Beyond 'beer, fags, egg and chips'? Exploring lay understandings of social inequalities in health

Jennie Popay[1], Sharon Bennett[2], Carol Thomas[1], Gareth Williams[3], Anthony Gatrell[1] and Lisa Bostock[4]

1 *Institute for Health Research, Lancaster University*
2 *Formerly at Institute for Public Health Research and Policy, University of Salford*
3 *School of Social Sciences, Cardiff University*
4 *Social Care Institute for Excellence, London*

Abstract   This paper seeks to contribute to the limited body of work that has directly explored lay understandings of the causes of health inequalities. Using both quantitative and qualitative methodology, the views of people living in contrasting socio-economic neighbourhoods are compared. The findings support previous research in suggesting that lay theories about causality in relation to health inequalities, like lay concepts of health and illness in general, are multi-factorial. The findings, however, also illustrate how the ways in which questions about health and illness are asked shape people's responses. In the survey reported on here people had no problem offering explanations for health inequalities and, in response to a question asking specifically about area differences in health experience, people living in disadvantaged areas 'constructed' explanations which included, but went beyond, individualistic factors to encompass structural explanations that gave prominence to aspects of 'place'. In contrast, within the context of in-depth interviews, people living in disadvantaged areas were reluctant to accept the existence of health inequalities highlighting the moral dilemmas such questions pose for people living in poor material circumstances. While resisting the notion of health inequalities, however, in in-depth interviews the same people provided vivid accounts of the way in which inequalities in material circumstances have an adverse impact upon health. The paper highlights ways in which different methodologies provide different and not necessarily complementary understandings of lay perspectives on the causes of inequalities in health.

Introduction

There is now a considerable body of research on lay concepts of health and illness. Little of this work, however, has focused directly upon lay understandings of the nature and causes of social inequalities in the experience of health and illness. Reflecting on this situation, Mildred Blaxter has commented:

> Considerable progress is being made in research that attempts to explain social inequalities in health. But how do people themselves think about the question? What kinds of causal attributions do they use: what or whom do they blame for ill health? The answers may have importance both for social policy and its public acceptance, and for individual choices relevant to health (Blaxter 1997: 747).

This paper aims to address these and related questions using data from research in four socio-economically diverse neighbourhoods in the North West of England. It explores 'lay theories' about the causes of inequalities in the health experience of people living in different areas, and the ways in which these 'explanations' vary amongst people living in contrasting socio-economic localities. In so doing, it illuminates how the research process in general, and in particular different methods and questions, influences the understandings generated.

In the next section we briefly review the literature on lay concepts of health and illness identifying the main issues relevant to this paper. We then describe the study design before presenting our empirical findings. The implications of our findings for future research are then discussed.

Lay concepts of health and illness and health inequalities

In early research lay perspectives on health and illness were conceptualised as separate from the formal scientific expertise that informed medical practice (Blaxter 1997, Rosenstock 1969). Since then, however, the diversity of 'lay' and 'scientific' knowledges, the interpretative and critical relationship that exists between different forms of knowledge, and the contingent nature of the notion of 'expertise' have all been highlighted (Wynne 1996, Lambert and Rose 1996, Popay and Williams 1996, Williams and Popay 1994, Gabe *et al.* 1994, Lynch and Woolgar 1990, Mishlar 1984).

Over the same period, a richer, thicker description of lay concepts of health and illness has accumulated – reflected in the changing lexicon, from 'lay beliefs' to 'lay knowledge' or even 'lay epidemiology' (Davison *et al.*

1991, Popay and Williams 1996). In a recent paper Mildred Blaxter (1997) has considered what insight this larger body of work on lay theorising about health and illness has to offer to our understanding of lay perspectives on health inequalities. She argues that findings from survey-based research suggest that all social groups tend to neglect structural causes of health and illness giving primacy to individual responsibility as promulgated in health promotion activity. However, quoting a study by Calnan (1987), which unusually focused specifically on lay perceptions of health inequalities, Blaxter also notes that higher socio-economic groups appear to be more likely to highlight those same structural factors – such as income, work, the environment – that are emphasised in social epidemiological evidence. As the qualitative research reviewed by Blaxter powerfully demonstrates, explanations lay people offer for health inequalities cannot be simply dichotomised into individualistic or structural:

> throughout the research evidence, lay respondents tend rather to move back and forwards between concepts of cause which seem opposed but which individuals can keep in equilibrium (Blaxter 1997: 750)

Qualitative research also highlights the need to distinguish between health and illness and the importance of the context within which questions are posed. In particular, there appears to be a powerful moral imperative associated with health and the normality of health. As Blaxter notes, 'health is a more inclusive concept which people prefer to claim if at all possible' (1997: 750). People may therefore offer different explanations for their experience of health as opposed to illness and still different explanations for other people's experiences.

Blaxter's attempt to explore lay views about health inequalities obliquely through a review of existing research on lay concepts of health and illness is an important starting point. Overall, she concludes that lay people have rarely talked about health inequalities in the context of research, suggesting that this:

> genuinely represents a feeling of disbelief or unease at the notion, or a conceptual difficulty, especially amongst those most at risk (Blaxter 1997: 753).

The tentative conclusions she draws, however, about the likely response of lay people to evidence of health inequalities, the possible substance of lay theories of causality and the likelihood of social differentiation in these theories, need to be further explored. In particular, there is a need to consider the way in which people respond to questions that focus specifically and directly on inequalities in the experience of health and illness. Recent research involving qualitative methods by Davidson and colleagues (1999) has sought to do this and preliminary results from this study suggest that people are sensitive to the 'ontological' implications that flow from an acceptance that their disadvantaged circumstances could adversely affect their health. However, they

also appear to be willing and able to acknowledge a causal relationship between social and material inequalities and health inequalities.

There are also likely to be important dimensions of lay 'theories' about health inequalities that existing research on lay perceptions of health and illness in general cannot illuminate, such as the salience of time and place. Many of the studies reviewed by Blaxter involved samples of people in particular places at particular times (Blaxter and Patterson 1982, Herzlich 1973, Herzlich and Pierret 1984, Cornwall 1984) and give some prominence to historical and particularly biographical time. In an important sense, however, the material places in which people lived out their lives in these studies were largely presented as 'the canvas on which events happen' (Jones and Moon 1993: 515) rather than being conceptualised as a focus for detailed enquiry in the course of the research. Given the growing interest in the relationship between health and place (Popay *et al*. 1998, forthcoming) and the need for further exploration of lay theories about health inequalities, research giving greater attention to lay perceptions of the role of 'area effects' is timely.

Study design

The study reported on here took place in the cities of Salford and Lancaster in the North West of England. There were four study localities overall, two in each city – one relatively disadvantaged, the other relatively advantaged. These four localities were chosen on the basis of detailed explorations of small-area data from the 1991 census, as well as local knowledge. Three of the localities comprised a number of enumeration districts (EDs) within electoral wards, whilst the fourth comprised a set of EDs across two electoral wards.

The data are drawn from two strands of the study's empirical work; a survey of a random sample of people living in the four areas and a series of in-depth interviews with purposively sampled individuals drawn from these survey samples. As explained below, each strand of the empirical work directly asked respondents about their perceptions of health inequalities and in particular the relationship between place and health.

Across the four localities, 2000 names and addresses were selected from the electoral registers, 600 in each of the more deprived areas and 400 in the relatively affluent localities. The differences in sampling fractions reflected the expectation of differing response rates across the two sets of localities. Each person was contacted by letter and subsequently on the doorstep, when they were asked to take part in a short interview concerning their own health and that of other members of the household. Data on household type, age, gender and ethnicity were also collected. They were then asked to complete, and to return by post, a questionnaire. A total of 777 questionnaires were returned and analysed. The response rate ranged from 35 per cent to 56 per cent across the four study areas. Table 1 provides comparative data on the response rates and material circumstances in the areas.

Table 1 *The survey: response rates, material circumstances, and age distribution across the four localities*

	Disadvantaged area 1: Salford % (n)	Disadvantaged area 2: Lancaster % (n)	Advantaged area 1: Salford % (n)	Advantaged area 2: Lancaster % (n)
Survey Response Rate	47.2 (247)	36.5 (191)	56.2 (207)	34.6 (132)
Indicator of material conditions				
Social Class 4 & 5	30 (74)	30 (57)	8 (16)	13 (17)
Rate of unemployment	7 (17)	9 (17)	1 (2)	2 (3)
Income < £6k	27 (66)	29 (54)	8 (15)	12 (15)
Rented housing	27 (66)	32 (61)	8 (15)	5 (7)
Between 75% & 100% income from benefits	36 (89)	36 (69)	8 (15)	5 (17)
Age distribution of respondents				
Under 25 years	6.1 (15)	6.3 (12)	6.3 (13)	2.3 (3)
25–44 years	45.5 (112)	51.8 (99)	39.3 (81)	28.8 (38)
45–64 years	24.4 (60)	26.2 (50)	34.5 (71)	40.9 (54)
65–74 years	14.2 (35)	10.5 (20)	12.6 (26)	15.2 (20)
Over 75 years	9.8 (24)	5.2 (10)	7.3 (15)	12.9 (17)

The self-completion postal questionnaire sought detailed information on the respondent's health, home, work status, family finances, levels of support and how they felt about living in their neighbourhood. In this paper we focus particularly on the answers given to an open-ended question (see Box 1) that aimed to explore respondents' perceptions of social inequalities in health, focusing particularly on differences in the experience of people living in the contrasting study areas.

Following participation in the survey 51 people took part in in-depth interviews. This sub-set of people was selected purposively to ensure social

Box 1 *Survey question on perceptions of social inequalities in health*

> In the self-completion questionnaire respondents were asked to provide free text answers to the following question:
>
> We are interested in why people in some places have worse health than people from other places. In general people living in *(name of deprived city locality)* have poorer health than people living in *(name of affluent city locality)*. For example, more men in their forties have heart attacks and more children have accidents. What do you think are the three most important reasons for worse health in some places?

diversity, and included lone parents, people aged 25 or younger, older people who had retired and parents in two-parent families. Of these respondents, 19 were asked to take part in a second interview focusing on health inequalities, of whom 12 were from the relatively deprived study localities, and seven from the relatively affluent. Findings from these second interviews are reported here. These respondents included four lone parents, two younger people aged below 25, six older people who had retired and seven parents in two-parent families.

The interviews took place in respondents' homes and were conducted by two researchers. The interviewer began by indicating that they were interested in obtaining peoples' opinions of why research was finding differences in health status between people who lived in different areas, and this was often enough to initiate the discussion. Three types of 'prompt' material were taken into the interviews to stimulate discussion: illustrative findings from the research in the study areas; findings from other research demonstrating inequalities in health; and newspaper cuttings reporting on health inequalities. Examples of the material taken into the interviews are shown in Box 2.

The amount and type of prompt material used varied between interviews, and depended on the way in which each individual responded. Prompts were typically used to clarify opinions expressed by respondents or to initiate further discussion. For example, in some interviews the interviewee would focus to a large extent on the local area and compare it with other localities. Within these interviews, findings relating to the study area were discussed more than national newspaper headlines. In other interviews, respondents did not respond to any of the prompt material but instead preferred to talk on the topic in more general terms.

Box 2 *Examples of prompt material*

- *Free text responses to the open-ended survey question shown in Box 1:*
  'Worsley and Boothstown are relatively affluent compared to Weaste, Seedley and Langworthy. Poor housing, unemployment and poverty are the most important reasons for ill health'
  '(Areas need) good housing, secure employment prospects and proper neighbour relationships and a sense of community'
- *Quantitative results from the survey:*
  People from Weaste, Seedley and Langworthy were almost twice as likely to report fair or poor health than people in Worsley or Boothstown'
- *Newspaper headlines/text*
  'Where you live has a big effect on when you die'
  'Poor suffer more illness than rich'
  'Inequality Kills'
  'Death rate gap widens to worst for 50 years'
  'An unhealthy interest in the wealth gap: why should it follow that rich people get healthier simply because they are richer . . . what about the choices we all make'

The interviews were tape recorded, with respondents' consent, and then fully transcribed. The analysis identified the major themes emerging from the transcripts and was concerned to explore similarities and differences in the approaches taken to talk about social inequalities in health. In presenting the data we have changed individuals' names and omitted some of the other identifying details to ensure confidentiality.

Findings

Survey data – lay 'theories' on the causes of health inequalities
Although described by one respondent as 'the most difficult question in the questionnaire', 89 per cent (n = 691) of the survey sample completed the open-ended question asking for their thoughts on why health differences are observed between people who live in different places (Box 1). The open-ended responses were coded into four broad categories on the basis of the type of causal factors given prominence: macro-structural (including poverty and employment issues); individual (including health related behaviours, attitudes and lifestyles); place-based factors (including pollution, traffic, access to facilities, housing and crime); and other factors (including family history, psychological factors and stress in general).

Only 15 of these respondents (2.2%) said they did not know why the differences existed and only two (0.3%) refuted the existence of area inequalities in health. A fifth (N = 149) chose to focus on just one of the four categories of causal factors, whilst the remainder (n = 525) ranged across categories and often explored the relationship between them.

Given the emphasis within the question on area differences in health experience it is not surprising that the characteristics of places figured prominently in the explanations offered. As Table 2 illustrates, the majority of those respondents choosing to focus on a single category of cause highlighted place-based factors, with some people offering a single factor, such as, 'Dirty pavements, dog dirt and unclean streets' (ID4) or 'Not enough places for kids to play' (ID20). Others listed various area factors such as '[In poorer areas you have] a higher population density, a lack of leisure facilities, more pollution and poorer housing' (ID21). Explanations centering on individual health behaviours such as 'Beer, fags, egg and chips' (ID1201) were the second most common amongst responses focusing on a single causal category, followed by those focusing on macro-structural causes such as poverty and unemployment. Inevitably perhaps, references to stress and hereditary factors were rarely made independently of other factors.

Previous research has explored the extent to which lay theories about health and illness differ across social groups. Considering this issue in relation to the minority of respondents in each of our study areas choosing to highlight a single causal category in their response, significant differences between the areas were found as shown in Table 3.

Table 2 *Explanations for health inequalities offering a single causal category*

Type of Explanation	Percentage	N
Place based factors	55.0	82
Individual	29.5	44
Macro-Structural	13.4	20
Other	2.0	3

Table 3 *Single causal category responses in the four areas*

	Percentage of Responses				
	Relatively disadvantaged		Relatively Advantaged		
Type of explanation	Lancaster	Salford	Lancaster	Salford	Sig Level
Place	51.2	78.8	30.8	40.0	***
Individual	24.4	11.5	57.7	43.3	***
Macro-structural	22.0	7.7	7.7	16.7	NS
Other	2.4	1.9	3.8	0	NS

Significance level: * –p < 0.05, **–p < 0.01, ***–p < 0.001, NS – Not significant

Amongst people choosing to focus on a single category of causes those living in the relatively disadvantaged study localities were more likely to explain health inequalities in terms of area-based factors ($x^2 = 21.08$ $p < 0.001$) compared with those from the more advantaged areas who were more likely to mention individual factors ($x^2 = 21.26$ $p < 0.001$). Although there were differences across the four areas in the proportions highlighting macro-structural factors and, to a lesser extent, other factors such as stress or heredity, for example, these were not significantly different between the disadvantaged and advantaged areas.

This type of analysis is more problematic in relation to the overwhelming majority of respondents who included different categories of causes in their explanations, as these responses are not easily classified as primarily individualistic, macro-structural or area-focused. Some people did give particular emphasis to individual responsibility whilst acknowledging – sometimes begrudgingly – wider factors. For example, one man living in the more affluent area of Salford wrote that:

Some people don't care about themselves or their children, *i.e.* diet and lack of exercise. Some parts of Salford have a higher birth rate because parents don't care about scrounging off the state. They let their kids out to play on busy roads. They live too close to city centres and major through routes (ID655).

More often, however, these explanations suggested complex relationships between individual lifestyle factors, macro-structural factors and place-based factors. Reflecting the influence of the question asked, place-based factors figured large in many responses. Additionally, mirroring the findings of much previous research, many responses were deeply embedded in personal experience. Respondents in the disadvantaged study areas often painted stark and vivid pictures of the ways in which macro-structural factors interacted with place-based factors to shape individual lifestyle. In many of these accounts 'stress' is presented as the mediating mechanism between material and health inequalities. For example, one woman in her late 20s, living in the disadvantaged area of Salford, wrote:

> Less money, not being able to afford healthy food and worrying about how to pay bills all brings stress and anxiety. Also not being able to go to evening classes. The general area is in decline. It's very worrying all the graffiti, crime and vandalism. You wonder each time you go out what you will come back to. The worry and stress and anxiety affect health and mental health. Trouble with nerves is generally very unsettling (ID495).

Similarly, two widows – one 72 years old, the other 63 – who now lived alone, describe how they think their lives in the disadvantaged study area of Salford (which had been their home for more than 30 years) damaged their health and that of their neighbours:

> We have worse housing, high unemployment and a lack of hope in the area. Depressing areas don't give anyone any hope in the future and the will to fight and live (ID194).

> Look around, see the dirt and filth we are now living in. In [X] alone we have poor housing, high unemployment, all the shops are closing down. People now have to travel further for their needs. Long hospital waiting lists. It is now a very poor area to live in (ID135).

Some respondents living in the advantaged study areas also highlighted the causal role of macro-structural and place-based factors in generating health inequalities. However, distance from the lived experience of health-damaging places gave these responses a more sterile and dispassionate quality as this quote from a 40-year-old woman, who lived in the advantaged area of Salford with her family, illustrates:

> The effect of poverty is evident in the aforementioned areas [the relatively deprived area of Salford] and this affects all areas of life – housing is generally poorer, diet, health. Every aspect is affected and one of the biggest factors causing these problems is unemployment, inadequate benefits and support and avoidance of the issue from Government (ID778).

In summary, few quantitative studies focusing on lay perceptions of health and illness have asked directly about views on the causes of inequalities in the health experience of people living in different areas. The analysis presented so far suggests that when this is done, the 'theories' people offer point to the health-damaging consequences of the interactions between many diverse factors. These theories frequently describe how the characteristics of particular areas combine with wider macro-structural factors to damage health via complex pathways including material, lifestyle and stress-related factors. Where respondents choose to focus on one category of cause in their explanations, those focusing on 'area effects' were much more common than those concerned with individualistic factors – reflecting the influence of the specific question asked. The analysis also suggests that amongst these respondents there were significant differences across the study areas in the type of causes highlighted, with people living in the disadvantaged areas being more likely to focus on 'area effects' while those in the more advantaged areas favoured individualistic explanations. However, the explanations offered by the majority of respondents in all four areas highlighted complex multi-dimensional pathways not easily classified into particular 'types' of explanations.

As already noted, these findings are based on the analysis of written answers to an open-ended question in a structured self-completion questionnaire. In the context of this research design, few people refused to answer the question or sought to deny the existence of health inequalities. Although the illustrative data included in the question did refer to the areas in which respondents lived, it is arguably the case that a postal self-completion survey provided more 'ontological' distance for respondents than would be the case with qualitative research. Additionally, whilst some responses were longer than others they were all brief – consisting at the most of a few sentences. Whilst the majority of responses reflected complexity and personal experience, there was little scope in the questionnaire for respondents to provide the 'interpretative elaboration of the meanings of one or more factors in the context of everyday life' that Busby and colleagues have argued sets lay 'theories' of health and illness apart from the 'multifactoriality' of 'expert' accounts which, they suggest 'involve the addition of more and more variables into putative models' (Busby, Williams and Rogers 1997: 94). In the next section we therefore move on to explore this process of 'meaning elaboration' in lay theories about the causes of inequalities in the context of in-depth interviews.

Qualitative data: elaborating the meanings of causal factors

Challenging the evidence on health inequalities: The in-depth interviews began by telling respondents that we were interested in exploring what they thought about health inequalities between the study areas. The most striking feature of these 'beginnings' was the diverging responses of people living in

the different study areas. The seven respondents who lived in the relatively affluent areas did not dispute the existence of health inequalities between areas. In fact the majority of them did not find this surprising. In contrast, the 12 respondents living in the relatively disadvantaged study areas questioned the findings. Phrases such as 'I don't believe in them' or 'that puzzles me' were not uncommon first reactions. Similar responses were evoked when people were presented with some newspaper headlines that compared the health of 'the rich and the poor' or 'one part of the country against another'.

Not everybody, however, disputed the evidence on inequalities for the same reasons. Some respondents questioned the existence of health inequalities between areas because this contradicted 'facts' they had acquired about the causes of ill health. Maureen, for example, who lived in a disadvantaged study area with her husband and eight-year-old son, muses on what she perceives to be a profound mismatch between the evidence she is presented with in the interview and her understanding about the causes of heart disease:

> People in areas where they've got more money and professional backgrounds . . . it kind of puzzles me in a way to say that the men are living longer because heart disease is the biggest killer I think in this country and I would have thought that men who were in high powered or stressful jobs . . . would be perhaps only on a par with a lower working class person in that respect. Stress factors I would think are quite high amongst people in what you might call the middle classes. I think one of the biggest things now is that people feel very much more under stress because of the hours they have to work. I think that cuts across all working people (ID071).

In a similar vein, Pete, a 70-year-old man, living alone in the same disadvantaged study area, questions the newspaper article, suggesting that the rich live longer, healthier lives. He argues instead that they have a more unhealthy lifestyle than poorer people. At the same time he reflects a widespread distrust of official statistics and the media:

> I would think actually that they [the rich] weren't as healthy as the poor 'cos of all the spirits they drink and stuff they eat. I mean if you eat the basics like we do I think you're much healthier . . . I mean they just make the figures out to look bad. . . . I don't trust statistics at all 'cos I know they can always make them do what they like . . . they can do anything with figures and percentages. If somebody wants to write something they can write anything can't they? (ID555)

Many of the respondents living in disadvantaged areas rejected the 'labelling' of people living in particular places, or the classification of people into what they perceived to be overly broad groupings that carried assumptions (often normative) about how people live their lives. Respondents were keen

to stress the many variations that existed within apparently homogenous categories. Maureen, for instance, quoted earlier, commented:

> I can't believe 'em [evidence of health difference between social groups] you know, 'cos I see myself as like just a working class person. . . . but there are obviously differences between me and my way of life and the way of life of other people in my community. . . . I wouldn't like to take it right across the board and say that all people who are out of work are the same, you know, there's differences isn't there? It is hard to generalise really, 'cos you can become very condemnatory. You condemn people but there is exceptions within each group, isn't there?. . . . It's difficult to put labels on people isn't it? (ID071).

There were many other examples where respondents objected to being 'labelled' in various ways – they rejected 'what this says about me and the people around me'. For example, Chris, a lone mother with a five-month-old son living in a disadvantaged area, commented on the distinction drawn in newspaper headlines between rich and poor:

> How do they calculate rich and how do they calculate poor? To me nobody is really poor in this day and age. Nobody's really poor. They [the rich] can afford to have their extra bit of luxuries like their new cars that they can park in their garages and not worry about things you see. Whereas we can't but it doesn't make us poor it just makes us a different class distinction. But then again you can look at it the other way and say well we are probably not in as much debt as what they are over there. So there's two ways. There's too much grey in the middle saying poor against rich. . . . I would honestly say that we are not living in poverty. I think that's an insult to say that to us. We're not. I mean you can see. You only have to go in the X [a local pub] on a Friday night, that's how much poverty we're in 'cos it's packed, it's bursting and they've got to get the money from somewhere . . . so no (ID485).

In some cases, the manner in which respondents living in disadvantaged areas questioned the existence of inequalities in health between social groups and/or areas points clearly to the moral and ontological uncertainties attaching to acceptance. Reacting to a newspaper headline, for example, Ruth, a young woman living alone in a disadvantaged study area, provides a powerful example of how some respondents struggled with the moral and ontological connotations of the material they were presented with:

> I don't believe in them [headlines on social inequalities in health] . . . .
> I don't agree with this one 'where you live has a big effect on when you die'. I mean, I don't know, some areas might a bit. Moss Side I mean you're more likely to get your head blown off or something and pollution

and stuff like that but everywhere is like that. It's not just area, it's just life, so I don't agree with none of them. . . . I think if you are going to die, you are going to die. It doesn't matter where you live [And, later in the interview] . . .They look at Salford as being a dump; they think nobody lives there. I mean everybody in Salford has got nothing, they are seen as outcasts. I mean people in Gloucester . . . it's all dead nice and they've got big houses and loads of money. I don't think you can say all people die earlier than people living there. I think you'd have to look into it and think again. Yes there's pollution but other than that it's attitudes . . . they are making out that it's all like scum and they're all dying but if you live there you're got it easy . . . it doesn't make sense (IDYP01).

In rejecting the possibility of inequalities in the health of people living in different places, these respondents were, in part at least, rejecting the suggestion that premature ill health and death are in some way inevitable for people like them who live in materially disadvantaged areas. In struggling to make sense of the material they were shown many respondents elaborated on the meaning of 'area effects'. In an important sense, for example, in arguing that 'it's not just area, it's just life' Ruth is resisting the separation of 'context' from 'composition' in favour of a notion of 'lives lived in places'. Additionally, in pointing to the importance of individual attitudes and diversity, and rejecting over-arching labels, these respondents are also asserting the power of individual agency over structural constraints.

Without exception, as the interview progressed, respondents moved beyond comment on the existence and causes of social inequalities in health at an abstract level to reflect on their personal experiences of their lives and health in particular places at particular times. In so doing, these two themes – the health impact of 'lives lived in particular places' and the power of individual agency – gained increasing prominence, alongside and linked to two other themes – the causal significance of stress and social comparison. These four themes are discussed in more detail in the following sections.

Lives lived in places: narrating the lived experiences of health inequalities: The extension of the interviews beyond discussion of inequalities in health was perhaps inevitable for two reasons. Firstly, as already noted, the data presented here are derived from the second of two in-depth interviews conducted by the same researchers with all the respondents. The first in-depth interview focused on their accounts of their lives in the study areas. Often the stories told in the second interview were elaborations upon, and updates of, the stories told in the first. Respondents naturally interpreted this second meeting as an extension of the first, which perhaps encouraged a greater emphasis on individual experiences than would otherwise have been the case. Secondly, as we have already begun to discuss, for people living in materially disadvantaged circumstances abstract conversations about health inequalities

proved to be difficult. In contrast, in an important sense 'stories' of personal experiences provided different types of commentaries on inequalities in health. In choosing to tell these particular 'stories' respondents were tapping into their lives to describe the lived experience of inequalities in health and, in so doing, draw attention to the complex causal pathways lay people 'construct' to make sense of their experiences.

In their narratives, people would weave in and out from one type of 'causal factor' to another, demonstrating that each provided its share of explanation. Like many other respondents, Chris, the lone mother previously quoted, questioned the health inequalities evidence throughout the interview. Alongside this, however, sits her 'story' of living in the area in which she describes how different types of factors – macro-structural, area and individual – have shaped her life, and the impact this has had on her own health and that of her son. The following is part of her description of the impact on her health of living where she does and in particular of her recent experience of being burgled:

> I'm a strong person. I can deal with a lot of things but this particular area and living in this area has made me ill . . . At the end of the day you've got to feel happy in the environment you're living in, 'cos that is your source, that is where you are based. . . . I mean I have to put my alarm on and the mortice lock on to go to the corner shop. At one time I'd just shut the door behind me and sometimes I didn't even do that 10 years ago. It's just your whole lifestyle now it's awful. . . . I can't deal with it. I think that now as it's happened to me [being burgled] I realise it's a weakness and it's something that can make me physically ill. In all the stress and financial things with not working and after having him [her son], I've been able to deal with it, control it. It's got me down and it has made me ill but I've got up and psyched myself up. But this hurdle [being burgled] I just can't get over. I've had counselling for it and I still can't get over it. So as I say the only end resort is for me to move out of the area 'cos I don't think I'll ever have peace of mind ever again, it's sad really (ID 485).

It has already been noted that at an abstract level the respondents who lived in the disadvantaged study areas rejected the idea of 'area effects' on health. However, it was also apparent that in the context of people's personal stories 'area effects' on health had special salience for those living in these study areas. As Pete, an older resident of one of the two disadvantaged study areas put it, 'it's to do with the places we live' (ID555). Different aspects of areas were seen to impact on health. These included levels of crime in the area, poor housing, the condition of the local physical environment, pollution and socially defined aspects of areas. In relation to the latter, respondents' talked of the impact of living in places where there was a lack of neighbourliness, community spirit and trust. For example, Pete stressed how important having good neighbours was to him:

> I know most of them [the neighbours] round here. . . . smashing people really. I mean there is a woman of 90-odd in the street and they look after her and run errands. That's how it is . . . there's a community spirit. I mean we are all in the home watch. . . . We confide in people and talk to them . . . I mean John [neighbour] comes here and we'll have a chat and a cup of tea. We go to his or anybodies down here and talk to them. It [the sense of community] gives you more confidence you know. You're not as frightened 'cos you know you can rely on your neighbours. . . . I think trust is one of the big things. If you can trust the people around you then you've got peace of mind and that is what is needed (ID555).

The way in which the labelling of places as 'failing' could adversely affect health was another common theme in the interviews. Bill, for example, a married man living with his wife and two children in one of the disadvantaged study areas, explained how it made him feel bad to only ever hear 'bad things, bad reports and bad press' about his neighbourhood (ID518). The lone mother Chris also stressed the health impact of this labelling process:

> What's going on round here . . . it's either in the *local paper* or on the news and then people ask where you live and they say 'oh dear'. Straight away it's like a slur on your character. We have not made it the way it is but we are being punished for it . . . [The fact that] everybody is talking about it just makes you more and more aware . . . and it just gets you down (ID485).

Some 'lay theories' about the causes of health inequalities dwelt in particular on the role of poverty and financial problems. Here two themes were especially evident, both illustrated in the quote below from Bill – the favourable living conditions money could buy, and the stress caused by managing on low incomes.

> Money talks. When you have money you can live in the country I suppose . . . better lifestyle, better living, you don't have to work full time, on the golf course everyday I suppose. . . . I mean you're watching telly and they're throwing all these loans at you and credit cards and things like that. I think it does people's health in, financial problems, because they worry about it. It makes them ill (ID518).

Similarly, while some respondents suggested that health-damaging lifestyles were a matter for individual responsibility, it was more common for accounts to highlight the importance of having the resources to 'behave healthily', as illustrated in this comment from Olive – an older married woman living in a disadvantaged study area:

> They are poorer up this way and they probably don't eat as well. They live on chips and things like that up here. I mean they have less money

> whereas if you are more posher, as I call them, you have the money to spend on different foods . . . to have more vegetables . . . it's because of money (ID1179).

It is implicit in many of the comments quoted so far that the pathway between the experience of material disadvantage and ill health could be conceptualised as direct and/or indirect. As Bill noted, worrying about financial problems could lead to ill health as surely as shortage of good quality food. In many accounts, as we discuss in the following section, these indirect pathways were elaborated in some detail.

Indirect pathways between disadvantage and ill health: The most common mediating factor linking material disadvantage to ill health elaborated by the respondents in this study was 'stress'. However, it is also evident from the discussion so far that stress could operate in two contradictory ways: to equalise the health risks experienced across socio-economically diverse groups, or to discriminate between people living in different socio-economic circumstances. Respondents quoted earlier, for example, noted that professional people experience both more or less stress than working class people and that having neighbours you can trust leads to 'peace of mind'. In some accounts the mediating role of 'stress' in the pathway between disadvantage and ill health was crafted with great attention to detail. For example, in discussing the impact financial pressures have on her life, the lone mother Chris, quoted earlier, argues that:

> It's only obvious that we would not feel health wise as someone would who has all the comfort and luxuries around them. You know they go on holidays three times a year . . . whereas we can't afford to go on three holidays a year so that's the difference. Their outlook on life is more relaxed and at ease and more comfortable. Whereas we are struggling day to day with pressures and to keep up with things (ID485).

Respondents living in the affluent study areas would also highlight 'stress' as the pivot linking material and health disadvantage, drawing on their own more 'positive' experiences to explain their reasoning, as the following quote from Linda, a lone mother of two children illustrates

> I think it [health differences] boils down to the area and social aspects of it, the social issues. I think they are the most important things that affect people's ill health . . . I just look at myself, 'cos I've got quite a stressful job . . . but I mean I think a bit of stress is good for you. It can spur you on a little but when you get too much of it your body just goes wow, time out, I've had enough. So you can understand that people are suffering from stress when they're got a low income coming in and they've got the stress of not being able to get a job . . . and they've got no money and they've

got to feed their family. and like I say it's no wonder that people end up ill . . . whereas the only stressful thing I think round here is the traffic. You're got all your facilities near by . . . and you're not actually far from the countryside . . . it's a nice area. I'm not frightened to let the kids out. 'Cos the neighbours will watch out for the kids (ID808).

Some respondents referred to the cumulative effects of stressful experiences. Others, such as Eva, who was in her 30s and lived with her partner and children in a disadvantaged area, distinguished between the sources of stress that one could change and those over which individuals had no control:

I mean everyone has a bit of worry. But it's our own worry brought on by ourselves. . . . but outside worries that you haven't got an influence on changing, that has a bigger effect on you, I think. You can't sit down and think 'well I've got this problem and how can I solve it'. 'Cos you can't solve it if it's outside your house and it's some little toe rag giving you grief or whatever . . . it's an outside influence that you can't control, you can't change it, you haven't the power to change it and it takes over your life. 'Cos I went through a phase [being harassed by a particular person] . . . and you don't sleep and it does tire you out and you're nervous all the time and scared to go out of the house (ID054).

The way that people make comparisons across social groups was also identified as a mechanism linking material and health disadvantage – albeit less frequently. Tim, an 18-year-old man living in the disadvantaged area of Lancaster with his parents and older sister, for example, talked of the psychological effect of feeling 'less well off than others around you'. Commenting on health differences between different areas he says:

It's probably more psychological. You know 'we live in [XX] a slightly better area' to 'we live in [Y] kind of an ick area'. I think it's probably something to do with that. You live in a slightly nicer area and that will have some effect on your mental health or your general wellbeing (ID1042).

In the context of what was widely perceived to be strong social pressure to be successful in material terms, some respondents argued that it was inevitable that people would judge themselves against others, as Eva commented:

I think that inevitably there must be a comparison. You know you look and see and think 'life's not fair, why can't I have, why aren't I able to have?'. Because if we are all honest, we all like to have nice things around us. . . . I think if we are all honest, we all do it [make comparisons] to

> some extent and I don't think any of us could say that at some stage in our lives we haven't felt envy. . . . You either have or you haven't in today's world and I think that gap is getting wider . . . you are judged by what you have and not by who you are . . . and the people who haven't just get left further behind (ID054).

Ruth, the young woman quoted previously, also highlighted the way in which social comparisons might operate to contribute to health disadvantage amongst people living on low incomes:

> I think it depends on the attitude of the person. If they think why has that person got more money than me? . . . then that would get to them and affect their health (IDYP01).

In this quote Ruth is also pointing to one of the most prominent themes running through these narratives – the pivotal role that individual attributes, such as attitudes, assume as people seek to construct morally rational accounts of health experience (Duncan and Edwards 1999).

Inequalities in health and moral identities: As Blaxter (1997) has commented, qualitative research is full of expressions of the moral frameworks within which lay concepts of health and illness are constructed. In this context, she suggests that:

> To acknowledge 'inequality' would be to admit an inferior moral status for oneself and one's peers: hence, perhaps, the emphasis on 'not giving in to illness', which can be seen as a claim to moral equality even in the face of clear economic inequality (Blaxter 1997: 754).

As the analysis so far has shown, whilst respondents living in disadvantaged circumstances found it difficult to accept evidence on inequalities in health in the abstract, they also gave graphic and explicit accounts of the way in which adverse material circumstances impinged on their health and/or the health of others. However, alongside acknowledging causal links between material disadvantage and health status, individuals, particularly those living in our disadvantaged areas, also (re)constructed acceptable moral identities through narratives of coping and control. In the transcripts of those from the relatively deprived study areas overcoming adversity through 'strength of character' was a particularly prominent theme. In these narratives it was proposed that the individual's response to structural and area disadvantages would determine the impact on health. The following extract from the interview with Bill, a father of two living in an area of relative disadvantage, illustrates the way in which people balanced an acceptance of the relationship between material and health disadvantage with the preservation of moral worth:

Alright, the area might have a lot to do with it. I mean . . . the first thing you do when you get up is see the graffiti, the vandalism and it doesn't help but . . . . at the end of the day if you let it get to you it just causes you ill health. I mean I just, like you hear people talking about worrying, to me I just lock the door and go and forget about it, 'cos it's all got to affect your health at the end of the day, worry. It's how the individual person deals with it all, if you let it get to you, you going to have the health problems, if you don't you, I mean I just, the wife will tell you, I don't care, I just get on with it and just leave it. . . . to me it's just mind over matter (ID518).

The process by which people (re)constructed moral identity was more explicit in some narratives than others. For example, Eva continually stressed the ways in which she adapted her lifestyle and that of her children to improve their families' health. She feels strongly that 'what you do today is an investment for tomorrow' and talks frequently of the importance of having a 'positive outlook and attitude' towards life and health. Commenting on inequalities in health between areas she says:

I think if you have poor housing, or are unemployed and don't have a lot of money, well you are going to have a different outlook. . . . 'Cos unless you are a really strong person and think 'no I am going out there and get a job or retraining' . . . I think it boils down to the person you are and what sort of influences you have had growing up. I mean a lot of people think it's more the outside but at the end of the day it's what goes on in your own home, what sort of morals and standards and ethics you've got. . . . I know everyone can get mixed up and meet the wrong crowd and end up unemployed and taking drugs . . . but that can happen to somebody living in [affluent area] or wherever . . . at the end of the day it's what sort of person you are (ID054).

With only two exceptions, people living in the more advantaged study areas did not feel the need to consider issues of moral identity during the interview although some presented a different moral stance in relation to the issues being discussed. In these narratives, respondents pointed out how they did not have the experience to understand the effects of living in disadvantaged circumstances and were not forced to relate personally to the data. The following comments from Linda, a lone mother with two school-aged daughters and Joyce, a retired married woman, both living in the advantaged area of Salford, illustrate these responses:

I find it difficult to comprehend having lived always in areas where I have liked living. . . . When you have never sort of been there, I mean if I had experienced it I could say yeah it's because of x, y and z . . . but never having been there you can't really understand (ID808).

> I mean I believe there are people who are quite poor in this country but I can't really speak for that because I've always lived my life in suburbia. . . . I can have nice holidays, I can buy clothes within reason and I've got a bit of money in the bank and I'm fortunate. . . . It's very difficult to say isn't it when you haven't been in that position yourself? You see I haven't been in that position thank God. But I'm sure that must bring enormous stresses and strains. I just think that life is very cruel and very unequal but sadly I think it always will be (ID758).

Importantly, the two respondents in the advantaged areas who did make reference to the way in which 'strength of character' mediated between material inequalities and health experience had been brought up in the inner city area and described themselves as working class.

Conclusion

There has been relatively little previous research on lay perspectives on health inequalities. This study has sought to explore these perspectives using quantitative data from local surveys and data from in-depth interviews. Specifically, through a postal self-completion survey and in-depth interviews, the research has been concerned to ask respondents living in relatively advantaged and disadvantaged areas to consider why people living in different areas have different health experiences.

When asked, most people in the survey sample made some attempt to explain the inequalities in the health experience of people living in different places that were described in the questionnaire. Not surprisingly, given the format of the question asked, characteristics associated with particular places – referred to in the literature as 'area effects' – were more prominent in these explanations than aspects of individual behaviour, such as smoking or diet. A minority of those responding – around 20 per cent – chose to focus on one of the four categories of causes used in the analysis: macro-structural, place-based factors, individual factors and other factors, including hereditary and stress. Amongst these respondents place-based effects were twice as likely to be highlighted in the genesis of inequalities compared with aspects of individual behaviour. Additionally, amongst these respondents, people living in disadvantaged areas were more likely to suggest place-based causes for inequalities in health, such as poor housing and pollution, whilst those living in more advantaged circumstances were more likely to offer individualistic explanations.

Importantly, however, the vast majority of respondents in these surveys offered explanations that encompassed more than one causal category and frequently articulated linkages between these. Inevitably, therefore, these responses defy any simple categorisation by cause. It was clear, however, that place-based factors were prominent.

Previous research on lay theories about the causes of health and illness have suggested that across social groups people will give more prominence to individual lifestyle factors than to wider structural factors, including unemployment, low income, poor housing, unsafe roads and pollution. In this study, in contrast, and notwithstanding the initial rejection of health inequalities by many respondents from disadvantaged areas in the in-depth interviews, structural factors, particularly those associated with living in particular places at particular times, were given considerable prominence in lay theories of causation. This is almost certainly a direct result of the context within which questions were asked.

In both the survey and in-depth interviews respondents were specifically asked to focus on the causes of differences in the health experience of people living in different places rather than between people in different social groups, such as the rich and the poor, for example. The questions also referred to health problems clearly associated with the physical environment – such as child accidents – as well as to specific diseases. It is therefore not surprising that so many people suggested that the health problems they were asked to comment on were caused, at least in part, by place-based factors, particularly when these aspects of place – for example, poor housing, pollution and lack of play space – were prominent in their own lives. However, this logic does not hold in the wider literature on concepts of health and illness discussed earlier. In this literature, people with direct and immediate experience of social and economic disadvantage appear to be no more likely to give primacy to these factors. Another likely influence on our findings is that the way the research was framed spoke directly to some people's daily experience of living in 'health-damaging places' rather than being framed in more abstract terms. Additionally, it may be that place-based factors, such as pollution and poor housing, are less readily personalised than macro-structural factors, such as poverty and unemployment, and hence carry a lighter 'moral' load – at least within the context of a self-completion postal survey. The anonymity afforded by such a survey may reduce the pressure people feel under to 'account' for themselves socially and/or morally. This could explain why so few people rejected the notion of health inequalities in the context of the survey.

To some extent the findings from the qualitative data support the conclusions Blaxter (1997) draws from her review of previous research on lay concepts of health and illness. There was a clear reluctance amongst people living in disadvantaged areas to accept the notion of inequalities in health between areas and social groups. The data suggest that this is strongly linked to the moral connotations acceptance would involve for places and the people living in them. At the same time, however, respondents also gave vivid accounts of how living in difficult places had negative effects on their health and that of others. Within these narratives there were therefore two potentially contradictory themes: one in which the existence of inequalities is denied and one in which there are degrees of acceptance of inequality. These

contradictions are resolved by the narrative (re)construction of moral and social identity in which strength of character and personal control are emphasised. An individual may be exposed to considerable social, material and psychological risks to their health but the way the individual responds to these will determine whether health is damaged.

To the extent that ideas of causality can be excavated from these accounts, it would appear that psychosocial pathways linking material and health disadvantage are common in lay theories. For example, whilst some respondents suggested that stress was equally distributed in the population, others, particularly those living in disadvantaged circumstances, argued that it was stress that mediated the relationship between the experience of disadvantage and poor health. Another route to stress and hence ill health, although mentioned by fewer people, was the tendency for 'poor' people to compare themselves unfavourably with those more advantaged than them. To some extent the particular focus on psychosocial pathways mirrors the current preoccupation of research on inequalities in health. Additionally, however, it could be argued that psychosocial pathways provide an important conceptual link within lay 'theories' to the moral framework within which explanations for health and illness are 'constructed'. If the pathways to ill health are conceptualised as psychosocial then the means to avoid ill health (framed in terms of individual resilience and strength of character) are, potentially at least, within an individual's control. In contrast, it is difficult to envisage what an effective individual response would be to any direct causal relationship between structural factors, area effects and ill health.

Address of correspondence: Jennie Popay, Institute for Health Research, University of Lancaster, Lancaster LA1 4YT
e-mail: J.Popay@Lancaster.ac.uk

Acknowledgements

References

Blaxter, M. (1997) Whose fault is it? People's own conceptions of the reasons for health inequalities, *Social Science and Medicine*, 44, 6, 747–56.
Blaxter, M. and Paterson, E. (1982) *Mothers and Daughters*. London: Heinemann.
Busby, H. Williams, G. and H. Rogers, A. (1997) Bodies of knowledge: lay and

biomedical understandings of musculoskeletal disorders, In Elston, M.A. (ed) *The Sociology of Medical Science and Technology*. Sociology of Health and Illness Monograph. Oxford: Blackwell Publishers.

Calnan, M. (1987) *Health and Illness: the Lay Perspective*. London: Tavistock.

Cornwell, J. (1984) *Hard-earned Lives: Accounts of Health and Illness from East London*. London: Tavistock.

Davidson, R., Hunt, K. and Kitzinger, J. (1999) 'That could be down the road': lay perceptions of images of poverty and inequality, Paper presented at 1999 Medical Sociology Conference.

Davison, C. Davey Smith, G. and Frankel, S. (1991) Lay epidemiology and the prevention paradox: the implications of coronary candidacy for health education, *Sociology of Health and Illness*, 13, 1–20.

Duncan, S. and Edwards, R. (1999) *Lone Mothers, Paid Work and Gendered Moral Rationalities*. Basingstoke, Macmillan.

Gabe, J., Kelleher, D. and Williams, G. (1994) *Challenging Medicine*. London: Routledge.

Herzlich, C. (1973) *Health and Illness: a Socio-Psychological Approach*. London: Academic Press.

Herzlich, C. and Pierret, J. (1984) *Illness and Self in Society*. Baltimore: John Hopkins.

Jones, K. and Monn, G. (1993) Medical geography: taking space seriously, *Progress in Human Geography*, 17, 4, 515–31.

Lambert, H. and Rose, H. (1996) Disembodied knowledge? Making sense of medical science. In Irvin, A. and Wynne, B. (eds) *Misunderstanding Science? The Public Reconstruction of Science and Technology*. Cambridge: Cambridge University Press.

Lynch, M. and Woolgar, S. (eds) (1990) *Representation in Scientific Practice*. Cambridge MA: MIT Press.

Mishler, E. (1984) *The Discourse of Medicine: Dialectics of Medical Interviews*. New Jersey: Ablex.

Popay, J. and Williams, G.H. (1996) Public health research and lay knowledge, *Social Science and Medicine*, 42, 5, 759–68.

Popay, J., Williams, G., Thomas, C. and Gatrell, A. (1998) Theorising inequalities in health: the place of lay knowledge. In Bartley, M., Blane, D. and Davey-Smith, G. (eds) *The Sociology of Health Inequalities*. Oxford: Blackwell.

Popay, J., Thomas, C., Williams, G., Bennett, S., Gatrell, A. and Bostock, L. (forthcoming) A proper place to live: health inequalities, agency and the normative dimensions of space, *Social Science and Medicine*.

Rosenstock, I.M. (1969) Prevention of illness and maintenance of health. In Kosa, J., Antonovsky, A. and Zola, I.K. (eds) *Poverty and Health*. Cambridge MA: Harvard University Press.

Williams G.H. and Popay J. (1994) Lay knowledge and the privilege of experience. In Gabe, J., Kelleher, D. and Williams, G. (eds) *Challenging Medicine*. London: Routledge.

Wynne, B. (1996) Misunderstanding misunderstandings: social identities and public untake of science. In Irwin, A. and Wynne, B. (eds) *Misunderstanding Science? The Public Reconstruction of Science and Technology*. Cambridge: Cambridge University Press.