in public health research as both lay and professional viewpoints have a contribution to make to knowledge. There is no right or wrong ways of looking at health issues, instead what exists are multiple perspectives that are obtained from multiple sources by multiple means. This reflects the way in which public health has developed through the twentieth century to the present with a move away from the collection of statistics about passive members of society to one where lay understandings are given the importance and value that they deserve (Popay & Williams, 1996).

Head lice infestation is a case in point here as quantitative epidemiology is misleading in relation to the extent of the problem. In the early part of the twentieth century statistics provided information that allowed the extent of the problem to be mapped and quantified and those providing these insights were passive members of society. Towards the end of the century quantitative information became more limited as the screening of school children ceased. Sources of information became focused on the prescribing and selling of proprietary chemical preparations. These, however, do not give a true picture of the problem and do not reflect issues such as lay decisions making and understanding all of which represent a much more active public health approach to the problem that was driven from within society. Williams and Calnan (1996) have argued that this represents a trend in the de-medicalization of health issues and a shift in the balance of control between professional and lay perspectives in public health. In addition they point out that this also represents a change in the view of people at the end of the twentieth century which was more likely to be sceptical of what professionals within public health were providing. As a result the only available information that reflects the nature of infestation comes from individual experience and reporting and the willingness of people to talk about these.

Though public health policy and practice has to draw on evidence based sources to offer guidance about the prevention and treatment of head lice it is equally important to understand how and why people actually view, accept and use this. Insights into this are hidden in the narratives of the community and are only accessible through qualitative means. While the women's experiences heard in this inquiry sit in the twentieth century the fact that so many understandings are shared across generations suggests that these may be transferable and therefore as relevant now as then. Consequentially, it is possible to speculate that despite changes in context across time these will endure and will continue to influence individual women and their responses.

The individual must always be the focus of healthcare practice. Yet in order to achieve this there has to be some wider understanding about the factors that influence not only health but also the beliefs and understandings about health issues that impact on choice and action. In this study much of the social history discourse comes from social sources that miss the everyday experience and activities of people within society. They provide access to social understandings and perceptions across time but these reflect viewpoints that emerge from particular social, economic, political and professional agendas at their time of writing. From an anthropological standpoint this provides an incomplete picture of the experience of head lice as it takes little account of ordinary people's understandings. The women's stories however add to this dimension, changing its focus and creating a more complete picture that is about individual experience and understanding within the social and historical context in which this has emerged. Their narratives constitute events that took place in their lives and were being reported as oral histories. These are important as they allow the voices of ordinary women engaged in everyday domestic routine, to be heard against a background of social accounts, facts and research (Tosh, 1991). This highlights the hidden and allows access to a range of previously unexplored understandings about the experience of infestation that extend from the relationship of the individual with society to the perceptions of the role of women as mothers on to insights into domestic thinking, perceptions, decision making and actions.

The women's stories allow the voices of mothers to be heard. Greenhalgh and Hurwitz (1999) has stressed the importance of storytelling in an evidence based professional world. They point out that, because people live by the stories they tell these need to be considered within healthcare practice as they provide *"meaning, context and perspective"* (p49) to a person's situation. People's stories also define the how's and why's of a health experience and the practitioner is allowed insights into understandings that are not available by any other means. Greenhalgh and Hurwitz argued that in practicing in this manner it is possible to provide treatment and care from a person centred perspective and that the narrative encounter can extend treatment options. The important issue in relation to head lice is the appropriateness and client centeredness of the response of healthcare practitioners to people experiencing a stressful and stigmatizing event.

Evidence based treatments are quick and effective but this has to be considered alongside the way in which complex social understandings impact on the way in which people view and use treatments suggested and the advice given. Lambert and McKevitt (2002) have argued that from an anthropological perspective what people see as rational in terms of choices and decisions is socially and culturally specific. Therefore, a narrative approach to discovering the understandings and beliefs behind what people, think, say and do is important for the development and delivery of healthcare practice.

The women's stories tell of being able to hold and use different understandings of the experience of head lice at the same time. They used proprietary preparations and mechanical means of treatment and control while at the same time using largely unproven treatments or those based on myths and folk beliefs. As a result whenever healthcare practitioners provide support and advice these perspectives of the experience will need to be considered. In addition issues including the use of correct treatment regimes and compliance are set against a range of lay understandings which will always influence the way in which people respond and act. This therefore creates a blending of evidence based treatment options with folk remedies and lay understandings to create a hybrid approach that will only apply at that particular point in time and will change with further experiences.

For the healthcare practitioner this creates an increased demand upon them to be flexible in their approach and to see any encounter with those experiencing head lice as one that must be undertaken in partnership. As a result, particular challenges for healthcare practitioners present as they work with complex and often unfamiliar understandings about health and illness. In an attempt to address this Maclachlan (2000) proposes the use of the *"Problem Portrait Technique"* or *"PPT"* (p373) as a way of addressing these complexities of practice. The technique is concerned with enhancing the way in which practitioners respond to health issues that require a blending of medical approaches with those that are more culturally sensitive. The technique has a number of stages which begin with the person's description of their problem and their personal perceptions of their experiences. Understandings of the views of others close to them, as well as the impact of the views of their culture are also explored. Additionally the person's understandings of what is said to them by others outside their culture, but providing healthcare, are considered. The process allows the development of a *"word map"* or *"'picture' of the ecocultural context"* [p378] in which the person is experiencing their problem. Beliefs and understandings about its cause are then rated by the individual and treatments that are culturally sensitive to the individual and their needs can then be planned. What this offers is a pluralistic way in which the assessment and management of a health issue can take into account the individual and the complexity of the social and cultural influences around them.

However, when addressing minor healthcare issues it may be argued that using a PPT could be time consuming within resource restricted healthcare practice. From this perspective and in relation to head lice, this study provides insight into the shared cultural aspects of infestation which would form one aspect of a PPT. Using the findings of the study in this way would facilitate assessment and management of the problem by providing the context in which an individual experiences it. This would allow time to be spent in a more person centred manner. By using the study's shared understandings in this way this would increase the partnership working and negotiation that could take place within the limited amount of time available for any consultation. Culturally sensitive, personalized care and treatment that is valued because of the extent to which it takes into account the world of the individual could then become the focus of all such healthcare encounters (Maclachlan 2000).

The stigma of head lice was very evident in the women's stories and this too has to be considered in relation to healthcare practice. It is important to ensure that all care is sensitive to the needs that are evident within a particular cultural or social group as to fail to do this means that needs are poorly addressed or missed (Popay & Williams, 1996). In relation to this the women's understandings indicate that privacy in public places where treatment is accessed is vital. This suggests that healthcare practitioners should always provide somewhere private to consult with a mother. For those healthcare practitioners who prescribe making greater use of this by ensuring that free proprietary treatments are more easily available to families would reduce frustration and would also further reduce the health inequalities generated by limited access to free treatments for those who could not afford them.

8.2.2 Adopting a Community Approach

Much of the contact that healthcare practitioners have with ordinary people when addressing infestation is on an individual basis. However a more community orientated approach should also be considered as this draws on public health practice that place an emphasis on cultural understanding as a way of addressing health issues. Community development work is not new and has been used to address a range of health issues that are part of the experience of communities. School nurses and other community workers use educational and empowerment strategies that seek to inform and promote understanding, decision making and self esteem based on shared community understandings. The school provides a natural group for this and it also reflects the social profile of the community in which it sits. By providing access to knowledge and skills about head lice to these communities, social misconceptions about infestation could be broken down. This could be made fun, fit in with the National Curriculum and provide young women in particular with the kind of skills and knowledge that they would have ordinarily received from their own mothers in the past.

Community development work, however, is not restricted to the school environment as programmes within the wider community also have a great deal to offer people in terms of shared experience. An example of this is the head lice control strategy used by Worcestershire Health Authority (1998) in the last decade of the twentieth century. This project was concerned with giving women skills and knowledge to deal with head lice within their own homes. It helped address the gap in knowledge and skills that existed for women when the shift in public health strategy to increased maternal responsibility for the detection and management of infestation took place at the end of the century. It clearly showed that community action within a geographical locality was an effective way to empower women and give them confidence in managing the problem by providing access to trained, volunteer community members who could help others to make decisions that took account of the culture of the community.

From a healthcare practice perspective the healthcare workers involved in the initial stages of the project were not community members but were viewed as a resources and facilitators by those living in the community. Their role was to increase community capacity and develop personal confidence in dealing with the problem and this worked effectively to shift the emphasis of control from the health service to the community. The most important element of this was the increased individual confidence that emerged from better knowledge and skills. What the project also did was to make people aware that the problem was one that was shared; this suggested that it might be possible to reduce stigma and social exclusion while increasing the ability of the community to address the problem with a common aim and approach.

The nature of the experience of head lice indicates that an individual approach is essential in enabling people to deal with the problem. However, a community orientated approach has the potential to provide much greater opportunity for people to easily access the information that they need while allowing them to share their experiences with others who also understand what it means to have head lice. The essential understandings that are shared by all under these circumstances serve as the basis on which to break down erroneous perceptions and build new understanding. This means that people can feel that they are not alone or excluded because infestation has suddenly entered and affected their lives.

It is important to understand how the community and the individual interact under such circumstances. From this perspective healthcare practitioners must to take into account the fact that practice with one group or community may well be significantly different to another and that in order to ensure that needs are met appropriately some assessment is required. One aspect of this is how a community actually identifies itself and how this definition is then taken into account when planning strategies to address infestation. While essential features of the experience discovered in this study may well be shared between and across individuals and within and across communities, there may also be significant differences and these would need to be taken into account in order that the practice was culturally sensitive. As this study shows it is vital to hear people's stories and to view their experiences and understandings in the context of their own communities as well as wider society. Healthcare practitioners will generally tend to be outsiders to the community and sensitive communication would be essential to discover the exact understandings of the experience that the community held. This would be particularly important where these were hidden within it.

Much of this hinges on the importance of partnerships between professionals and lay people and the extent to which knowledge and understanding can be shared for the greater good. If a lay person's understandings and representation of a condition are such that these do not fit in with the beliefs understood by healthcare practitioners this will make it more difficult to work in this manner. Consequentially, if support and guidance do not fit in with the cultural frame of reference of those receiving help their needs may not be met. Equally, if it is difficult for lay people to rationalise the use of their own knowledge and that offered by professionals this could mean that evidence based support may be rejected and this limits the opportunities people have to make appropriate and effective decisions. What is required is a balance between practice at individual and community levels; the meeting of lay and professional understandings; the individual and their culture and changing experiences and contexts.

8.3 Strengths and limitations

8.3.1 The Voices of Ordinary Women

One of the study's strengths is the way in which it has allowed the voices of ordinary women, talking about their experience of head lice to be heard for the first time. The inquiry process allowed the interpretation of their stories to take place in such a way that the essential features of their shared experiences became visible and available for others to draw on in relation to healthcare practice and the development of social and historical knowledge. The particular inquiry approach used allowed these understandings to emerge and as these were set within the context of wider discourses it has been possible to demonstrate the complexity of understanding associated with what society and medicine regard as an insignificant everyday experience.

The study highlights domestic life and routine and the ways in which the women have responded to their roles as mothers and providers of health throughout the century. It highlights and illustrates an intimate aspect family life during the twentieth century that was linked to social movements and government policies; the impact of which upon their lives the women were largely unaware of. Despite this, it is clear that family lives and the women's experiences of head lice were influenced by what was happening in the social world beyond their homes and that this affected the way in which they made sense of the experience.

It is only through narrative that these understandings can emerge. The study shows the significance of the experience of head lice to women. The importance of the experience for them is also demonstrated through their willingness to take part and talk openly about something that other regard as trivial. The fact that all of the women who took part felt equally about this demonstrates that it is possible to consider an experience as unimportant from the outside when for those actually having it this is not the case. This is particularly important for healthcare practice where in the provision of care and treatment it is rarely possible to fully understand another's perceptions of an experience unless they are allowed to tell their stories and these are given the importance that they deserve (Greenhalgh and Hurwitz, 1999). Evidence based practice can often function to control what takes place in a care encounter and this can mean that practitioners may seek to confirm their own beliefs and understandings that are based on this and this can exclude expressed need.

The women's stories were about more than the mere presence of the insect in their family and the study makes clear the associations and representations that they held which emphasise that the experience was social rather than clinical. From this perspective any public health approach to actually giving women the knowledge and skills to address the problem has to accept that this is so and practitioners have to understand that this will influence the way people make sense of what is being said and the value that they place on it.

The study clearly demonstrates the importance of familial and cultural links when making sense of the experience across time. This means that healthcare practitioners have to have some insight and understanding of the way in which these networks work in order that their practice is appropriate and meets women's needs. Partnership working is required either at an individual or a community level to encompass this. In addition, there is a need for healthcare practitioners to see understanding as being socially constructed so that when they interact with women they are aware that new understandings are created with each new contact. This should influence practice most importantly in their ability to listen and be flexible in their response with each new care partnership and its outcomes.

8.3.2 Recalling the Past

At an individual level the women's memories and reflections were the main source of their stories and these had been formed in part by what took place in the world around them. This is a strength of the inquiry as it allowed the women to speak about their everyday lives in such a way that they chose what they shared and how their thoughts were expressed. When the analysis and interpretation of all of their narratives had taken place the essential features of the experience shared by all became evident. These were recognisable to the women themselves even though their starting points and paths through their stories had been different. In addition the essential features were recognisable to other women who had not taken part.

By their very nature all narratives are about past events and when people tell their stories these allow access to experiences and their understandings about these that would otherwise be hidden in time. Roberts (2003) argues that narrative can never be separated from time as our individual lives are formed in part through memories as we give them and their experiences meaning. From this perspective he argues that narratives about health are concerned with a search for meaning about life events and their possible explanations. Personal narratives are revised through memories and the way in which the individual interprets these shapes the everyday life of the present (p13) and may influence the future. As this takes place there is a revision in the way in which the person sees themselves and those around them with multiple selves existing across time and the events in a person's life history effectively recreating the self.

Jordanova (2000) points out that many of these hidden experiences take place within the confines of the home environment and are not necessarily available to others because they are highly personal and private. This study gained access to this environment though the highly sensitive and private understandings of the women that were about being mothers and giving care. It is essential to note however that this inquiry was not merely about discovering past experience as I was interested in generating dialogue and in hearing the personal and shared understandings that emerged from the stories that the women told. During the interviews the women controlled this content and the narratives that emerged created understandings that were about what they felt it was important to tell about their past experience and what this meant for them.

Despite the focus on the mothers and their stories the inquiry it was also possible to established links between these and the social and historical discourses of the time and this was another strength. Many perceptions became evident across all of the discourses and these included complex images and understandings about stigma and social exclusion, the role of women as carers, maternal responsibility and the involvement of the State. Though these were present in the wider social discourses no reference was made to these by the women during the interviews. Later, when all of the discourses were considered together it was possible to see the links that were present. At this point it was also possible to clarify and validate some of what had been said during the interviews as the women recollected and reflected on their memories (Richie 2003).

Though the study was set in the twentieth century this thesis is written in the twenty-first century and the understandings of women who have become mothers during this period are currently unknown. While it is possible to speculate that the essential features identified in this study would be shared by these women just as they were by the women in the study it would only be by hearing their stories that this could be discovered. The context of their experiences would be significantly different as they would never have experienced school nurse examinations and would be aware that responsibility for detection and treatment rested with them alone even though many may never have see the insect or be aware that head lice was still a problem. Although this study demonstrates that essential understandings cross time it would be only via a study of mothers in this century that it would be possible to discover whether these were the same or significantly different from the women in this study. What would be the new elements of understanding that are hidden at this point or would the understandings be essentially the same as those already interviewed?

8.3.3 Father's Understandings

Reference to fathers featured very little in the women's narrative and this begs the question of whether understandings might have been different if men had participated in the study. While it is evident that women provide most of the child care in society it is not clear from the study to what extent the experience and understandings of men are important here. It was not clear from the women's narratives what men's involvement in the experience was or the understandings that it held for them. This was in part because the women did not talk about the role of men in relation to the problem other than to say that they chose not to involve fathers as the experience was seen as falling within their remit as mothers. There was also an understanding that men would not be interested in such child related experiences and that they had other things, such as work to think about. Women were also the focus of attention and discussion in the social and historical discourses consulted. Despite this men do have a role in child care and in disregarding this and focusing upon women important understandings about the complete experience may have been missed. As a result men's experiences remain hidden. Men did not need to be involved in the experience, though some women said that they had asked them to obtain treatments from the pharmacy. This meant that women did not know about or understand their partner's perceptions of the experience as they felt it was a mother's responsibility. A study exploring father's understandings would therefore add to the picture of the experience. However it would mean that interpretations of narrative would change those understandings encountered in this study and the resultant understanding that emerged may be very different.

Though men were excluded in terms of their personal experiences it is remarkable to note that it was men who created the majority of the social and expert documents that provided the study's context. Therefore wider social understandings of the experience are dominated by the culture of men and take little account of the understandings of women. A future study to explore this may find that the understandings of ordinary men are significantly different due to the influence of this male dominated context and it would be interesting to examine the relationship between men head lice and their social and private experience of infestation.

The social and expert discourses about head lice may well have been created largely by men but one limitation of the study is that this aspect was influenced by the constraints of time and therefore, though expert sources are critically examined in terms of what they add to understanding this was not done to the same extent with social and historical sources. Crabtree and Miller (1992) point out that the aim of historical research is to discover how the intentions of the past are linked to the events that took place then. In this study a historical experience approach was used to direct the search for sources and to study the discourses accessed but this was only concerned with the use of elements of the past and how they linked with the women's narratives. In contrast what constitutes the search for historical knowledge is more concerned with interpretation and validation of the past and the new knowledge that this creates (Crabtree and Miller, 1992). If historical knowledge had been sought this would have created more depth to the understandings generated by the women but in focusing on this it would have been more difficult to place the same emphasis on the women's narrative within the time allowed.

8.3.4 Healthcare practitioners Understandings

The expert discourses and the women's narratives express a view that healthcare practitioners see the experience of head lice as trivial and unimportant in terms of its implications for individual and public health practice. Yet the understandings of healthcare practitioners are as yet unexplored. This is a limitation as Lambert and McKevitt (2002) argue that it is essential that some understanding is reached about such issues which are about the way that different cultural influences that impact on the understandings that different groups hold. Professional cultures have philosophies, values and beliefs about people and practice that may well be significantly different from ordinary people and if partnership working is to take place effectively lay people and those coming from a professional perspective must accept that they may see the experience in very different ways. The healthcare practitioner comes to another's experiences of head lice with different sets of understandings; their own personal understandings and those they hold as professionals. My own personal phenomenological reflection clearly shows this. Despite this they have to try to make sense of lay understandings in order to provide appropriate care and treatment. This can create some difficulties as they try to work with evidence based understandings and the different perspectives that their own understandings and those of others brings.

When two individuals and their cultures meet the reality that is created through this interaction influences the sense and meaning that both give to the experience and negotiation has to be an aspect of this. Therefore not only is it important to listen to ordinary people's stories but also to consider the understandings of those providing support, treatment and care. This aspect of the experience is only explored in this study in terms of the expert, medical science discourses explored and these do not address the actual delivery of treatment and care by first contact practitioners. Though a little of this is included in my own personal phenomenological reflection it is not possible to know from this study whether the understandings identified in this are shared by other healthcare practitioners. Discovering more about healthcare practitioners' understandings would therefore enhance opportunities to investigate partnership working and to look at ways that supporting people experiencing infestation could be enhanced, it would also add to the understanding of the experience overall.

8.3.5 Understandings about other Infestation

Finally, though this study is concerned with the experience of head lice infestation this is by no means the only infestation experienced by humans. In relation to this though the depth of the study is a strength this is limited by the fact that no other infestations were explored. Some of the women who took part did make reference to one parasite in passing; commenting on scabies "*being* *about poor hygiene"* (PC: 56) and understanding that *"they can be caught from towels and bedding"* (PE: 123). However, there were no views expressed about any other common infestations. This raises questions about the nature of these experiences which, at this point are unknown and unexplored. These questions are about the nature of the differences in understandings concerned with the ecto-parasites, head *(Pediculus humanus capitis)*, body *(Pediculus humanus)* and public *(Pthirus pubis)* lice and how experiences of these relate to each other. Other questions as yet unanswered are concerned with the extent to which experiences and understandings differ or are similar because of the nature of the biology of the insects and their relationships with their human host. Additionally the experiences and understandings concerning other common parasites that infest people in different ways are unknown, for example, scabies (Sarcoptes scabiei), that live within the layers of the skin or threadworm *(Enterobius vermicularis)* that live in the lower gut. Understandings about these may be very different because of the different way in which they inhabit the body. Greater insights into these would add to current social, scientific and professional knowledge about infestations which are common and regularly experienced by people within society. As yet these remain un-explored, but greater knowledge about their nature would increase understanding about highly personal experiences that are currently defined more by science than by human existence.

8.4 Thesis Summary

Many qualitative approaches to the study of the social world do so with a particular question in mind and seek to identify people's views about a defined phenomenon. This study used hermeneutic phenomenology as a way of investigating a social experience that had not been explored before. The question asked in the inquiry was what it meant for women to experience head lice. Lambert and McKevitt (2002) argue that in using an approach that draws on qualitative inquiry and anthropology it is possible to discover aspects of an experience that create culturally specific beliefs and understandings that do not assume it's boundaries and nature. They stress that in doing this the phenomenon defines itself. In this inquiry the boundaries of mother's understandings concerned with the experience of head lice were unknown. Hermeneutic phenomenology allowed these hidden understandings to emerge and it was the existential nature of this approach that demanded that these were considered within the context from which they arose. Though people are storytellers Widdershoven (1993) points out that their stories can have little value unless they are connected in some way to both personal narrative and the relationship that these have to other discourses. Therefore the stories that the women told provided essential, shared understandings that were set in the social and historical context of the twentieth century.

The women were different ages though all had lived, been mothers and experience head lice during the twentieth century. The interpretation of their stories generated themes of understandings that included being mothers and giving care, understandings about the insect and dealing with infestation and the meaning and impact of social stigma. These were placed into context with reference to discourse about head lice that were already available in the world. The variety of discourses available created different sorts of realities and an array of different perceptions, meanings and understandings emerged from these (Burr, 1995). The understandings are recognisable to ordinary people and are now available for healthcare practitioners and those involved in social and history studies to draw upon in order to inform their own knowledge and understanding.

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Appendix 1 Participant Information and Consent Form

Appendix 1 Participant Information and Consent Form

I am undertaking research for a PhD with the intention of exploring the understandings that mothers have about head lice infestation.

If you agree to take part in the study, I would like to interview you on one occasion with the interview lasting between one and one and a-half-hours. I will undertake this interview entirely at your own convenience.

I would like to record the interview on tape. This will be reproduced as written text and will form the basis for the study.

You are under no obligation to tell me anything that you do not wish to, and you will not be asked any personal or prying questions.

You may be asked at a later point to give your views on the analysis undertaken on the interviews in the study.

All information will be kept in the strictest confidence. I am the only person who will have access to it. It will not be possible for anyone to identify you during the study or when it is written up.

The study will form the research thesis for a PhD degree which will be held by Liverpool John Moores University Library. Some aspects of it may be used in academic and professional papers and articles.

I would be most grateful if you would help in this study which may provide insights about the way in which this sort of infestation is viewed by mothers. This will add to academic and healthcare practice understanding and may provide insights as to how it can be tackled by society as a whole.

Consent to take part in the study

I,--------------------agree to take part in the research study as explained to me by Anitra Malin.

I understand that I am free to leave the study at any time.

I also inderstand that my name will not be used in any publication, or made available to anyone other than Anitra Malin.

Signed (participant)------------------------Date---------------------

Signed (researcher)------------------------Date---------------------

Appendix 2 Interview Protocol

Appendix 2 Interview Protocol

Questions used to guide the interviews

- Can you tell me about your experiences of head lice?
- What do your experiences mean to you?
- What understandings and beliefs do you have about head-lice?
- Where do your ideas and beliefs about head lice come from?
- What and who has influenced your beliefs/understandings/actions about head-lice throughout your life?

The protocol was flexible and was guided by emerging issues that arose during each interview.