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**Perception of Health Inequalities
in Different Social Classes, by Health
Professionals and Health Policy Makers
in Germany and in the United Kingdom**

VON

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Abstract

In der Studie wird die Wahrnehmung der 'gesundheitlichen Ungleichheit' untersucht, d.h. die Wahrnehmung der in vielen empirischen Studien belegten Tatsache, daß Personen mit einem geringeren sozio-ökonomischen Status zumeist kränker sind und früher sterben als Personen mit einem höheren Status. Die folgende Frage steht im Mittelpunkt: Was wissen Angehörige der unteren sozialen Schichten, Akteure der gesundheitlichen Versorgung und der Gesundheitspolitik über die Existenz der gesundheitlichen Ungleichheit, die Erklärung und die mögliche Verringerung dieses Problems?

Die Studie betrachtet das Problem der gesundheitlichen Ungleichheit somit von einer 'Akteur-Perspektive' aus. Bezogen auf Akteure der gesundheitlichen Versorgung und der Gesundheitspolitik werden vor allem Informationen aus der Bundesrepublik vorgestellt. Bezogen auf die Perspektive der unteren sozialen Schichten werden dagegen vor allem Studienergebnisse aus Großbritannien präsentiert.

Der Überblick über den Stand der Literatur zeigt, daß sehr wenig über die Wahrnehmung der gesundheitlichen Ungleichheit bekannt ist. Die Forschungsfragen dieser Studie spielen offenbar weder für Wissenschaftler noch für Akteure der gesundheitlichen Versorgung und der Gesundheitspolitik eine bedeutende Rolle. Durch eine verstärkte Thematisierung dieser Fragen könnte ein Beitrag dazu geleistet werden, die Diskussion über Strategien der Verringerung gesundheitlicher Ungleichheit zu beleben.

Abstract

The paper focuses on the following question: What is known about the existence and the extent of health inequalities, their explanations and potential ways to reduce them, by members of the lower social class, by health professionals and by health policy makers? By health inequalities we mainly refer to differences in morbidity and mortality between socio-economic groups, i.e. differences in morbidity and mortality by education, occupation and income.

The paper looks at the problem of health inequalities from an 'actor-perspective'. Concerning the perspective of health professionals and health policy makers, information is mainly provided from Germany, where the funding institution and the first author are based. Concerning the perspective of the lower social class, however, information is mainly provided from the United Kingdom. The United Kingdom is the Western European country with the greatest breadth of research on health inequalities; thus it can serve as a "role model" for Germany, where this kind of research is still rather limited.

The review shows that we know very little about the perception of health inequalities by these actors. Research on health inequalities still seems to be rather isolated from the beliefs and values of the people most concerned, at least in Germany and in the United Kingdom. Promoting the discussion on the perception of health inequalities would help to develop strategies addressed at reducing them.

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I. Introduction

The paper focuses on the following question:

What is known about the existence and the extent of health inequalities, their explanations and potential ways to reduce them, in different social classes, and especially by members of the lower social class, by health professionals and health policy makers?

By health inequalities we mainly refer to differences in morbidity and mortality between socio-economic groups (i.e. differences in morbidity and mortality by education, occupation and income), although differences between other groups of the population (e.g. between men and women) could also be included.

We believe that it is important to ask this question. Health inequalities have been found in all countries where this issue has been studied (Kunst/Mackenbach 1994, Mielck/Giraldes 1993). The failure to reduce health inequalities is probably at least partly due to the fact that there is little communication between the researchers working on health inequalities and the general public. The research results on health inequalities are rarely discussed with health policy makers, for example, and researchers rarely ask members of the lower social class why they believe their health is relatively poor. Thus, asking the above question could help to improve research on health inequalities and the implementation of its results. The question has very seldom been addressed thoroughly, though, and it cannot be answered easily, as the available information is very scattered and has not been reviewed yet. At least for Germany this paper is a first attempt to assess the state of the art concerning this question and to define the need for future research.

The paper looks at the problem of health inequalities from an 'actor-perspective'. Concerning the perspective of health professionals and health policy makers, information is mainly provided from Germany, where the funding institution and the first author are based. Concerning the perspective of the lower social class, however, information is mainly provided from the United Kingdom, as there are hardly any studies on this topic from Germany. The United Kingdom is the Western European country with the greatest breadth of research on health inequalities; thus it can serve as a "role model" for Germany, where this research is still rather limited. The information from the United Kingdom mainly deals with lay concepts of health and of health inequalities. Any attempt to understand the perception of health inequalities by the lower social class has to incorporate these concepts, and in Germany very few studies have been conducted in this field (Faltermaier 1994a).

The review is based on the extensive experience of the authors in research on health inequalities and on lay concepts of health. A computerised literature search is not very helpful in this case, as there are hardly any special articles or books dealing with the question discussed in this paper. Therefore, we had to scan through the published and unpublished papers available to us in order to find information that could be relevant.

II. Discussion in Germany: Perspective of Health Professionals and Health Policy Makers

1. Health Inequalities in Germany

Health inequalities have been a major public health issue in Germany before World War I (Grotjahn 1912, Mosse/Tugendreich 1913), and after World War II it took some years until it regained some public attention (Abholz 1976). In recent years, there has been an increasing awareness of health inequalities among public health researchers, but the communication of their results to health professionals and health policy makers is still very limited.

a) Empirical Information on Health Inequalities

There is a large body of empirical information from Germany demonstrating that there are important differences in morbidity and mortality by education, occupation and income (Mielck 1994). Most of these studies are based on data from Western Germany, but the available studies from Eastern Germany show very similar results.

Concerning differences by *education*, the studies have shown, for example, that the prevalence of less than good health (Mielck/Apelt 1994), the number of sick days (Bormann/Schroeder 1994, Kirschner/Meinlschmidt 1994), the prevalence of cardiovascular diseases (Hoffmeister et al. 1992, Mielck/Apelt 1994) and the restrictions of daily activities due to poor health (Kunst et al. 1995) are increasing and that life expectancy (Klein 1996) is decreasing with decreasing educational status. In order to demonstrate the extent of these differences, the results from Mielck/Apelt (1994) are presented in table 1. They are based on a survey conducted 1986/87 in the East German town of Görlitz. They indicate that in the lowest educational group morbidity is 1.6 to 5.9 times higher than in the highest educational group, and that in most cases this difference is statistically significant.

Table 1: Educational Status and Morbidity

	School class finished	Odds Ratios ^a (95% Conf.-Interval)	
		Men	Women
Less than good health	12	1.00 ^b	1.00 ^b
	10	1.42 (0.79 - 2.54)	1.13 (0.65 - 1.95)
	8	2.29 (1.33 - 3.95)	1.73 (1.01 - 2.95)
Cardiovascular Diseases	12	1.00 ^b	1.00 ^b
	10	1.09 (0.59 - 2.00)	4.18 (1.48 - 11.78)
	8	1.63 (0.93 - 2.87)	5.92 (2.14 - 16.41)

a: Variable controlled for: age

b: Comparison group

Population sample: 1.544 men and 2.205 women (above age 20) from Görlitz

Data base: Survey conducted 1986/87

Source: Mielck/Apelt 1994

Concerning differences by *occupation*, information from Germany is much more scarce than in many European countries, mainly because in Germany (unlike in other European countries such as the United Kingdom) there is no information on occupation on the death certificates. Other studies are available, though, and they show,

for example, that the prevalence of poor health (Statistisches Bundesamt 1992), of cardiovascular diseases (Hoffmeister et al. 1992) and of psychological problems is increasing (Dilling/Weyerer 1987) as well as mortality (Neumann/Liedermann 1981) is increasing with decreasing occupational status. As an example of these studies the results from the Statistisches Bundesamt (1992) are presented in table 2. In this study very broad occupational groups are distinguished, but despite the fact that these broad groups hardly present distinct social classes, the results still indicate that there are large differences in morbidity between these occupational groups.

Table 2: Occupational Status and Morbidity

	Respondents Saying that there are Sick or that are Injured by an Accident (in %)	
	Age: 15 - 40 years	Age: 40 - 65 years
Self employed	4.9	7.7
Civil servants	6.5	9.5
White collar workers	7.3	8.8
Blue collar workers	9.3	13.2

Population sample: 33,196 occupied men and women from East. & West. Germany

Data base: Survey conducted 1992

Source: Statistisches Bundesamt 1992

Concerning differences by *income*, studies from Germany have shown, for example, that the prevalence of less than good health (Abel/Wysong 1991, Helmert et al. 1997, Statistisches Bundesamt 1992) and of restrictions of daily activities due to poor health (Helmert et al. 1997) is increasing as well as mortality (Klosterhuis/Müller-Fahrnow 1994) is increasing with decreasing income. In order to demonstrate the importance of these differences the results from Klosterhuis/Müller-Fahrnow (1994) are presented in table 3. The study includes white collar workers only, but despite this restriction there are still large differences in mortality by income in all age groups included.

Table 3: Income and Mortality

Age (in years)	Deaths per 100,000 Persons in the Same Income Groups Gross Income (in 1,000 DM)					
	27 - 34	35 - 42	43 - 50	51-58	59-64	> 64
30 - 34	168	83	37	72	21	35
35 - 39	217	86	109	91	65	38
40 - 44	483	291	247	140	111	104
45 - 49	617	394	279	210	144	167
50 - 54	751	551	479	456	363	357
55 - 59	1010	839	629	704	621	589

Population sample: 13.952 male white collar workers in West Germany

Data base: Routine data from pension funds 1985

Source: Klosterhuis/Müller-Fahrnow 1994

A number of studies have been conducted in Germany which use a combined index of education, occupation and income in order to define different "social strata". These studies show, for example, that for adults the prevalence of less than good health (Helmert 1994), of cardiovascular diseases (Helmert 1994, Hoffmeister et al. 1992, Hoffmeister/Hüttner 1995), of myocardial infarction and stroke (Helmert et al. 1993), of diabetes (Helmert et al. 1994, Hoffmeister et al. 1992) and of poor dental health (Micheelis/Bauch 1991, 1993) is increasing with decreasing social stratum, and that a very similar association between social strata and morbidity is found for children as well (Klocke/Hurrelmann 1995). The results from Helmert (1994) are shown in table 4. He distinguished five social strata, each including about 20% of the sample. The results indicate that less than good health is about 1.9 to 4.1 times more prevalent in the lowest stratum as compared with the highest, and that restrictions of daily activities due to poor health are even 2.3 to 7.0 times more prevalent in the lowest social stratum.

Table 4: Social Strata and Morbidity

	Odds Ratios ^a				
	Social Strata ^b				
	1 (upper)	2	3	4	5 (lower)
Less than good health					
- Men					
- 1984/86	1.0	1.14*	1.25	1.27	1.86**
- 1987/88	1.0	1.77**	2.23***	2.58***	4.13***
- Women					
- 1984/86	1.0	1.75*	1.93**	2.39***	2.58***
- 1987/88	1.0	1.52	1.72*	2.66***	3.32***
Restrictions of daily activities due to poor health					
- Men					
- 1984/86	1.0	1.13	1.39*	1.65	3.52***
- 1987/88	1.0	2.18**	2.95***	4.22***	7.03***
- Women					
- 1984/86	1.0	1.82	1.95	2.58**	2.25**
- 1987/88	1.0	2.25**	2.61**	3.42***	3.63***

*:p<0,05; **: p<0,01; ***: p<0,001 (comparison group: upper social stratum)

a: Variable controlled for: age

b: Index based on education, occupation and income (percentiles of the sample)

Population sample: 2.448 and 2.556 men (1984/86, 1987/88), 2.461 and 2.776 women (1984/86, 1987/88) from Western Germany aged 25-69 years

Data base: Surveys conducted 1984/86, 1987/88

Source: Helmert 1994;

b) Explanations Concerning Health Inequalities

There is sufficient empirical information to support the statement that important health inequalities exist in Germany, that mortality and morbidity increase with de-

creasing social status, in the West as well as in the East. In the German scientific community of social epidemiology, social medicine, medical sociology and public health it is generally agreed that important health inequalities exist and that they present a major public health problem. The next step would then be to explain these health inequalities in order to find potential ways for reducing them. In Germany, there is hardly any discussion on explanatory models, though, and only few researchers participate in this debate. Are health inequalities primarily due to living and working conditions, to individual behaviour such as smoking and diet, to a middle class bias of health promotion programs, to the accessibility of the health care system, to a combination of these different explanatory factors; and how do these different explanatory factors interact? It is even rare that these questions are asked.

The discussion centers around two basic hypotheses:

- Poverty makes you sick.
- Sickness makes you poor.

The explanatory factors mentioned above are mostly addressed towards the first hypothesis. The second hypothesis is based on the fact that sickness could lead to lower income and to unemployment, and also to high medical expenses. More than 100 years ago the Statutory Sickness Fund was established in order to reduce this problem of "sickness makes you poor", and it has been very successful in this respect. The problem has not completely disappeared, of course, but today it is widely believed that health inequalities can mainly be explained by the first hypothesis.

In West-Germany, theoretical contributions addressed at explaining the impact of social class membership on health status were published since the 1970s (Elkeles/Mielck 1997). Some of these contributions are rather vague and unspecific. Weber (1987), for example, distinguishes between environmental factors (e.g. working conditions), health relevant lifestyles (e.g. smoking) and the utilisation of health services (e.g. participation in cancer screening programs), but he does not propose a more sophisticated theoretical model specifying the content of each of these three dimensions and the links between them. Steinkamp (1993) is right when he stresses that the causal links between class specific living conditions (macro level) and the health status of individual persons (micro level) have hardly been established, and that we should focus on the intermediate level (i.e. the level between the macro and the micro level); but he does not present a more elaborated model that tries to specify these causal links.

The most specific theoretical contributions address the importance of the working conditions. Oppolzer (1994) distinguishes between primary and secondary effects of the working conditions. Concerning the primary effects, he points to the fact that in the lower social class the working conditions usually carry more health risks than in upper social class (physical and psychological stress, noise, dust etc.). Concerning the secondary effects, he stresses that deprived working conditions are often associated with other deprivations such as inadequate housing due to insufficient income.

Siegrist (1989) proposes a distinction between three objectives that would have to be achieved in order to reduce health inequalities: equal *availability* of health care re-

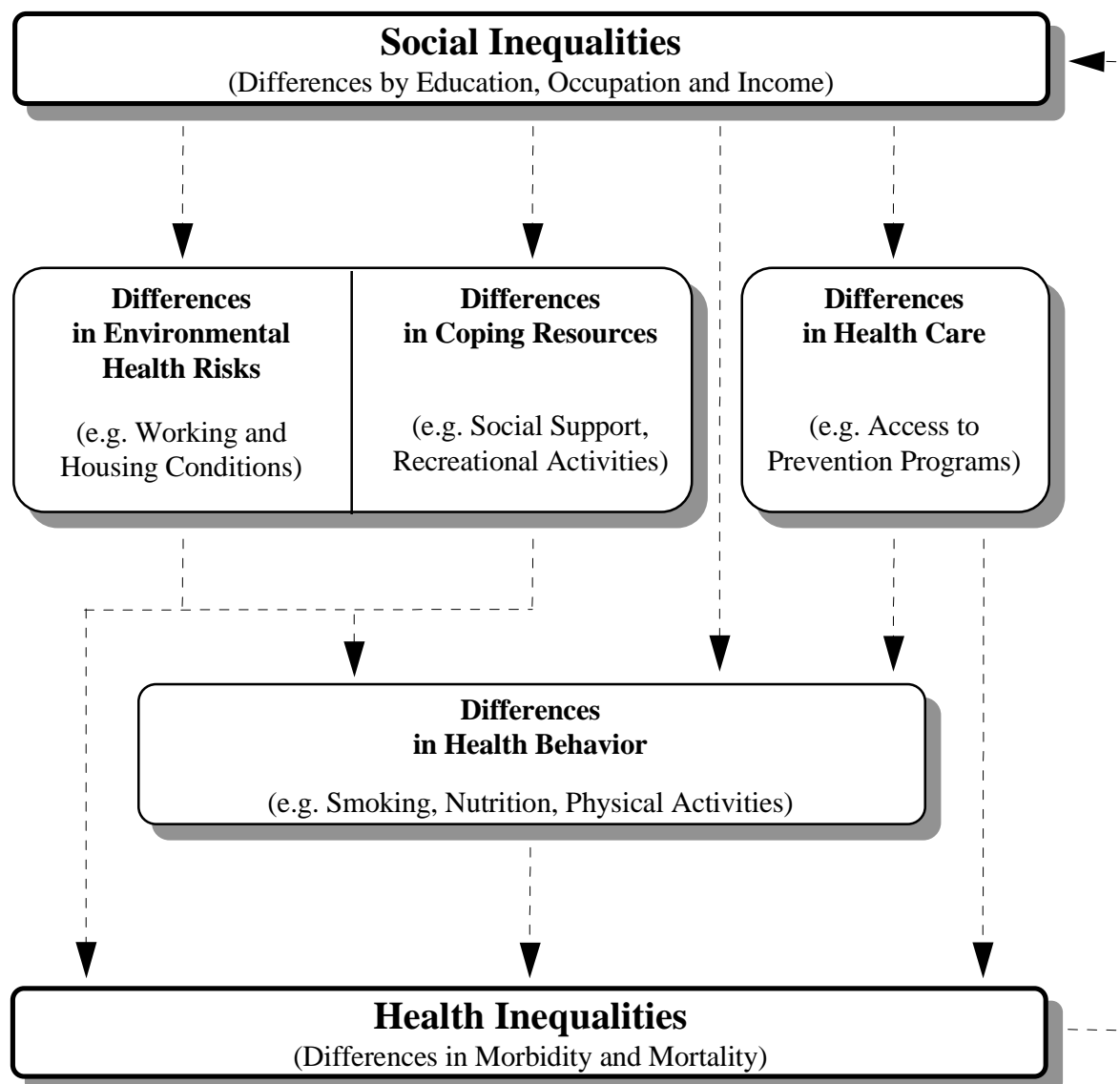
sources for equal needs, equal *utilisation* of health care resources for equal needs, and equal *exposure and resistance* towards health risks. He states that the first objective has largely been reached in Germany, and that currently it is the third objective that poses the greatest problem. This is why Siegrist and his team developed a new theoretical model concerning the exposure and resistance towards health risks (Siegrist et al. 1990, Siegrist 1996). Their model concentrates on the mismatch between high workload and low rewards (low income, restricted career opportunities, low security to stay employed etc.). Empirical studies have shown that this mismatch is a risk factor for cardiovascular diseases, and as the mismatch is most prevalent in the lower social class, the model contributes to our understanding of health inequalities in a similar way as the "job strain" model (Karasek/Theorell 1990) which stresses the imbalance between high psychological job demand (high concentration etc.) and low job control (low freedom to decide upon the content and order of one owns work).

A similar theoretical approach is proposed by Gerhardt (1991). She observed that after a by-pass surgery early retirement is much more common in the lower social class than in the upper. She explains this difference by social class differences in coping styles and in competence, stating that it is more easy for members of the upper social class to return to work as they have a greater chance to adapt their way of working to their new impaired health status.

In Germany, the theoretical discussion on health inequalities is faced with a number of problems. First of all, the discussion is not very vivid, as there are only few researchers participating. Another problem is the focus on working conditions. Obviously, working conditions are important for explaining health inequalities, but they don't explain everything. It would be important to look for social class differences in all major health relevant factors such as environmental pollution and social support, and for the links between these various factors. Also, it is generally assumed that in Germany health inequalities cannot be explained by differences in access to and quality of health care, but there are hardly any studies looking more carefully at this potential cause of health inequalities.

In a recent paper, Elkeles/Mielck (1997) try to promote the discussion on health inequalities by proposing a simple theoretical model that integrates social class differences concerning exposure to environmental health risks and coping resources, health care and health behaviour (figure 1). The model could be a step forward, although it could be criticised, of course, that it is still rather vague and unspecific.

Figure 1: Association Between Social Inequalities and Health Inequalities



Source: Elkeles/Mielck 1997 (English version by A. Mielck)

Some readers might wonder about the contribution of German sociologists to the explanation of health inequalities. In the recent years the sociological discussion in Germany has moved away from the concepts of social class and social strata. It is often claimed that in Germany classes and strata have nearly disappeared in the process of modernisation, that today it is more important to study "horizontal" inequalities (e.g. differences by gender) than "vertical" ones (e.g. differences by income), that the diversity of lifestyles cannot any longer be stratified into distinct strata according to knowledge, power, wealth or prestige (Hradil 1994). Some researchers insist that important vertical inequalities still exist (Noll/Habich 1990, Geißler 1996, Bulmahn 1997), but most German sociologists are neglecting this problem. This is why social epidemiology has received little support from sociology concerning theoretical models explaining health inequalities.

2. Health Inequalities as a Public Issue

a) Awareness Concerning Health Inequalities

In recent years public awareness concerning health inequalities has increased in Germany, probably due to the fact that unemployment and poverty have risen considerably. Some large reports on poverty in Germany have been published (e.g. Armutsbericht 1989, Hanesch et al. 1994, Hauser/Hübinger 1993), and in the newspaper there is often an article discussing problems related to poverty. A study reviewing reports on poverty in 32 major regional and national German newspapers and news magazines found that the number of reports has increased considerably between 1990 and 1995 (Peters 1996). Reports on poverty were found in 243 issues with the highest number of reports in November and December 1995 (table 5).

Table 5: Issues of 32 Major German Newspapers Including Reports on Poverty

Month	1990	1991	1992	1993	1994	1995	
January	1	0	3	4	8	4	20
February	1	0	0	2	2	2	7
March	2	0	2	3	1	5	13
April	0	1	3	1	6	8	19
May	2	1	2	3	1	6	15
June	3	0	0	4	2	7	16
July	0	1	0	2	7	9	19
August	0	1	2	5	5	9	22
September	1	0	9	3	2	7	22
October	2	0	1	2	4	7	16
November	1	3	0	5	4	23	36
December	4	2	1	4	4	23	38
	17	9	23	38	46	110	243

Source: Peters 1996

The reports and articles on poverty rarely discuss health problems, though, and thus their potential impact on promoting interest in health inequalities is probably rather limited. Public interest in health inequalities has mainly be promoted by a number of conferences on poverty and health. The first conference took place in 1994, indicating again that poverty became an issue of great public concern at the beginning of the 1990s, and a number of conferences have followed in the meantime. The following list is ordered by the date the conference took place:

- Conference on *"Poverty and Health"* (Bielefeld, June 1994), organised by the German Consortium for Health Sciences (Deutscher Verband für Gesundheitswissenschaften); publication: Zeitschrift für Gesundheitswissenschaften 1995 (2. Beiheft).
- Conference on *"Smoking and Poverty"* (Bonn, August 1994), organised by the Coalition against Smoking (Koalition gegen das Rauchen); no publication.
- Conference on *"Poverty and Diet"* (Berlin, October 1994), mainly organised by the Social Science Research Center - WZB (Wissenschaftszentrum Berlin); publication: Barlösius et al. (1995).

- Conference on "*Poverty and Food in Welfare Societies*" (Freising, October 1995), organised by the Working Association for Nutrition Behaviour (Arbeitsgemeinschaft Ernährungsverhalten, AGEV) and the Technical University of Munich; publication: Köhler et al. (1997).
- Conference on "*Poverty and Health of Children in Hamburg*" (Hamburg, November 1995), organised by the Ministry of Social Affairs of Hamburg (Behörde für Arbeit, Gesundheit und Soziales); publication: Behörde (1996).
- Conference on "*Social Inequalities as a Challenge to Health Promotion*" (Stuttgart, November 1995), organised by the Ministry of Social Affairs (Sozialministerium) of the State of Baden-Württemberg; publication: Sozialministerium (1996a).
- Conference on "*Poverty and Health*" (Berlin, December 1995), mainly organised by the Physician Association (Ärzttekammer) of Berlin; publication: Bouali et al. (1996).
- Conference on "*Poverty and Health: Focusing on Women and Children*" (Hannover, March 1996), mainly organised by the Academy for Social Medicine (Akademie für Sozialmedizin) in Hannover; publication in preparation.
- Conference on "*Poverty and Health*" (Berlin, November 1996), mainly organised by the Physician Association (Ärzttekammer) of Berlin; publication in preparation.
- Conference on "*Social Inequality, Health and Illness*" (Nürnberg, September 1997), organised by the German Society of Sociology (Deutsche Gesellschaft für Soziologie); publication in preparation.
- Conference on "*Poverty and Health*" (Berlin, December 1997), mainly organised by the Physician Association (Ärzttekammer) of Berlin; publication in preparation.

As pointed out above, in German newspapers and news magazines there have been many reports on poverty especially in November and December 1995 (table 5). This is possibly a reflection of the fact that three of the conferences mentioned above took place in this time.

b) Perception by Different Social Classes

The rather unspecific statement that public awareness of health inequalities has risen does not say very much about the perception of health inequalities by the lower social class, by health professionals and by health policy makers. It is important to assess this perception specifically, as dissatisfaction with health inequalities by the lower social class is vital for any program to reduce these inequalities, and as these programs heavily depend on the co-operation with health professionals and health policy makers.

Concerning the perception of health inequalities by the lower social class, there is practically no empirical information from Germany, though, and the same is true for the perception by other social classes. This vast research gap has not even been stated yet in Germany. There seems to be no interest in incorporating the expertise of the lower social class concerning the causes of their increased morbidity and mortality and the potential ways to decrease these health inequalities. Speculating about potential reasons for this neglect, two points could be stressed. First, there are only few researchers in Germany working on health inequalities, and in recent years they concentrated on demonstrating the *existence* of health inequalities. This was probably a good choice, as in Germany there has been very little public awareness concerning

health inequalities. Today, public awareness has risen considerably and the researchers should now focus more on *explaining* and *reducing* health inequalities, and this shift should include asking members of the lower social class about their perception. Second, this kind of research cannot be based on questionnaires only; it requires qualitative research, in-depth interviews, and this kind of research is very time consuming and expensive.

Another related question is how different social classes perceive their chances to influence their own health status. Some researchers have tried to promote the discussion on this question in Germany (Horn et al. 1983, Gawatz/Novak 1993, Faltermeier 1994a), but they have not been very successful, and today there is practically no empirical information from Germany addressing this question directly. The available evidence mainly indicates that members of the lower social class often perceive poor health as 'fate' (Horn et al. 1983), that compared with the upper social classes there is much less optimism concerning the possibility to improve one's own health status (Faltermeier 1994b). This lack of optimism is not surprising, it is probably based on the everyday experience that the chances to change one's living and working conditions are much more limited than for the upper social classes.

3. Perception by Health Professionals and Health Policy Makers

In their daily work health professionals help to improve the health status of the disadvantaged, and of course there is a wide range of activities organised and financed by Regional, State and Federal authorities which aim at helping the disadvantaged. These activities help to improve the living conditions of the lower social classes and thus they also help to improve their health status and to reduce health inequalities. The activities range from financial support (e.g. welfare) to emotional support (e.g. counselling for drug addicts). It would be grossly wrong and unfair to say that health professionals and public authorities don't care about the problems the disadvantaged are faced with. One recent example for this engagement is the "Law for the Support of Children" (Kinder- und Jugendhilfegesetz) which has been expanded in 1991. The major objective of the law is to support children in deprived families, and in 1991 the "Social Pedagogical Support of Families" (Sozialpädagogische Familienhilfe) was included in this law, aiming at helping the parents with the educational training of their children (Fleischer 1996).

It is a different question, though, if health professionals and public authorities care *enough* (and in the right way) about the disadvantaged. Obviously there is no objective answer to this question. Probably, most health professionals and Regional, State and Federal officials will say that they are doing everything they can, and probably most public health researchers and social welfare organisations will say that much more should and could be done. The conflict became more pronounced in the recent years, as unemployment rates were rising in Germany, as public authorities were trying to reduce their expenses on social affairs, and as employers were increasing their efforts to reduce labour costs.

As a "starter" to this section, a small survey conducted in three different German States will be described, indicating that most health professional associations and

health policy makers are not very much aware of health inequalities. Exceptions to this general impression are outlined in the following parts: At first, results from a conference on health inequalities organised by a physician association are presented. In Germany, the major responsibility for health policy lies with the "Laender" (States), not with the Federal government, and that is why it is important to stress that the Ministries of Social Affairs from three States (Baden-Württemberg, Hamburg, North Rhine-Westphalia) have recently taken up the issue of health inequalities. These activities are outlined next, followed by a short description of similar activities on the Federal level. The section closes with a discussion of current health care reforms in Germany, which support the overall impression that health policy makers are still largely neglecting the problem of health inequalities.

a) Survey in Three German States

In 1993 a small survey was conducted by the first author of this paper in order to find out what key players in health policy think about health inequalities (Mielck et. al. 1995). In three different States - a "City-State" in West (Hamburg) and two large States in West (Bayern) and in East Germany (Brandenburg) - 166 key players were contacted: from political parties, Ministries of Health, public health offices, employer organisations, unions, sickness funds, pension funds, physician associations, nursing associations and social welfare organisations. They received a booklet from the WHO explaining the objective of reducing health inequalities (Whitehead 1991), and a very short questionnaire including some questions such as, for example:

- The booklet describes the problem of *health inequalities*.
What do you think, how important is this problem in Germany?
- The booklet describes the problem of *unequal access to health care*.
What do you think, how important is this problem in Germany?

The respondents could circle an answer between "1" (very small) and "8" (very big).

The first result worth mentioning is that the overall response rate was only 25% (table 6). Some respondents sent a letter instead of the questionnaire, explaining that they did not understand the whole idea of the survey. Two of these letters are particularly interesting; they include the following statements (translation by A. Mielck):

- 'The questionnaire does not seem to relate to Germany. The study seems to be addressed to countries that have not yet reached our standard of health care'.
- 'Your questionnaire is addressed to those countries in which unfair inequalities in health exist between different social groups'.

It can be assumed that this position is shared by many of those who have not responded at all, and that the low response rate reflects their little interest in health inequalities.

Table 6: Perception of Health Inequalities in Germany

	n	Respondents n (in %)	Perception of Inequalities ^a	
			in Health	in Health Care
Political Parties	18	1 (6)	3.0	2.0
Ministries of Health	3	3 (100)	3.3	2.8
Public health offices	54	9 (17)	4.4	3.0
Employer organisations	6	1 (17)	2.0	1.0

Unions	6	3 (50)	3.7	4.3
Sickness funds	18	2 (11)	4.5	1.5
Pension funds	6	1 (17)	4.0	3.0
Physician associations	24	9 (38)	2.2	2.0
Nursing associations	9	4 (44)	4.8	4.3
Social welfare organisations	22	8 (36)	4.0	3.6
	166	41 (25)	3.6	3.0

a: Medium score; score between '1' (very small problem) and '8' (very big problem).

Source: Mielck et. al. 1995

Even most of those respondents who filled out and send back the questionnaire don't seem believe that health inequalities are a major problem in Germany. A score of 4.5 would reflect the middle position between "1" (very small problem) and "8" (very big problem). Concerning "inequalities in health", a medium score of 3.6 was reached only, though, and concerning "inequalities in health care", the medium score dropped to 3.0 (table 6). The nursing associations, which have the closest contact to those in need, show the highest score on both inequalities in health and inequalities in health care. It is also interesting to point out that the Sickness Funds have a very low response rate and a very low score on "inequalities in health care". Due to small numbers, the results of this survey have to interpreted cautiously, of course, but the results still suggest that in Germany inequalities in health and in health care are not perceived to be a major problem by most health professional associations and health policy makers.

b) Perception by Physician Associations

The survey mentioned above suggests that inequalities in health and health care are a minor problem for physicians associations. The perception of health inequalities by physicians can also be assessed by screening their journals for relevant publications. In Germany, almost all publications on health inequalities have been published in books or in scientific journals that are probably not consulted by most physicians on a regular basis; and there are only very few articles on health inequalities in those journals that specifically address physicians (e.g. Loosen 1996, Mielck 1995). As far as we know, the journal that is sent to most physicians in Germany (i.e. the "Ärztezeitung") has not yet published a single article with data demonstrating the existence of health inequalities.

It is difficult to find statements from German physician associations concerning the existence of health inequalities and the need to reduce them. The most pronounced exception from this general impression comes from Berlin. At the end of 1995, the "Ärztelkammer Berlin" (Physician Association of Berlin) has organised a conference on poverty and health, mainly concentrating on the homeless, migrants and single mothers and their children. The conference was joined by experts form all over Germany, offering researchers, social workers and health policy makers a platform to exchange their experience. It is not by pure chance that most participants were social workers, and that few researchers and even fewer health policy makers took part. This imbalance mirrors the neglect of health inequalities in the German public health research community and in German health policy.

In the conference proceedings, the president of the Physician Association of Berlin, Dr. E. Huber, defines the problem very clearly (translation by A. Mielck):

'Poverty makes sick. (...). We also know that poverty is not restricted to a small part of the population any more. We are in the middle of a process in which society is split between one third that is rich and two thirds that is poor. (...). The Physician Association of Berlin is obliged to raise its voice if those who are sick due to social distress or neglect of public authorities need special assistance' (Bouali et al. 1996, 9-10).

It is no secret that Dr. Huber does not represent the majority of the presidents of the German physician associations. It is very important, therefore, that he has promised to organise conferences on poverty and health on a regular basis; the second conference has taken place in Berlin at the end of 1996 and the third will take place at the end of 1997.

c) Perception by State and Federal Ministries

Baden-Württemberg, Ministry of Social Affairs

In Baden-Württemberg, the "Sozialministerium" (Ministry of Social Affairs) has initiated and conducted a conference on "Soziale Ungleichheit als Herausforderung für Gesundheitsförderung" (Social Inequalities as a Challenge to Health Promotion) which took place in 1996. In the conference proceedings, the Ministry of Social Affairs states that health promotion programs mainly reach the middle and upper social classes, thus possibly contributing to an increase of health inequalities, and that therefore specific health promotion programs are needed for the lower social class (Sozialministerium 1996a). At the conference Mrs. Solinger, the Minister of Social Affairs in Baden-Württemberg, clearly said that health inequalities favouring the upper social classes exist in Germany, and that in the lower social classes health is relatively poor due to worse working and living conditions, less healthy behaviour and less access to health care (Solinger 1996).

In 1996, the Ministry of Social Affairs in Baden-Württemberg has also financed a project which aimed at enhancing the co-operation between health promotion activities for disadvantaged groups such as the poor, the homeless and the unemployed. About 300 public and private institutions in East and West Germany were asked to provide information on health promotion activities addressing these groups. In the final report 115 activities are listed (Sozialministerium 1996b). In the introduction of the study report the Ministry states that current health promotion activities have not achieved at reaching the disadvantaged, and that special programs tailored for them are needed to improve their living conditions and their health status. The report aims at providing short information on different forms of activities in order to promote networking between them. It does not intend to provide a representative overview from all parts of Germany, and the criteria for including or excluding activities are not quite clear, as it is rather difficult to exactly define those criteria. A multitude of activities providing support to the unemployed, for example, could be classified as health promotion activities. Based on the objective of the report, the list is rather inclusive than exclusive.

Despite these shortcomings it is a very important and useful list, though, as it is the first inventory of its kind in Germany. It supports the following statements:

- Activities are reported from many small and large cities from different parts of Germany, but mostly from the State where the Ministry is based, i.e. Baden-Württemberg. As pointed out above, the list is not intended to provide a representative and complete overview concerning all parts of Germany, and doubtless there are many more activities than listed here.
- It is widely accepted that the poor, the homeless, the unemployed etc. are faced with severe health problems, and that special health promotion programs are needed to improve their health status. Of course, this does not imply that public awareness is large enough and should not be increased, but is important to point out that there are many public and non-public institutions engaged in promoting the health status in the lower social class.
- Public and non-public institutions are about equally engaged in these health promotion activities. The public activities are mainly conducted by the public health offices; they include, for example, counselling of homeless young people and drug addiction prevention programs for people living on social assistance. The non-public activities are mainly run by welfare institutions such as the Red Cross and the churches; they include, for example, counselling of the unemployed and provision of healthy food to people living on social assistance.

The report also shows that the health promotion activities are mostly based on small scale regional initiatives; there seems to be a lack of broad support from State or Federal authorities. Based on the conference mentioned above and the succeeding project on health promotion activities, the perception of health inequalities by the Ministry of Social Affairs in Baden-Württemberg could be summarised in the following way:

- Health inequalities favouring the upper social classes represent a major public health problem that needs to be addressed more than has been done to date.
- It is especially important to support health promotion activities for the disadvantaged and to improve the co-ordination between those activities that are under way already.
- These activities should address those most in need (the poor, the homeless, the unemployed etc.).

It has to be acknowledged that there are very few official documents from State or Federal authorities with a perception and a commitment as clear as this one from Baden-Württemberg. It has to be stated also, though, that the Ministry addresses a very special problem in the realm of health inequalities. The lower social class also includes blue collar workers who are not living below the poverty line, for example, and the health status of the lower social class could also be improved by activities neglected in the study report such as structural changes of the working conditions.

North Rhine-Westphalia, Ministry of Social Affairs

In Germany, Regional, State and Federal authorities have started to publish new kinds of "health reports". The old reports mainly consisted of long tables reporting data derived from public health services, whereas in the new reports information is gathered from more sources and the focus shifted from just reporting the available data to selecting and interpreting the most relevant data. Most of these new reports omit the topic of health inequalities, but in some reports it is included.

In the State of "Nordrhein-Westfalen" (North Rhine-Westphalia), a health report has been published in 1995 including 29 chapters on specific topics such as diabetes or rehabilitation (Ministerium 1995). One of these chapters is specifically addressed to health inequalities. It clearly states that mortality and morbidity are higher in the lower social class than in the upper social classes, and that this inequality is not just due to differences in health behaviour, but mainly due to differences in living conditions.

Including this chapter does not mean that health inequalities rank very high on the list of public health targets, though. The State of North Rhine-Westphalia is the first one in Germany to officially adopt health targets based on the "Health for All 2000 (HFA2000)" program of the World Health Organisation (WHO). The "Landesinstitut für den Öffentlichen Gesundheitsdienst des Landes Nordrhein-Westfalen (LÖGD)" (State Institute for Public Health of North Rhine-Westphalia) has recently published the current 10 primary targets, including targets such as "reduction of cardiovascular diseases" and "support through health information" (Landesinstitut 1996). The first target of the HFA2000 program focusing on health inequalities is not mentioned, though, indicating that the public commitment towards reducing health inequalities is still rather limited.

Hamburg, Ministry of Social Affairs

In Hamburg, the "Behörde für Arbeit, Gesundheit und Soziales" (Ministry of Social Affairs) has issued a report specifying 14 primary health care targets concerning children (Behörde 1992). The fourteenth target is named "poverty" and it reads (translation by A. Mielck):

'Unemployment and increasing dependency on welfare will be fought against in order to reduce the health consequences of unsecure social conditions'.

Three years later another report was issued by the same Ministry documenting the progress that has been achieved in reaching those 14 targets (Behörde 1995). Concerning the fourteenth target, the report states that poverty among children has increased even further.

In 1995, the Ministry has organised a conference on "Poverty and Health of Children in Hamburg" (Behörde 1996). The first talk of the conference was given by the Minister herself, Mrs. Helgrit Fischer-Menzel, and it is interesting to quote some of her statements (translation by A. Mielck):

- 'There is still truth in the old saying: "As you are poor, you have to die earlier". The association between poverty and health has been demonstrated in scientific publications as well'.
- 'The association between social strata and health is not restricted to poverty. Morbidity and mortality are increasing with decreasing education, income and social status for all social strata'.
- 'Due to financial stringencies of the public administration and due to diminishing social support systems, poverty is increasing in our society. Since 1993, the number of people living on welfare increased by 11% in Hamburg'.
- 'Poverty is not a question of money alone, but it includes social disintegration'.
- 'Children growing up in poor families are faced with numerous specific health risks, and thus they "inherit" a disadvantage in morbidity and mortality'.

- 'The primary target has to be: Establish equal chances for being healthy'.
- 'A major activity of the Ministry in order to reach this target is the promotion of employment among the disadvantaged'.

Of course it is a long way from political statements to political actions and finally to reductions in health inequalities, but in Germany there are only very few statements from health policy makers as clear as these. At the conference representatives from different parts of the public administration in Hamburg gave talks, either stressing the importance of the problem or reporting on activities that could help to reduce it. This broad support suggests that there is some reason to be optimistic regarding the link between political statements and political actions in Hamburg.

It is also important to mention that a number of regional and national newspapers published articles on the conference, always stressing that poverty increases among children and that increased poverty is associated with increased morbidity. In a report published in a magazine for physicians these two main results are stated very clearly as well (Loosen 1996).

State Ministries of Social Affairs or Health

In 1994, the Ministry of Social Affairs in Hamburg has raised the issue of "effects of social deprivation on health in children" in one of the regular meetings of the Ministries of Social Affairs or Health from all States in Germany ("Gesundheitsministerkonferenz"). At this meeting, a resolution was passed which can be summarised in the following way (Behörde 1996, pp. 41-43):

Social deprivation is leading to an increase in premature birth and in child mortality, in traffic accidents and in infectious diseases. Medical examinations of school children have also shown an increase in morbidity. Malnutrition is more prevalent among children from socially deprived families, and they more often use legal and illegal drugs. In order to reduce or remove these disadvantages a detailed catalogue of activities should be worked out taking into account the following points:

- In the health reports issued by the Federal and the State governments, more weight has to be put on social deprivation and its consequences for the health status of children. The description has to be detailed enough to provide a basis for the development of specific prevention programs. All Federal, State and Regional statistical systems should be designed to contribute to our knowledge concerning the association between poverty and health in children.
- For children from deprived families the chance to receive adequate health care must no longer be limited as compared with other children. It has to be checked if for the deprived there are specific barriers to accessing the health care system. Access could be limited, for example, by a system of ambulatory care that is too complicated for the deprived, by co-payments, by language and cultural barriers and by long distances to the providers.
- Special health promotion activities have to be addressed towards deprived families, including, for example, programs of empowerment.
- Special programs have to be implemented in those regions where many socially deprived families live, based on a network including all local providers of health care and of social support, and also including local schools, sport clubs etc.

This is probably the most important statement on health inequalities from health authorities in Germany, as it has been supported by the Ministries of Health from all States, and it is important to stress that it includes a clear commitment towards *reducing* health inequalities. It is difficult, though, to assess the impact of this statement. It has been published in the "grey literature" only, and many experts working on health inequalities never even heard of it.

To date there seems to be just one State in Germany that produced a report specifically addressed towards specifying the statements from the resolution outlined above. Not surprisingly it is the State of Hamburg, as Hamburg has brought up the issue in the first place, and again the paper produced by an expert group in Hamburg is published in the "grey literature" only (Behörde 1996, pp. 44-50). The report from Hamburg specifies the population groups that have to be addressed (children from single parent families, children from migrants who are not socially integrated, disabled children, children of parents who are unemployed or who are drug addicts, children in the lowest school level, children who are homeless etc.), and it lists a number of still rather unspecific measures that should be taken (networking of experts and of activities, special health education activities in the lowest level schools etc.).

Probably the impact of these statements from the Ministries - including those specific statements from the Ministries in Baden-Württemberg, North Rhine-Westphalia and Hamburg outlined above - is rather limited, but the important point here is that at least some State Ministries have officially accepted the problem of health inequalities and have committed themselves towards reducing the problem. In Germany, this is a major step forward.

Federal Level

On the Federal level, it is even more difficult to find statements from public authorities stressing that health inequalities are a major public health problem which should be reduced. About 15 years ago Federal Ministries have funded some projects that were specifically addressed towards health inequalities (Eßer 1994); but since then health inequalities have rarely even been mentioned in publications from Federal authorities (Enquete-Kommission 1988, Antwort 1994).

This is also true for the platforms of the political parties. The present Federal government is based on a coalition of the "Christliche Demokratische Union (CDU)", the "Christliche Soziale Union (CSU)" and the "Freie Demokratische Partei (FDP)". The opposition is mainly established by the "Sozialdemokratische Partei (SPD)", the "Bündnis 90/Die Grünen (Green Party)" and the "Partei des Demokratischen Sozialismus (PDS)". The platforms of these parties cover a wide spectrum of political issues, and no issue can be discussed in detail, of course, but if health inequalities are considered to be an important issue, they should at least be mentioned in the platform.

In the platforms of the coalition parties health inequalities are not addressed specifically (Mielck et al. 1995). The platforms stress the importance of equal access to the

health care system irrespective of social status, by they don't include a commitment towards reducing health inequalities, they don't even mention the existence of health inequalities. The opposition parties mentioned above seem to be more aware of health inequalities (Mielck et al. 1995). The SPD issued a paper in 1994 stating, for example, that health inequalities exist, and that any attempt to introduce a health care system for the poor and another one for the rich must be stopped (SPD 1994). A similar paper was published by the Green Party in 1993 (Green Party 1993). In a recent discussion paper of the PDS, it is specifically stressed, though, that health inequalities should be reduced (PDS 1997).

In 1994, the federal government issued a health policy paper, answering questions the SPD has raised on the federal concepts concerning 'disease prevention and health politics' (Antwort 1994). In this paper the government states that health inequalities do exist in Germany, and it is also stated that health promotion and disease prevention should focus on those population groups who need it most. There is no clear commitment, however, towards reducing the health inequalities. As outlined above for the State level, there are some indications, though, that awareness for health inequalities is increasing on the Federal level as well. In the new Federal health report that will be published in 1998 one chapter will be included on "income and health" (Mielck et al. 1997) and another one on "educational level and health". Also, in 1997 the office for technology assessment of the German parliament ("Büro für Technikfolgen-Abschätzung beim Deutschen Bundestag") financed a project reviewing the state of the art concerning the problem of "health inequalities and environmental diseases" (Heinrich et al. 1997).

d) Recent Discussion on Health Care Reforms

The Statutory Sickness Funds in Germany cover 90% of the total population, including all poor and even the homeless. Officially, every insured has equal access to the health care system, and thus it is often believed that health inequalities cannot be due to differences in health care provision. It is interesting, though, to shortly review the recent reforms of the Statutory Sickness Funds and the controversies surrounding these discussions.

The following three steps of the reform have to be distinguished:

- The first step is represented by the "Gesundheitsreformgesetz (GRG)" which took effect in 1989. It included a massive increase of co-payments.
- The second step is represented by the "Gesundheitsstrukturgesetz (GSG)" which took effect in 1993. It included a further increase of co-payments.
- The third step has recently been introduced by the "Neuordnungsgesetz (NOG)" which took effect in 1997. It includes a further increase of co-payments and a reduction of the benefits.

It is obvious that increasing co-payments should have an effect on health inequalities. Those who are poor are often more sick and thus they would have to pay more for co-payments. In addition, their financial burden is increased by the fact that they have less income to pay the higher co-payments from. One consequence could be that poor people are spending a much higher percentage of their income on co-payments than the rest of the population. Another consequence could be that poor

people avoid co-payments by avoiding medical care that the rest of the population asks for. To date there are no empirical studies from Germany, though, assessing the impact of co-payments on health care utilisation by the poor.

The argument that co-payments increase inequalities by putting a special financial burden on the poor is regularly countered by the government with the argument that in the Statutory Sickness Funds there is a system to exempt the poor from co-payments. In 1996, for example, an insured with a gross monthly income below 1,650 DM didn't have to pay any co-payments. In addition, co-payments are limited for the rest of the insured to 2% of the gross income. Thus, a couple living on a pension of 2,000 DM per month would have to pay a maximum of 480 DM per year for co-payments.

This counter-argument is flawed for at least two reasons, though. First, many eligible insured are probably too ashamed to apply for the exemption. There is not a single study in Germany that tried to assess the percentage of the eligible patients who did not apply for the exemption, and that tried to find out the reasons and the health consequences of this refusal. We have to assume that many eligible insured refuse to apply and that therefore the counter-argument of the government is not well substantiated.

Second, the counter-argument does not relate to those benefits that are not covered by the Statutory Sickness Funds in the first place. In the last years a number of drugs for minor illnesses have been taken from the schedule of benefits, for example. When these drugs are paid out of pocket now, the financial burden is more heavy for the poor than for the rich. The government plans to further restrict the schedule of benefits, and thus to increase co-payments for the excluded benefits to 100%. In this situation it is rather cynical to state that there is a system in the Statutory Sickness Funds that prevents co-payments from putting an undue burden on the poor. Again, there is no study that tries to assess the effect of reducing the schedule of benefits on the utilisation of health care by the poor.

The introduction of fixed budgets for medical care leads to an additional problem concerning health inequalities. In 1996, some budgets in the Statutory Sickness Funds have been exhausted before the end of the year. Many physicians were afraid that they would not be reimbursed adequately any more, and some even refused to provide all services they would normally provide. In a newspaper report, a gynaecologist from Bonn said that nobody can expect a physician to work for free, and that he asks his patients who are insured at a Statutory Sickness Fund to please not use too much of his time. If no reimbursement can be expected from the Statutory Sickness Fund, some physicians refuse to treat these patients or ask them to pay the treatment out of pocket (General Anzeiger, January 21, 1997, p. 6).

Compared with treating patients from Statutory Sickness Fund, physicians can usually earn much more by treating "private patients" (i.e. patients who are insured at a Private Sickness Fund or who pay out of pocket). On one hand, people with low income are usually insured at a Statutory Sickness Fund; on the other, it has to be expected that physicians are increasingly trying to raise their income by treating "pri-

vate patients" with more care than the other patients. It has to be feared, therefore, that the quality of health care is decreasing especially for the poor.

The new regulations of the "Neuordnungsgesetz (NOG)" that took effect in 1997 led to a substantial increase in the financial burden of the insured. The main changes are:

- For those who were born *after* December 31, 1978, dentures are not covered any more. The financial support from the Statutory Sickness Fund (previously 50% to 60%) is reduced to zero. The reasoning is that today young people are learning so much about preventive dental care that from now on they should be financially responsible for dentures. Only those dentures are still covered that are necessary due to an accident, a malformation or a severe general disease.
- Co-payments for drugs have been raised from 3, 5 and 7 DM per package (depending on the size of the package) to 4, 6 and 8 DM in January 1997, and even to 9, 11 and 13 DM in July 1997. In a single year this amounts to an increase of 300% (from 3 to 9 DM), 220% (from 5 to 11 DM) and 186% (from 7 to 13 DM)!
- Sickness leave payments from the Statutory Sickness Fund are reduced from 80% to 70% of the gross income.

(In Germany, the first six weeks of sickness leave are covered by the employer, and the following sickness leave payments are covered by the Statutory Sickness Fund.)

Table 7 gives an overview over the current most important co-payment regulations of the Statutory Sickness Funds in West Germany (the regulations for East Germany differ only slightly). It also shows that children below age 18 and the poor are exempted from most co-payments, and that some co-payments for other insured are restricted to 2% (for chronically sick to 1%) of the gross income. As stated above it is not known, however, how many eligible adults are actually applying for this exemption from co-payments.

Table 7: Co-payments (selection) and exemptions in West Germany, October 1997

Categories	Amount of co-payment	Exemptions		
		Total exemption of children below 18 years	Total exemption of poor adults ^a	Partly exemption of other adults ^b
Drugs	DM 9, 11 or 13 ^c	YES	YES	YES
Bandaging	DM 9 (per bandage)	YES	YES	YES
Massages, physiotherapy etc.	15% of the costs	YES	YES	YES
Insoles etc.	20% of the costs	YES	YES	-
Travel fares ^d	DM 25 per travel	-	YES	YES
Inpatient treatment	DM 17 per day (max. 14 days)	YES	-	-
Spa-cures after inpatient treatment	DM 17 per day (max. 14 days)	YES	YES	-
Dentures	45% to 55% of the costs ^e	-	YES	(special clause) ^f
Spa-cures for mothers	DM 17 per day	YES	YES	-

a: exemption of insured below the poverty line (e.g. for a couple with no children in West Germany: gross income per month below DM 2.348,50)

b: co-payments per year of max. 2% of the household gross income, for chronically sick max. 1%

c: for small, medium or large packages (per package)

d: travel in an ambulance to and from inpatient care, and to outpatient care if it replaces inpatient care

e: depending on participation in preventive dental care

f: Even for low income households, co-payments for dentures could amount to a few thousand DM per year.

Probably the co-payments will increase even further. If a Sickness Fund has to raise the contribution rate, the "Neuordnungsgesetz (NOG)" states that per 0.1 increase of the contribution rate it has to raise its *relative* co-payments rates (e.g. for dentures) by 1% and its *absolute* co-payments (e.g. for drugs) by 1 DM. Today, the Sickness Fund takes about 13% to 14% of the gross income. If this contribution would have to be raised by 0.5%, the following increases would have to be established, for example:

- Co-payment for drugs would have to be raised from 9, 11 and 13 DM to 14, 16 and 18 DM per package (depending on the size of the package).
- For those who were born *before* December 31, 1978, co-payments for dentures would have to be raised from 45% to 50% or from 55% to 60% (depending on the participation in preventive dental care).

It is also planned that the schedule of benefits shall be restricted more than to date to the "medically necessary" benefits (e.g. by restricting expenses for rehabilitation, massages and for nursing care at home).

It is by no means certain that the government will succeed in establishing these additional measures. There is still a hot discussion going on between the Minister of Health on the one hand, claiming that the additional steps are unavoidable, and the opposition in parliament, the Statutory Sickness Funds, the unions etc. on the other hand, claiming that this would put an end to the "principle of solidarity" which is fundamental to the Statutory Sickness Funds. The principle of solidarity states that in the Statutory Sickness Funds the poor are supported by the rich, and the sick are supported by the healthy. Those opposing the reforms of Statutory Sickness Funds often claim that the principle of solidarity is endangered and that we are on the way towards a "two-classes health care system" (Zwei-Klassen-Medizin), i.e. one kind of health care for the rich and another one for the poor.

The worry that the principle of solidarity will be weakened is also based on the fact that it is planned to increase the competition between different Statutory Sickness Funds. This could lead to an increasing competition for 'good risks', i.e. a competition for healthy members from the higher income groups. Those Sickness Funds successfully competing for these 'good risks' could then offer their members lower premiums and/or a better schedule of benefits, whereas the other Sickness Funds would have to raise their premiums and/or reduce their schedule of benefit.

The reforms of the Statutory Sickness Funds that have been established already and those that are still planned by the Federal government all carry the potential to *increase* health inequalities. It can be assumed, therefore, that the Federal government is not very much aware of the problem of health inequalities, and that new laws that are designed to *reduce* these inequalities cannot be expected in the near future.

4. Conclusion

Many empirical studies have shown that in Germany there are large differences in morbidity and mortality by education, occupation and income favouring the upper social classes. It is much more easy to describe than to explain these health inequalities, though, as the explanation has to incorporate a multitude of interrelated factors such as working and housing conditions, health behaviour and access to health care,

and as the effect can work in both ways: On one hand, low socio-economic status could lead to poor health (causation hypothesis), and on the other, poor health could lead to low socio-economic status (selection hypothesis).

The discussion on explanatory models is not very advanced in Germany, and there is no study that tried to assess whether the health inequalities found in Germany can mainly be explained by the causation hypothesis or by the selection hypothesis. Drawing on studies from the United Kingdom showing that the causation hypothesis carries much more explanatory power than the selection hypotheses (Davey Smith et al. 1994), it can be assumed that the same is true for Germany as well, but we still don't know *why* poor health is "caused" by a low socio-economic status. Socio-economic status could influence health via a number of intermediate factors, it could be associated with many health relevant conditions, and to date only few of those have been analysed (e.g. physical and psychological stress at work).

The lack of vivid discussions on explanatory models in the German scientific community corresponds with a lack of discussions on health inequalities in the general public, and also with a lack of programs addressed towards reducing health inequalities, but slowly the situation seems to be changing now. For some years poverty is on the rise in Germany, it became a hot topic, and a number of conferences were specifically addressed towards the association between poverty and health. Physician associations and State and Federal Ministries are also slowly starting to pay more attention to health inequalities. This "movement" is still rather weak, though, and the current health care reforms in Germany (that include a massive increase of the financial burden on the sick) indicate that health policy today is not designed to *reduce* health inequalities but rather to *increase* it.

Public commitment towards reducing health inequalities can also be assessed by reviewing publications on interventions that are addressed to this problem. In a recent review, 67 publications have been found in international scientific journals (Gepkens/Gunning-Schepers 1996), and none of the publications came from Germany. This lack of contributions from Germany is partly due the small number of German researchers working on health inequalities, but it also indicates that in Germany few researchers and public health officials believe that health inequalities should and could be reduced. Most studies have been published from the USA, where differences in health and health care by income and by race are much more pronounced than in Western Europe. Regarding Western European countries, most studies came from the United Kingdom and from The Netherlands. In these two countries health inequalities are probably not a much greater problem than in Germany, but experts working on health inequalities have been more successful than in Germany to make this a public issue.

It can be assumed that in Germany most health professionals and health policy makers are either not fully aware of the existing health inequalities, or that they believe that they are doing already everything they can to reduce this problem. It is sometimes argued that in order to reduce health inequalities it is most important to reduce social inequalities in the first place, or that the association between poverty and health is primarily a problem of the social welfare system in general and not of

the health care system in specific. There is some truth in this argument, but it is easily misused as an excuse for passing the responsibility on to another authority. It would be most important to fight poverty, of course, but as long as poverty exists it is important to reduce the association between poverty and health, and health professionals and health policy makers should accept their responsibility in this regard.

It can also be assumed that the lack of knowledge concerning health inequalities - and the belief that the existing health inequalities cannot be reduced - is shared by the majority of the population. These assumptions can be specified by the following hypotheses:

- It is widely known in all social classes that health inequalities exist favouring the upper social class, but the extent of these inequalities and the potentials to reduce them are largely underestimated.
- Health inequalities - as well as social inequalities - are widely accepted in all social classes as a fact of life that has to be taken as an expression of how our society is organised and how it rewards the upper class. This passive attitude could be overcome, for example, by asking members of the lower social classes about potential ways to improve their health status.

It is a strange situation that for many years empirical information has been accumulated showing that we are faced with a large public health problem, i.e. health inequalities, that there is a lack of explanation and of programs designed to reduce this problem, and that still no study has been conducted that tried to fill these gaps by analysing the perception of health inequalities by the general public on one hand and by physician associations and health policy makers on the other. It would be interesting to know, for example, how members of the lower social class perceive the inability of researchers to explain health inequalities. We don't know the answer, but it can be assumed that there is a lot of mocking at these "experts" who don't even care to ask those who are most affected.

III. Discussion in the United Kingdom: The Lay Perspective

As pointed out in the introduction, the United Kingdom can serve as a "role model" for Germany concerning research on health inequalities. This is especially true for information on lay concepts of health. In order to study socio-economic differences in the perception of health inequalities it is essential to understand the socio-economic differences in lay concepts of health. In the United Kingdom there is an extensive body of research on lay concepts of health, and there are even a few studies on socio-economic differences in lay concepts of health. Before this information is presented below, a short introduction is given concerning the general discussion on health inequalities in the United Kingdom.

1. Health Inequalities in the United Kingdom

The study of health inequalities in the United Kingdom has a long history (Booth 1890, Nuffield Foundation 1947, Rowntree/Lavers 1957). During the last century it has been demonstrated that social class and material deprivation (Eachus et al. 1996), gender (Arber/Ginn 1993), ethnic origin (Benzeval et al. 1995, Madhok et al. 1992), geographical region (Benzeval/Judge 1996, Carstairs 1995) and age (Illsley/Le Grand 1993, Arber/Ginn 1993) all affect the experience of health and illness. However, British research into inequalities in health has involved more than just the study of mortality and morbidity rates. Work has also been conducted into the areas of access to health care resources (such as the number of doctors and/or hospitals per 1000 of the population, patient referral rates, preventative service use and length of individual consultations etc.) health related behaviours (e.g. tobacco smoking, alcohol consumption, diet and daily exercise) and lay perceptions of health and illness.

a) Social Class and Health

In 1980 the research Working Group chaired by Sir Douglas Black produced what was probably Britain's most authoritative report this century into health inequalities. The report's empirical evidence is now however somewhat outdated and accordingly we do not review it here, although we do discuss the report's theoretical insights. In 1986 the Health Education Council commissioned an up-date of the Black report's evidence. This report - *The Health Divide* (Townsend et al. 1990) - confirmed the earlier findings of Black and colleagues regarding the existence of strong social class gradients in mortality and morbidity. For example (ibid., p 228), in 1990 babies born to fathers in unskilled employment (social class V) ran twice the risk of dying in the first year of life than did babies born to professionals (social class I). Standardised Mortality Ratios (SMRs) showed that a man aged 20 from social class I or II could expect to live, on average, over five years longer than his counterparts from classes IV or V (Haberman/Bloomfield 1988). Similarly, Townsend et al. (1990) show that in Britain in 65 of the 78 disease categories for men, SMRs for classes IV and V are higher than for Classes I and II. Only one cause of death (malignant melanoma) shows the reverse trend. With regard to mortality and morbidity in Britain the pattern is clear, most diseases affect the poorer occupational classes more than the rich. This has been shown to be equally true of the so called "diseases of affluence" such as coronary heart disease, strokes and peptic ulcers (Drever et al. 1996).

British health care services are founded, at least in theory, on the principle that they are available on a basis of need irrespective of income or social position. However, research shows that entitlement in law does not always guarantee access in practice. Whitehouse (1985) and Knox (1979) both found that middle class areas tend to be better served by General Practitioner (GP) services and that transport difficulties hindered working class access. Benzeval and Judge (1996) argue that despite recent health care reforms, when the needs of the various geographical regions for health care services is taken into account, the distribution of GPs remain inequitable.

Ryan and Birch (1991) report that increasing prescription charges between 1979 and 1985 actually led to a decrease in service use amongst those from the lower income brackets. Blaxter (1984) found that patients from social classes I and II were more likely to be referred from primary health care services (GPs) to hospital based specialists than were their counterparts from social classes IV and V. This was particularly so for older women. Similarly, Pedleton and Bochner (1980) report that the higher social classes tend to receive medical explanations voluntarily from GPs whilst patients from the lower socio-economic groups tend not to.

Relating such inequalities to health relevant behaviours it has been found that gathering accurate information on the consumption of cigarettes and alcohol is notoriously difficult. Problems of respondent recall and the normative expectations surrounding these behaviours can lead to inaccurate reporting. However, British research does show a class gradients for both smoking and drinking. For example in England in 1995, 23% of professionals (social classes I and II) smoked cigarettes, falling from 33% in 1972, whilst 36% of unskilled manual workers smoked, falling from 52% in 1972 (Bridgewood et al. 1996, p. 30). Similarly, data from the 1988 General Household Survey shows that 18% of men and 12% of women with a university degree smoked compared to 44% of men and 42% of women with no formal educational qualifications (Amos et al. 1992, p. 29). In relation to alcohol consumption in 1996 no statistically significant patterns for males were found relating to social class and average quantity of alcohol consumed per week. However, women from classes I and II were more likely (19%) than women from classes IV and V (12%) to have consumed above the then recommended safe limit of 14 units per week (Bridgewood et al. 1996, p. 46). Here it is interesting to note that working class women actually reported consuming less alcohol than their professional counterparts.

b) The Black Report and Beyond: Views of the Social Analysts

As noted above the report of the *Working Group on Inequalities in Health* chaired by Sir Douglas Black proved to be a seminal work that influenced both understanding and policy within and beyond Britain (Townsend/Davidson 1982). Because of the significance of the report and the important ways that professionals' understandings of health inequalities often filter into lay perceptions we summarise Black's four possible theoretical explanation below:

1. The *artifactual explanation* maintains that class based inequalities do not exist or are not as great as the statistics suggest. It is argued that the reported differences in morbidity and mortality result from measurement errors or problems of definition rather than reflecting any real social processes. This explanation is now almost

uniformly rejected and it is acknowledged that 'the measurement process may be concealing as well as generating inequalities in health' (Bloor et al. 1987).

2. *Natural and/or social selection.* Hart summarises these explanations succinctly when she writes that, 'class inequalities reflect the tendency of fit people to do well in society leading to upward social mobility while the unfit being less successful tend to sink into the lower strata' (Hart 1986, p. 235). The adequacy of this position to account for all the observed inequalities in health has been questioned. British society simply does not show the degree of mobility between social classes that the theory predicts (Chalmers 1985). However, as Illsley (1987) points out, physical nurturing during childhood as well as genetic endowment clearly contribute to health in adulthood. Currently, Barker (1991) takes this position a stage further and argues that poor maternal health, due to current or past poverty, can create an unfavourable intra-uterine environment that influences foetal growth and development and ultimately lifelong health.
3. Within the Black report *materialist or structural* influences on health include a variety of factors that contribute to the experience of deprivation. Examples cited are nutrition, housing, education and working conditions as well as more psychological components like levels of self fulfilment, job satisfaction and mental strain. The materialist/structural together with the cultural/behavioural explanations are the ones favoured by the authors of the report.
4. *Cultural/behavioural* explanations are seen as primarily referring to individual behaviours, 'emphasising unthinking, reckless or irresponsible behaviour or incautious lifestyle as the moving determinant of poor health status' (Townsend/Davidson 1982, p. 118). Tobacco and alcohol consumption together with poor diet and inadequate exercise are examples of such lifestyle or cultural/behavioural factors.

Although highly influential the Black report has not been without its critics. Strong (1990) suggests that within the report the preferred levels of explanation (materialist/structural and cultural/behavioural) have theoretical parallels with the distinction found in Marxism between the economic base and the ideological superstructure. Within Marxism the economic base is seen as ultimately determining the ideological superstructure. Within the Black report structural and/or material conditions are portrayed as giving rise to behaviours and/or cultural patterns that influence health.

However for Vagero and Illsley (1995) this position is not sufficient to resolve the tensions regarding what is truly material, structural, cultural and behavioural. They argue that within the report the twinned terms *structural* and *material* are used too liberally. For example, structural/material is used to cover housing conditions, income levels and educational opportunities and also individuals' levels of self fulfilment, job satisfaction and degree of mental strain. For Vagero and Illsley (1995):

'It would be clearer to distinguish *poverty*, *working conditions*, *education*, and *up-bringing* as different types of explanation in their own right. It is not just that the term materialist is undefined - it is also used so broadly that it is used to include

very different levels of explanation: the biological and the social; the direct and the contextual; the micro and the historical' (Vagero/Illsley 1995, p. 221).

With regard to the Black report's use of the phrase cultural/behavioural Vagero and Illsley question the way that culture is equated with individual actions or behaviours. They point out that within sociology there has been a long tradition that sees culture as existing temporally prior to and beyond any one individual. Therefore, Kroeber and Parsons define culture as:

'... the transmitted and created content and patterns of values, ideas, and other symbolic-meaningful systems as factors in the shaping of human behaviour and in the artefacts produced through behaviour' (Kroeber/Parsons 1958, p. 583).

Recently Wilkinson (1996) has returned to the issue of the extent to which material circumstances influence health. He argues that it is over simplistic to see health as related solely to material standards and notes that in the developed world economic growth and improvements in living standards often have little effect on health (p. 2). By way of example, Wilkinson points out that the populations of some "poorer" countries (e.g. Greece, Italy, Iceland) actually experience higher life expectancy than some "richer" countries (e.g. USA and Germany). Further he notes that within Britain health inequalities have risen during the past fifty years despite huge rises in overall living standards and absolute gains in the nation's health.

He concludes that:

'Relative income is an inherently social concept ... The importance of income distribution implies that we must explain the effects of low income on health through its social meanings and the implications for social position rather than through the direct physical effects which material circumstances might have independently of their social connotations in any particular society. This is not to say that bad (or even non-existent) housing and an inadequate diet do not affect the health of a minority (though still a large number) of people in developed societies' (Wilkinson 1996, p. 176).

For Wilkinson the health of society's members is related to the level of social cohesion within the society. In turn a crucial element of social cohesion is income distribution. Social cohesion is however more than material income, it is related to

'... people's involvement in the social, ethical and human life of the society, rather than being abandoned to market values and transitions. People come together to pursue and contribute to broader, shared social purposes: that is the social cohesion' (ibid. p. 136).

The recent arguments and insights of Wilkinson are interesting and are gaining in influence within Britain's academic community. However, at present as Wilkinson himself acknowledges the empirical evidence remains quite thin and somewhat anecdotal.

The new genetics

In the late 1970s when the Black report was compiled, genetic explanations for health inequalities were unpopular in Britain, particularly with social scientists. As Davison et al. (1994) point out, in large part this was and perhaps still is because of the politi-

cal history of the discipline and its association with eugenics and previous attempts at achieving "improvements to human stock". Recently, however, in Britain as elsewhere in the world, the human genome projects have given a new impetus to genetic explanations for variations in health. It is now predicted (Richards 1993) that it will soon be possible to test large numbers of people for genetic predispositions for a wide range of cancers, respiratory diseases and cardio-vascular disorders as well as other common physical and mental illnesses such as diabetes, depression and schizophrenia (Davison et al. 1994). Further, certain personality and behavioural characteristics are also being investigated; a prime example being sexual orientation (Hamer et al. 1993).

As Davison et al. (1994) argue current genetic explanations for health inequalities are far from straight forward. As they point out, the concepts of genes and chromosomes are used in at least four ways:

1. Some common disorders are thought to work along the relatively straight forward lines of Mendelian inheritance. For example the familial polyposis variant of colon cancer appears to work via "autosomal dominance".
2. Other conditions or disorders cannot be simply explained by chromosomal abnormalities or single genes. So for example coronary heart disease, alcoholism and manic-depression are portrayed as resulting from the interaction of multiple genes.
3. In other cases it is thought that the person's wider biological environment has an effect on the exact timing that a specific gene expresses itself. Therefore whilst all those who carry the gene for Huntington's Disease will eventually experience the condition (assuming that they do not die of other causes first), the exact timing of onset varies considerably between individuals.
4. Finally, it is commonly acknowledged that many genes interact with the wider environment and behaviours of individuals. Therefore some people may be more susceptible to lung cancer than others and accordingly run a higher risk of developing lung cancer if they smoke cigarettes.

2. The Importance of Lay Concepts.

a) Introduction

In the UK there has been a long and distinguished tradition of documenting and analysing social inequalities in health and their aetiology. These data have been gathered principally through survey methodologies and have concentrated on examining statistical trends at the level of populations and sub-groups within societies. During the 1980s and 1990s, however, a body of research has been developed whose aim was to investigate the social and cultural processes which underpin these statistical differences.

This work drew both on earlier work in the fields of medical sociology (Freidson 1960) and medical anthropology (Kleinman 1978) and the increasing use of qualitative methods in the social sciences more broadly (Lofland 1971). This earlier work had demonstrated the importance of social, cultural and psychological factors in the development of illness behaviour (Zborowski 1952, Zola 1973, McKinlay 1975), but its agenda was usually set by the concerns of the dominant biomedical model; and

information about concepts of health and health relevant behaviours were invariably gathered as a by-product, rather than being the focus in their own right (RUHBC 1989).

It became apparent when preparing this paper, that whilst qualitative data now exist on the pluralism of concepts of health and illness beliefs and behaviours in Western societies, there is a significant gap in our understanding of how lay people conceptualise the relationship of these issues to social structural factors and in particular to social inequalities. This has also been noted by Blaxter (1992,1997) who pointed out that there has been little systematic attempt to link research into biographically based lay perspectives on health and illness to epidemiological work on social inequalities in health.

Again, as in the research of one of the authors (Backett 1992a, 1992b), such data have undoubtedly been gathered as a by-product of researching health with respondents, but study designs have tended to treat dimensions of inequalities (such as socio-economic status, gender, age, ethnicity etc.) as the descriptive variables for selecting samples rather than as topics for investigation and reporting in their own right (Burgess 1986). Consequently we now know more about how lay people with certain demographic characteristics conceptualise health and illness, but have more limited, indirect, information about how they understand and locate these conceptualisations relative to their own position along various structural dimensions.

In our view this is partly a function of the appropriate concern of qualitative researchers to carry out in-depth investigations of the embeddedness of health and illness behaviours within aspects of the everyday lives of respondents; this highlights the importance of experiential knowledge in the production of health. The political context in Britain in the last 20 years has also seen significant shifts towards an emphasis on individuals taking a greater share of responsibility for their health (and its associated blame for illness). At the same time in the UK health promotion related research has focused on individual health relevant behaviours rather than wider social and economic inequalities. Only recently have health inequalities come back into public focus with the Government White paper (NHS Executive 1995) and their official reconceptualisation as health "variations".

b) Background to the Development of Work on Lay Concepts

First it is important to consider terminology. As has been pointed out, much of the earlier work in this field focused on lay concepts of *illness*. Its value lay in drawing attention to the non-medical factors which affects individual perceptions of illness, the process of adopting the sick role, and decisions about the uptake of medical care. For example, valuable insights were gained into: how people interpret signs and symptoms such as pain; how others affect these interpretations and decisions; the social, cultural and psychological factors affecting help seeking; physician/patient communication; and lay health care.

Subsequently, researchers who adopted an interpretivist paradigm shifted the focus away from examining lay concepts of medically defined "givens" towards locating the construction of health and illness within the everyday interactions of individuals

and studying the subjective meanings underpinning behaviour. Such work was influenced by the work of Alfred Schutz (1972) which theorised that:

‘Individuals draw on their social stocks of knowledge and biographical experiences to perceive and interpret the situations, events and experiences they encounter. These interpretations are dynamic and are continuously re-examined and reformulated in the light of interactions with others and the situational context’ (RUHBC 1989, p. 37).

Thus a shift took place which distinguished between subjective experiences of illness and biomedical concepts of disease; and emphasised the importance of understanding the socio-cultural context of the construction of health and illness. This work also highlighted that "health" and "health relevant behaviour" are problematical concepts in their own right which cannot be treated simply as the obverse of illness.

An influential component in this debate has been the concept of "salutogenesis" (Antonovsky 1979). Building on an original interest in how some people coped with and survived major life challenges, events and stresses salutogenesis has become a guiding focus for many researchers. They have variously interpreted salutogenesis as the concept of positive health, and how people achieve and maintain links between health behaviours and well-being. As Antonovsky himself put it, the intriguing question is not why people get sick but ‘why do people stay healthy?’ (Antonovsky 1979, p. 35).

Developments on the theoretical level have been paralleled by reflections on methodological issues. Quantitative, survey based work explores respondent views in response to pre-defined questions or hypotheses about health and illness, and is often funded because of the need to address issues currently seen as "problematical". Qualitative research, using minimally structured and semi/structured individual interviews or discussion group techniques, usually approaches the subject area in an in-depth, broad-based and flexible manner. This encourages respondents to identify, discuss and account for issues which are meaningful to them in the context of their own lives and daily experiences.

For these reasons the majority of the research into lay concepts has adopted qualitative methods which are better able to highlight the complexity, diversity and interconnectedness of health and illness relevant beliefs and behaviours from the respondents’ own standpoints. Qualitative understanding at the micro level of the individual, group and interactive processes can help to unpack and aid interpretation of population-based survey data. However, it can also serve to uncover the lay theorising or "people knowledge" which may sometimes stand in contradiction to the dominant discourses and, as has been argued, ‘offends against positivistic canons by including the subjective with the objective’ and has as its crucial characteristics that it is ‘informal experiential and mostly unwritten’ (Stacey 1994, p. 90).

Davison et al. (1991) have called this development of lay knowledge, which includes "weighing up" evidence or examining processes of health and illness with reference to everyday experience and observation, "lay epidemiology". It can be likened to scientific epidemiology in that it involves lay people linking ill health (in their study the

focus was heart disease) to its surrounding circumstances to support or challenge "theories" of disease causation. It is closely connected to ideas of "candidacy": the idealised images of the kinds of people who are potential "candidates" for particular ailments. Of course lay people observe that classic "candidates" do not fall victim to heart disease whilst those who are not "candidates" can be seen to succumb to the illness. Broadening lay epidemiology out to the sphere of "what is healthy", such lay evaluation processes include 'examining what people "look like", what is "their attitude to life", how adequately they function in their work and personal life, how they cope with life's crisis, how happy they are and so on' (Backett et al. 1994, p. 278).

3. Lay Concepts of Health Inequalities

a) Acknowledging the Existence of Multiple Perspectives

Several recent papers have highlighted some of the ways in which lay perspectives, concepts and knowledge of health and illness both relate to other discourses in society, such as that of professional "scientific" knowledge, and also have their own characteristics and integrity (Williams/Calnan 1996a, RUHBC 1989). This increasing interest in lay views and experiences in fin de siecle Western societies can be located in: the need to understand changing patterns of health and illness; a questioning of health care systems in the balance they achieve between prevention, care and treatment; and the re-emergence of the significance for health of environmental and person-made "risks" often mediated through economic policies (Popay/Williams 1994).

It is also important to stress that in Western pluralistic societies there are varying and competing interpretations of these changes and that these are linked to competing cosmologies, discourses, paradigms and power groups (Unschuld 1986). Throughout history particular groups within society have attained the power to determine the form of conceptualisation of health, illness and treatment which will predominate; and in Western Societies biomedical models are currently more powerful than indigenous medical systems and lay concepts (Illich 1975, Navarro 1976). Thus, as Stacey (1986) pointed out, concepts, whether "lay" or "scientific", do not have any intrinsic neutrality but are embedded in social life and relationships and are products of their historical time and place.

The importance of understanding "lay" concepts of health and illness as part of the development of any pluralistic society is increasingly being stressed. This is not just for its intrinsic interest but because, in the view of some social analysts, the forms of knowledge should be accorded "equal worth" (Stacey 1994) in the planning of more effective health care systems and the development of healthier and more socially equal populations. "Lay knowledge" as a term has, however, often been conceptualised in contradistinction to "professional" knowledge and has tended,

'to be what is used for those people who do not belong to a specific profession, particularly those who are not clerics or medics. In referring to people who lack particular qualifications or have been ordained "lay" suggests the absence of something valuable or prestigious, and may imply less competence or even less moral worth' (Stacey 1994, p. 90).

Accordingly, Stacey argues for the use of the term "people knowledge".

Thus, for example, whilst acknowledging the vital contribution to be made by the lay populace to the evaluation of modern medicine and medical care and that, 'as sources of knowledge pluralise and fragment an expert in one area becomes a lay person in another', Williams and Calnan (1996b) state that, for their purposes:

' "lay" can be defined as those members of society who, despite being "experts" in other areas, lack any formal or orthodox medical knowledge, training, qualifications or expertise' (p. 17).

This implication of deficit is challenged by others who prefer to stress the validity of experiential, biographical and culturally based aspects of lay knowledge; and that its strengths for understanding health and illness lie in its very differences from the professional/scientific knowledge.

Thus, whilst Rogers et al. (1997) state (echoing the views of most social scientists) that lay knowledge also draws on "expert knowledge", and that the two systems can be mutually influential, they claim that:

'First, whilst lay views emphasise the interconnectedness of every day life, health experience and behaviour, professional perspectives tend to fragment specific aspects of behaviour and neglect social context. Second, lay accounts highlight positive or "natural" dimensions of behaviours/lifestyle while professional perspectives tend to problematise them' (Rogers et al. 1997, p. 5).

b) Qualitative Findings on Lay Concepts Related to Health Inequalities

Lay and professional perspectives (the example of childhood accidents)

One area where health inequalities are strongly linked with social class is that of childhood accidents. Here, several recent studies have not only illuminated the lay perspective but have also highlighted similarities and differences with respect to lay and professional perspectives (Roberts et al. 1995, Rice et al. 1994, Sparks et al. 1994, Green 1995).

These studies all illuminated lay concepts of risk, safety and danger and refocused attention away from the question of 'Why do child accidents happen?' towards 'How is it that most parents manage to keep their children safe most of the time?' (Rice et al. 1994, p. 122). In the study of a deprived area of Glasgow there were commonly held views by both parents and children that parents accepted and acknowledged responsibility for looking after their childrens' safety, but that mistakes could happen and things could go wrong. However, professionals focused on the need to address this parental responsibility and foster it through better education. Parents, however, felt that other agencies, involved with, for example, housing, transport and building, should also take more of a share of social responsibility for creating an environment which would promote child safety. For instance, parents identified known hazards, such as rotting balconies on their flats and dangerous roads as potential safety risks, but these were either disregarded or downplayed by official agencies and health professionals.

Another study has emphasised how these lay perspectives are embedded in a realistic, experiential appraisal of the extent to which parents can exercise control of keeping children safe (Sparks et al. 1994). They found that parents from all social classes developed rules and strategies for keeping children safe and avoiding accidents. However, those (often from poorer social groups) who lived in more objec-

tively hazardous areas and had fewer material resources tended to see their own efforts at maintaining child safety as less important than socio-environmental factors.

From Green's (1995) qualitative work she concluded that both lay and professional people felt that accidents could be prevented. However, both the lay and professional sets of accounts were paradoxical in that the ideal type of accident was constructed as blameless, but in practice most effort was devoted to debating responsibility and culpability of individuals and groups. She drew out some commonalities in scientific explanations for accidents as follows:

'There is perhaps a search for meaning for all misfortune at the individual level where statistical explanation of risk factors will not suffice. The accidental provides a provisional explanation for that which is at the limits of rational explanation' (Green 1995, p. 131).

Health and functionality

As we have stated, the UK literature on lay concepts deals largely with in-depth examinations of people's understandings of their own health and illness, and how these are embedded in personal biographies and current circumstances.

Two important studies in the 1980's examined the "common-sense ideas and theories about health, illness and health services" in more disadvantaged groups of the population (Cornwell 1984, Blaxter/Paterson 1982). In both of these studies it was claimed that respondents found it difficult to talk about positive health; and in fact Blaxter/Paterson (1982) concluded that their female working class respondents did not have a concept of positive health. Rather they found that the women's norms of what constituted good health were conspicuously low, such as being able to work, being healthy enough "for all practical purposes", not being admitted to hospital, and having no big operations. At that time, although this may have changed in the past decade, they found that some of the women regarded taking preventative or health promoting actions as somewhat odd or peculiar.

Similarly, although Cornwell (1984) identified gender differences in the knowledge, attitudes and responses to illness of her working class sample, the dominant theme for men and women was their need to demonstrate a readiness and willingness to work, whether in the domestic or wider world of employment. This affected the ways in which respondents re-acted to or undervalued signs of illness in themselves and others, as well as the ways in which they thought or talked about illness. Such functional definitions of health have been found in several studies focusing on disadvantaged groups, and it seems reasonable to suppose that this is a realistic reflection of living in adverse social and material circumstances.

There can be little doubt that the UK has experienced considerable change in its labour market since these earlier studies were conducted. Today we have higher levels of residual unemployment and more "flexible" working practices. It is interesting to speculate on how such functional definitions of health and illness may now be constructed in the late 1990s.

Health and illness

Subsequent work by Pill and Stott (1985a, 1985b) in Wales, however, found that their sample of working class women *did* hold positive concepts of physical and mental health and well-being. However, those women who were more likely to express such positive concepts were also those who were more familiar with lifestyle factors (such as diet and exercise) and to believe that they could have some influence on their environments.

It is important, though, that these findings are assessed in terms firstly of methodological difficulties involved in exploring taken-for-granted states, such as good health. Secondly, reflecting the moral dimensions of assessing health and illness, it may be the case that some groups in the population might assess a preoccupation with achieving good health as hypochondria or self indulgence. Furthermore, the studies cited above were also predominantly researching concepts of illness causation and prevention and the implications of these for use of health services and relationships with health professionals. (In essence the age-old issue of compliance with the medical system and working with a model of "problematical" groups in society.)

If the researchers' agendas were framed essentially within a biomedical model, then it is hardly surprising that respondents found it difficult to account for health in its broader sense. Calnan, however, concluded that:

'The lack of a positive conception of health and the accommodation of minor illnesses might explain why lower working-class groups have a lower rate of participation in preventive health programmes than other social classes. These conceptions are clearly influenced by the experience of a high prevalence of ill-health amongst this group' (Calnan 1987, p. 28).

Other studies during the mid 1980's sought to make direct comparisons between working class and middle class views of health and illness. Calnan and Johnson (1985) explored the possible relationship between occupational social class and various dimensions of health beliefs to investigate if and how social and economic circumstances might influence people's ideas about health. However, it is important to note that this was an exploratory study; it only involved women and used semi-structured questions. This is different from a more ethnographic approach to exploring lay perceptions where a semi-structured and flexible "topic guide" is used. The latter allows respondents to generate their *own* salient issues as well as addressing those areas about which the interviewer invites them to talk. It is particularly important when using qualitative methods to be reflexive about how the methods used might affect the substantive nature of the data which are produced.

Calnan and Johnson (1985) found that being a healthy person was viewed by both social groups as not having to take time off work or not going to the doctor. Also, they found that both groups used a range of positive concepts of health (feeling energetic, eating the right things, feeling well etc.) *and* negative concepts such as seldom being ill. Both groups also made connections between happiness and health. However, the middle class women were more likely to mention being fit and strong and having a good state of mind than were the working class women.

This is also one of the very few studies directly reporting the views of different classes about the relationship between economic circumstances and health. Calnan reported that:

'The majority of both social class groups saw a link between occupation and health status. Stress and inactivity were associated with ill-health in office workers and the hazards to health associated with manual workers were those directly associated with the risks of working in the chemical or mining industry. However, there was little agreement either between the social class groups or within them about the relative risks of different occupations' (Calnan 1987, p. 74).

However, he went on to say that:

'There was not the same level of acceptance amongst both social class groups that there was a link between level of income and health status as there was with occupation. "Money has got nothing to do with health" was a perspective expressed by the majority of working class women' (Calnan 1987, p. 76).

Calnan concluded that the working class women were either unaware of the links between economic circumstances, lifestyles and health or did not accept them. He suggested that perhaps the middle classes found it easier to acknowledge and criticise aspects of working class environments and lifestyles, notably diet, drinking and smoking, because they did not live in the same social conditions. Again, we can see the strong morally evaluative dimensions which infuse lay accounts of health and illness.

Subsequently, Calnan (1990) carried out a comparative study focusing on food and diet because he felt that these were the most significant and substantive elements in lay discourses about health and its maintenance. Here, anticipating future work with middle class groups (Backett 1992a, Calnan 1990), he found that the middle class women emphasised a balanced diet with everything in moderation whilst the working class were more concerned about the substantial and filling aspects of a meal. Again, one explanation of these different emphases can be related to different material circumstances, and that, for the working classes, "filling" food is an essential component of fuelling the "health" required to function in physical work.

In a recent paper Blaxter (1997) reflects on the possible reasons behind these differences in beliefs and attitudes towards health and health inequalities. She concludes that:

'In the face of the moral imperative in Western Society to be healthy, however, it is understandable that it is those who are most exposed to "unequal" health who will be least likely to talk readily about their risk status. Instead, they will talk, as the evidence shows, about coping with illness, about not giving in to illness, and about the principle of mind-over-matter. Taking responsibility for "health" in these terms - even taking responsibility, perhaps to some extent equivocally, for one's own health-related behaviour - is accounting for one's social identity. If one cannot deny the reality of one's own disease, one can at least respond "healthily" to it' (Blaxter 1997).

Health in the context of everyday life

More recent studies in the late 80s and early 90s have studied in depth the accounts of people from different social groupings (Backett 1992a, Backett 1992b, Mullen 1992) and sought to identify how people's every day assessments of health behaviours are located in broader sociocultural concepts (Davison et al. 1991, Backett/Davison 1995, Backett et al. 1994). These studies adopted a more ethnographic approach including, variously, in-depth semi-structured interview with men (Mullen 1992), an in-depth multi-interview approach with whole family groups over time (Backett 1992a, 1992b) and in-depth interviews plus participant observation and research with key informants (Davison et al. 1991). Although one of the studies had a central focus on understanding lay explanations for heart disease (Davison et al. 1991) all three studies were broadly concerned with

'the ways in which health concerns and lay evaluations are interwoven with other social constraints or opportunities in daily life' (Backett et al. 1994, p. 279).

Mullen's (1992) work with Glaswegian men aged 30-49 from all social classes focused on their perceptions of the health effects of their occupations. The respondents all felt that work was less detrimental to health than unemployment, but three different categories of perceived health effects of their own jobs could be identified:

'Jobs were seen to be either predominately physically tiring with little mental stress, physically tiring with mental stress, or mentally stressful with little physical stress. A lack of physical stress, however, was also seen as being unhealthy as it led to being overweight' (Mullen 1992, p. 79).

Health-relevant behaviours were evaluated differently by those in different kinds of occupations. For example, diet and exercise were viewed quite differently by those in sedentary or in manual occupations. The former saw a concern for these as necessary compensations to counteract their lack of physical activity in their jobs, the latter saw these quite differently.

Backett's (1992a, 1992b) work with middle class families focused more on the construction of health beliefs and practices within everyday domestic life, although the broader contexts of work, school, families and friendships were also explored. Men, women and children were all involved in the research which was based on the criticism that

'much health research has tended to detach particular items of knowledge or behaviour from the context of daily social life, when they are experienced, tested out and reformulated' (Backett 1992b, p. 498).

The research confirmed and extended the work of Cornwell (1984) which showed different "accounts" of health: the "public", more formal accounts which tend to reproduce well known currently acceptable views of health, and the "private" more informal experientially based accounts which reflected the intrusion of material concerns and practical constraints into the construction of health and illness. Thus, in the earlier stages of fieldwork, Backett's respondents tended initially to put forward biomedically determined ideas about keeping healthy as their main viewpoint. At later stages, and having discussed many aspects of their domestic lives with the researcher, other kinds of biographically experienced knowledge and concepts were more freely expressed and put forward as valid.

These middle class respondents, who were educationally and materially advantaged, described lives full of uncertainties about how best to look after their health and illness; lives which were characterised by trade-offs between behaviour thought to be not so good for health and those felt to be health-promoting. Importantly, albeit in perhaps different substantive ways, their accounts of their daily lives, as with more disadvantaged groups, showed that a concern for health was simply one amongst many other pressing priorities; and that many health relevant behaviours (whether damaging or promoting) were carried out for reasons (such as social obligations, pleasure etc.) unconnected with a concern for health (Backett 1992a).

It may be, therefore, that whilst socio-economic circumstances structure the substantive and subjective experience of health there are also commonly held cultural beliefs and practices which provide an overarching scheme of meanings within which to make sense of health. This is supported by meta analyses of their respective studies carried out by Backett, Davison and Mullen (1994). For example, all three researchers found that their respondents identified a wide variety of perceived influences on health and illness. They saw these as

‘including not only individual "lifestyle" behaviour, but also hereditary; social, political and economic factors; the wider natural or man-made environment; and luck, chance or fate’ (Backett et al. 1994, p. 278).

The lay evaluation of health and illness involved "weighing up" these factors with reference to their own personal everyday observations, and these "weightings" could change over time and in relation to different topics. The translation of these processes of lay evaluation into everyday action was affected by social and cultural considerations, for example the assessment of both the health damaging *and* health enhancing aspects of so called "risky" behaviours. Furthermore, health related behaviours were described as only a small part of daily life and had to be evaluated in terms of the whole experience of living. Thus:

'When respondents talked about their everyday lives, moderation and balancing out the "good" and the "bad" in health related behaviour were dominant themes in all three studies' (Backett et al. 1994, p. 279).

In a further paper, Backett and Davison (1995) have shown how notions about lifecourse position were used by respondents to make sense of and evaluate health relevant behaviours and lifestyles. Their central point was that the *same* health-relevant behaviour (such as drinking too much or engaging in risky sports) were evaluated differently depending on the perception of the individual's stage in the lifecourse.

Concepts of medicine and social inequalities

In a collection of recent papers the tradition of examining lay concepts of illness has been broadened to encompass the empirical investigation of how people view modern medicine and medical care. Williams and Calnan pointed out that:

'With notable exceptions of feminist research concerning woman's experiences of medical care and technology (Oakley 1980, Evans 1985, Denny 1994) and sociological work on the experience of modern medicine in chronic illness (Anderson/Bury 1988), studies of a more detailed qualitative or ethnographic

nature concerning lay perspectives and medical care are rare (Calnan 1987, 1988, Calnan/Williams 1992, Calnan/Williams 1994, Gabe/Calnan 1989' (Williams/Calnan 1996b, p. 16).

Several of the papers in this collection demonstrated, along a range of issues (such as type of technology, context of care, good and bad doctors) that, in general, the British public shows considerable ambivalence towards modern medicine. Williams and Calnan stated, though, that:

'Views appear to differ according to which specific forms of technology are being considered (i.e.: antibiotics, tranquillisers, hip replacements, heart transplants, etc. and socio demographic characteristics such as age, gender, class, educational status and health status' (Williams/Calnan 1996b, p. 17).

In particular, Gabe and Bury (1996) examined the social and cultural dimensions of "risk" in relation to tranquilliser use. Although they too found considerable ambivalence in lay perspectives they also concluded that the absence of key social and material resources may override negative views about risks of tranquilliser use. From Williams and Calnan's own qualitative work they concluded that people in more disadvantaged circumstances were more likely to have low health norms and to see health care largely in terms of curative services. People who were in social circumstances where more positive concepts of health may be fostered, including mental and physical well being, were more likely to see health care in terms of preventative as well as curative services. Throughout this volume of papers issues of social structure and class are thus shown to influence lay views about modern medicine and to intersect in complex ways with the emergence of "lay re-skilling" and issues of the politics of health lifestyles as they relate to criticisms of medicalisation.

4. Conclusion

The study of health inequalities in the UK has a long history, going back to at least the 19th century. Previous work has shown that health inequalities exist by social class, gender, race, age and geographical region. Several explanations have been put forward by social analysts: artifactual, natural/social selection (including genetics), materialist/structural and cultural/behavioural.

However, to date there has been no comparable work that has looked at how different social groupings perceive and account for health inequalities. The literature that does exist indicates that there may be some overlap between professional and lay understandings, or between accounts of different social groupings (including social classes). Previous research into lay health beliefs and behaviours has attempted to understand in-depth the health experiences of specific groups, rather than to engage respondents in discussions of variations between themselves and other social groupings. We suggest that work in this area would significant advance our knowledge of the complexities of health inequalities.

IV. Summary

As stated in the introduction, the paper focuses on the following question:

What is known about the existence and the extent of health inequalities, their explanations and potential ways to reduce them, in different social classes, and especially by members of the lower social class, by health professionals and health policy makers?

The review shows that we know very little. Research on health inequalities still seems to be rather isolated from the beliefs and values of the people most concerned, at least in Germany and in the United Kingdom. This in itself raises the question of who should be involved in reducing health variations? We believe at least it should be the lower social classes, health professionals and health policy makers, as they are the major actors, as they are the population groups most afflicted by health inequalities and who should be concerned about reducing them. It would be valuable to know how they perceive health inequalities, as this may help us to understand the aetiology of health inequalities and to design and implement programs to reduce such inequalities.

To date no study has directly attempted to answer these important questions. However, the review from Germany focusing on epidemiological information concerning health inequalities, theoretical models trying to explain this information and the political discussion surrounding health inequalities, and the review from the United Kingdom focusing on lay concepts of health, bring together some pieces of information which contribute to our understanding:

- There are large health inequalities in Germany and in the United Kingdom, but the theoretical models proposed by researchers for explaining these inequalities are not very sophisticated yet, indicating that other members of the population have a rather vague understanding of health inequalities as well.
- In Germany there are hardly any specific programmes addressed towards reducing health inequalities. Most people, including most health professionals and health policy makers, seem to believe that health inequalities cannot be reduced, although this belief has not really been tested yet.
- The impression that many health policy makers are not fully aware of the problem of health inequalities is supported by the recent health care reforms in Germany, which lead to increased financial burden of the sick. It is also interesting to note that in Germany the platforms of most political parties do not specifically address the problem of health inequalities.
- A number of recent conferences in Germany have focused on the association between poverty and health, and one physician association and a few State and Federal authorities have started to draw attention to health inequalities. These are exceptions in a society that seems to rather ignore health inequalities, but they point to the fact that public interest in health inequalities is rising, and that this trend should be supported by analysing the question asked above.
- Research on lay concepts has shown that health related beliefs and behaviour (interpretation of symptoms, help seeking, physician/patient communication, interpretation of potential preventive measure etc.) are strongly influenced by the social and cultural contexts in which an individual lives. Probably there are also differences in the perception of health inequalities between the lower social class,

health professionals and health policy makers. We need to understand these differences in health concepts and perceptions in order to elucidate health variations.

- Research on lay concepts of health has rarely been linked to research on health inequalities. The available evidence suggests that a functional definition of health (i.e. readiness to work) is more prevalent in the lower classes than in other social classes. This suggests that in the lower social classes concern about health inequalities could focus on health problems that interfere with the readiness to work. It has also been suggested that the association between socio-economic status and health is more easily accepted by the middle classes than by the lower class; indicating that for those most afflicted it is important to ignore their deprived situation.

The review presented here points to the fact that our knowledge concerning lay views of health inequalities is still very limited. In social epidemiology a large body of empirical evidence has been provided showing that important health inequalities exist, but we don't know very much about the causes for these inequalities and potential ways for reducing them. The research gap can be specified by the following questions:

- What do members of the lower social classes, health professionals and health policy makers *know* about the existence and the extent of health inequalities?
- How do *lay concepts* of health differ between members of the lower social class, health professionals and health policy makers?
- How do members of the lower social class, health professionals and health policy makers *explain* health inequalities, and how are these explanations related to their concepts of health?
- Do members of the lower social class, health professionals and health policy makers believe that this is an *important* public health problem that could be *reduced*, and how do these beliefs relate to their concepts of health?
- What proposals do members of the lower social class, health professionals and health policy makers have concerning the *reduction* of health inequalities, and how do these proposals relate to their concepts of health.

It is important to address these questions for each country specifically. These studies are time consuming, as they would have to be based on in-depth interviews. However, we would argue that such studies are essential for developing strategies addressed at reducing health inequalities.

V. References

- Abel T, Wyson J [1991]:** Sozialer Status, gesundheitliches Risiko und Krankenversicherung: Eine vergleichende Analyse der BRD und den USA. *Soz. Präventivmed.* 36:166-175.
- Abholz HH (Hrsg.) [1976]:** Krankheit und soziale Lage - Befunde der Sozialepidemiologie. Campus Verlag, Frankfurt/Main.
- Amos A, Hillhouse A, Alexander H, Sheehy C [1992]:** Tobacco use in Scotland: a review of literature and research. ASH, Edinburgh.
- Anderson R, Bury M [1988]:** Living with chronic illness. Hyman Unwin, London.
- Antonovsky A [1979]:** Health, stress and coping. New perspectives on mental and physical well-being. Jossey-Bass Inc, San Francisco C.A. and London.
- Antwort [1994]:** Antwort der Bundesregierung auf die Große Anfrage der Abgeordneten Klaus Kirschner u.a. und der Fraktion der SPD zum Thema 'Prävention in der Gesundheitspolitik'. Entwurf vom 6.6.1994. Bundestagsdrucksache 12/6826. Bonn.
- Arber S, Ginn J [1993]:** Gender inequalities in health in later life. *Social Science and Medicine* 36: 33-46.
- Armutsbericht [1989]:** Armutsbericht des Paritätischen Wohlfahrtsverbandes für die Bundesrepublik Deutschland. *Blätter der Wohlfahrtspflege* 136 (11/12).
- Backett K [1992a]:** Taboos and excesses: lay health moralities in middle class families. *Sociology of Health and Illness* 14: 255-274.
- Backett K [1992b]:** The construction of health knowledge in middle class families. *Health Education Research: Theory and Practice* 7: 497-507.
- Backett K, Davison C, Mullen K [1994]:** Lay evaluation of health and healthy lifestyles: evidence from three studies. *British Journal of General Practice* 44: 277-280.
- Backett K, Davison C [1995]:** Lifecourse and lifestyle: the social and cultural location of health behaviours. *Social Science and Medicine* 40: 629-638.
- Barker D [1991]:** The foetal and infant origins of inequalities in health in Britain. *Journal of Public Health Medicine* 13: 64-68.
- Barlösius E, Feichtinger E, Köhler BM (Hrsg.) [1995]:** Ernährung und Armut. Ed. Sigma, rainer bohner verlag, Berlin.
- Behörde [1992]:** Behörde für Arbeit, Gesundheit und Soziales der Freien und Hansestadt Hamburg (Hrsg.): Stadtdiagnose. *Gesundheitsbericht Hamburg*. Hamburg.
- Behörde [1995]:** Behörde für Arbeit, Gesundheit und Soziales der Freien und Hansestadt Hamburg (Hrsg.): *Gesundheit von Kindern und Jugendlichen in Hamburg. Zwischenbilanz*. Hamburg.
- Behörde [1996]:** Behörde für Arbeit, Gesundheit und Soziales der Freien und Hansestadt Hamburg (Hrsg.): *Armut und Gesundheit von Kindern in Hamburg*. Hamburg.
- Benzeval M, Judge K, Smaje C [1995]:** Beyond class, race and ethnicity: deprivation and health in Britain. *Health Services Research* 30: 163-177.
- Benzeval M, Judge K [1996]:** Access to health care in England: continuing inequalities in the distribution of GPs. *J. of Public Health Medicine* 18: 33-40.

- Blaxter M, Paterson E [1982]:** Mothers and daughters: a three generational study of health attitudes and behaviour. Heinemann Educational Books, London.
- Blaxter M [1984]:** Equity and consultation rates in General Practice. *British Medical Journal* 288: 1963-1967.
- Blaxter M [1992]:** Inequality and the problem of time. *Medical Sociology News* 18.
- Blaxter M [1997]:** Whose fault is it? People's own conceptions of the reasons for health inequalities. *Social Science and Medicine* 44: 747-756.
- Bloor M, Samphier M, Prior L [1987]:** Artefact explanations of inequalities in health: an assessment of evidence. *Sociology of Health and Illness* 9: 231-264.
- Booth W [1890]:** In darkest England, and the way out. International Headquarters of the Salvation Army, London.
- Bormann C, Schroeder E [1994]:** Soziale Ungleichheit im Krankenstand dargestellt am Beispiel des Indikators 'Tage mit gesundheitlicher Beeinträchtigung'. In: Mielck (Hrsg.) 1994, a.a.O., 209-225.
- Bouali K, Hellbernd H, Wieners K et al. (Hrsg.) [1996]:** Kongreß 'Armut und Gesundheit' - Dokumentation. Ärztekammer Berlin, Berlin.
- Bridgewood A, Malbon G, Lader D, Matheson J [1996]:** Health in England in 1995: a survey of adults aged 16-74 in England carried out by the Social Survey Division of ONS on behalf of the Health Education Authority. Office of National Statistics, London.
- Bulmahn T [1997]:** Soziostruktureller Wandel: soziale Lagen, Erwerbsstatus, Ungleichheit und Mobilität. In: Zapf W, Habich R (Hrsg.): Wohlfahrtsentwicklung im vereinten Deutschland. Sozialstruktur, sozialer Wandel und Lebensqualität. Ed. Sigma, Berlin, 25-49.
- Burgess R (ed.) [1986]:** Key variables in social investigation. Routledge and Kegan Paul, London.
- Calnan M, Johnson B [1985]:** Health, health risks and inequalities: an exploratory study of women's perceptions. *Sociology of Health and Illness* 7: 55-75.
- Calnan M [1987]:** Health and illness: the lay perspective. Tavistock Publications, London and New York.
- Calnan M [1988]:** Towards a conceptual framework of lay evaluation of health care. *Social Science and Medicine* 27: 927-933.
- Calnan M [1990]:** Food and health; a comparison of beliefs and practices in middle-class and working-class households. In: Cunningham-Burley S, Mckeganey NP (eds.): Readings in medical sociology. Routledge, London and New York 1990, 9-36.
- Calnan M, Williams S [1992]:** Images of scientific medicine. *Sociology of Health and Illness* 14: 23-254.
- Calnan M, Williams S [1994]:** The lay understanding of scientific medicine. In: Robinson, I (ed.): The social consequences of life and death technology medicine. Manchester University Press, Manchester.
- Carstairs V [1995]:** Deprivation indices: their interpretation and use in relation to health. *Journal of Epidemiology and Community Health* 49: S3-S8.
- Chalmers I [1985]:** Short, black, baird, himsworth and social class differences in fetal and neonatal mortality rates. *British Medical Journal* 291: 231-233.
- Cornwell J [1984]:** Hard earned lives: accounts of health and illness from East London. Tavistock, London.

- Davey Smith G, Blane D, Bartley M [1994]:** Soziale Ungleichheit und Mortalitätsunterschiede: Diskussion der Erklärungsansätze in Großbritannien. In: Mielck (Hrsg.) 1994, a.a.O., 425-451.
- Davison C, Davey Smith G, 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.
- Davison C, Macintyre S, Davey Smith G [1994]:** The potential social impact of predictive genetic testing for susceptibility to common chronic diseases: a review and proposed research agenda. *Sociology of Health and Illness* 16: 340-371.
- Denny E [1994]:** Liberation or oppression? Radical feminism and in vitro fertilisation. *Sociology of Health and Illness* 16: 62-82.
- Dilling H, Weyerer S [1987]:** Social Class and Mental Disorders: Results from Upper Bavarian Studies. In: Angermeyer MC (Hrsg.): *From Social Class to Social Stress. New Developments in Psychiatric Epidemiology*. Springer Verlag, Berlin 1987, 46-63.
- Drever F, Whitehead M, Roden M [1996]:** Current patterns and trends in male mortality by social class (based on occupation). *Population Trends*; 86: 15-20.
- Eachus J, Williams M, Chan P, Smith G, Grainge M, Donovan J, Frankel S [1996]:** Deprivation and Cause Specific Morbidity: Evidence From the Somerset and Avon Survey of Health. *British Medical Journal* 312: 287-92.
- Elkeles T, Mielck A [1997]:** Entwicklung eines Modells zur Erklärung gesundheitlicher Ungleichheit. *Gesundheitswesen* 59: 137-143.
- Enquete-Kommission [1988]:** 'Strukturreform der gesetzlichen Krankenversicherung', Zwischenbericht, Drucksache 11/3267, Bonn.
- Eßer P [1994]:** Lebenslage und gesundheitliche Versorgung: Erfahrungen aus einem Forschungsverbund. In: Mielck (Hrsg.) 1994, a.a.O., 167-177.
- Evans F [1985]:** Managers and labourers: womens attitudes to reproductive technology. In: Faulkner E, Arnold, E (eds.): *Smothered by technology: technology in womens lives*. Pluto, London 1985; 109-127.
- Faltermeier T [1994a]:** Gesundheitsbewußtsein und Gesundheitshandeln. Beltz Psychologie Verlags Union, Weinheim.
- Faltermeier T [1994b]:** Subjektive Konzepte von Gesundheit in einer salutogenetischen Perspektive. In: Kolip P (Hrsg.): *Lebenslust und Wohlbefinden*. Weinheim/München 1994.
- Fleischer K [1996]:** Gesundheitsförderung - Eine Rückführung der sozialpädagogischen Familienhilfe zu ihren pädagogischen Wurzeln. Diplomarbeit, Universität Trier.
- Freidson E [1960]:** Client control and medical practice. *American Journal of Sociology* 65: 374-382.
- Gabe J, Calnan M [1989]:** Limits to medicine-womens perceptions of medical technology. *Social Science and Medicine* 28: 223-231.
- Gabe J, Bury M [1996]:** Risking tranquilliser use: cultural and lay dimensions. In: Williams SJ, Calnan M (eds.): *Modern medicine. Lay perspectives and experiences*. UCL Press, London and Pennsylvania 1996a, 74-95.
- Gawatz R, Novak P (Hrsg.) [1993]:** Soziale Konstruktion von Gesundheit. Universitätsverlag Ulm.

- Geißler R [1996]:** Kein Abschied von Klasse und Schicht. Ideologische Gefahren der deutschen Sozialstrukturanalyse. Kölner Zeitschrift für Soziologie und Sozialpsychologie 48: 319-338.
- Gepkens A, Gunning-Schepers LJ [1996]:** Interventions to reduce socioeconomic health differences. Eur J Publ Health 6: 218-226.
- Gerhardt U [1991]:** Alternsdynamik und Rehabilitation nach koronarer Bypass-operation. Zeitschrift für Gerontologie 25: 243-254.
- Green J [1995]:** Accidents and the risk society. Some problems with prevention. In: Bunton R, Nettleton S, Burrows R (eds.): The sociology of health promotion. Critical analyses of consumption, lifestyle and risk. Routledge, London and New York 1995, 116-132.
- Green Party [1993]:** Bündnis 90/ Die Grünen (Hrsg.): Gesundheitsstrukturgesetz - viel Gesetz, wenig Gesundheit.
- Grotjahn A [1912]:** Soziale Pathologie. Verlag August Hirschwald, Berlin.
- Haberman M, Bloomfield D [1988]:** Social Class Differentials in Mortality in Great Britain Around 1981. Journal of the Institute of Actuaries 115: 495-517.
- Hamer D, Hu S, Magnuson V, Hu N, Pattatucci AA [1993]:** Linkage between DNA markers on the X chromosome and male sexual orientation. Science 261: 321-327.
- Hanesch W, Adamy W, Martens R, Rentzsch D et al. [1994]:** Armut in Deutschland. Rowohlt.
- Hart N [1986]:** Inequalities in health: the individual versus the environment. Journal of the Royal Statistical Society 149: 228-246.
- Hauser R, Hübinger W [1993]:** Arme unter uns. Teil 1: Ergebnisse und Konsequenzen der Caritas-Armutsuntersuchung. Lambertus.
- Heinrich J, Mielck A, Schäfer I, Mey W [1997]:** Soziale Ungleichheit und umweltbedingte Erkrankungen in Deutschland. Empirische Ergebnisse und Handlungsansätze. Gutachten für das Büro für Technikfolgen-Abschätzung beim Deutschen Bundestag, Bonn.
- Helmert U, Maschewsky-Schneider U, Mielck A, Greiser E [1993]:** Soziale Ungleichheit bei Herzinfarkt und Schlaganfall in West-Deutschland. Soz. Präventivmed. 38: 123-132.
- Helmert, U [1994]:** Sozialschichtspezifische Unterschiede in der selbst wahrgenommenen Morbidität und bei ausgewählten gesundheitsbezogenen Indikatoren in West-Deutschland. In: Mielck A (Hrsg.) 1994, a.a.O., 187-207.
- Helmert U, Janka HU, Strube H [1994]:** Epidemiologische Befunde zur Häufigkeit des Diabetes mellitus in der Bundesrepublik Deutschland 1984-1991. Diabetes und Stoffwechsel 3: 271-277.
- Helmert U, Mielck A, Shea S [1997]:** Poverty and health in West Germany. Soz. Präventivmed. 42: 276-285.
- Hoffmeister H, Hüttner H, Stolzenberg H, Lopez H, Winkler J [1992]:** Sozialer Status und Gesundheit. Nationaler Gesundheitssurvey 1984-1986. BGA Schriften 2/92. Medizin Verlag München, München.
- Hoffmeister H, Hüttner H [1995]:** Die Entwicklung sozialer Gradienten in den Nationalen Gesundheits-Surveys 1985-1991. Z. für Gesundheitswiss. 2. Beiheft: 113-129.
- Horn K, Beier C, Wolf M [1983]:** Krankheit, Konflikt und soziale Kontrolle. Westdeutscher Verlag, Opladen.

- Hradil S [1994]:** Neuerungen in der Ungleichheitsanalyse und die Programmatik künftiger Sozialepidemiologie. In: Mielck (ed.) 1994, 375-392.
- Illich I [1975]:** Medical Nemesis. Calder and Boyers, London.
- Illsley R [1987]:** Bad welfare of bad statistics. Poverty 67: 16-17.
- Illsley R, Le Grand J [1993]:** Regional inequalities in mortality. Journal of Epidemiology and Community Health 47(6): 444-449.
- Karasek R, Theorell T [1990]:** Healthy Work. Stress, productivity and the reconstruction of working life. New York.
- Kirschner W, Meinlschmidt G [1994]:** Gesundheitliche Risikoexposition, Gesundheitsverhalten und subjektive Morbidität von West- und Ostberlinern insgesamt und nach sozialer Schichtzugehörigkeit. In: Mielck (Hrsg.) 1994, a.a.O., 253-266.
- Klein T [1996]:** Mortalität in Deutschland: Aktuelle Entwicklungen und soziale Unterschiede. In: Zapf W, Schupp J, Habich R (Hrsg.): Lebenslagen im Wandel. Sozialberichterstattung im Längsschnitt. Campus Verlag, Frankfurt/New York 1996, 366-377.
- Kleinman A [1978]:** Concepts and a model for the comparison of medical systems as cultural systems. Social Science and Medicine 12: 85-93.
- Klocke A, Hurrelmann K [1995]:** Armut und Gesundheit. Inwieweit sind Kinder und Jugendliche betroffen? Z. für Gesundheitswiss. 2. Beiheft: 138-151.
- Klosterhuis H, Müller-Farnow W [1994]:** Sozialschicht und Sterblichkeit bei männlichen Angestellten aus den alten Bundesländern. In: Mielck (Hrsg.) 1994, a.a.O., 319-330.
- Knox P [1979]:** The accessibility of primary care to urban patients: a geographical analysis. Journal of the Royal College of General Practitioners 29: 160-168.
- Köhler BM, Feichtinger E, Barlösius E, Dowler E (eds.) [1997]:** Poverty and Food in Welfare Societies. Ed. Sigma, rainer bohne verlag, Berlin.
- Kroeber A, Parsons T [1958]:** The concepts of culture and of social system. American Sociological Review 23: 582-583.
- Kunst AE, Mackenbach JP [1994]:** Measuring socio-economic inequalities in health. WHO - Regional Office for Europe, Copenhagen.
- Kunst AE, Geurts JJM, Berg J van den [1995]:** International variation in socioeconomic inequalities in self reported health. J. Epidemiol. Community Health 49: 117-123.
- Landesinstitut [1996]:** Landesinstitut für den Öffentlichen Gesundheitsdienst des Landes Nordrhein-Westfalen (Hrsg.): Europäisches Public Health Zentrum NRW. Ziele, Aufgaben, Aktivitäten. Bielefeld.
- Levin LS, Katz AH, Holst E [1977]:** Self care: lay initiatives in health. Croom Helm, London.
- Lofland J [1971]:** Analysing social settings: a guide to qualitative observation and analysis. Wadsworth, Belmont, CA.
- Loosen W [1996]:** Sozialhilfereport. Kinder und Armut. Der Kassenarzt 5: 26-30.
- Madhok R, Bhopal R, Ramaiah R [1992]:** Quality of Service: An 'Asian' Perspective. Journal of Public Health Medicine 14(3).
- McKinlay JB [1975]:** The help seeking behaviour of the poor. In: Kosa J, Zola IK (eds.): Poverty and health. Harvard University Press, Cambridge, Mass., 1975, 224-273.

- Micheelis W, Bauch J [1991]:** Mundgesundheitszustand und -verhalten in der Bundesrepublik Deutschland. Ergebnisse des nationalen IDZ-Survey 1989. Institut der Deutschen Zahnärzte (IDZ), Deutscher Ärzte-Verlag, Köln.
- Micheelis W, Bauch J [1993]:** Mundgesundheitszustand und -verhalten in Ostdeutschland. Ergebnisse des IDZ-Ergänzungssurvey 1992. Institut der Deutschen Zahnärzte (IDZ), Deutscher Ärzte-Verlag, Köln.
- Mielck A, Giraldes M.d.R. (ed.) [1993]:** Inequalities in health and health care. Review of selected publications from 18 Western European countries. Waxmann, Münster/New York.
- Mielck A (Hrsg.) [1994]:** Krankheit und soziale Ungleichheit. Ergebnisse der sozialepidemiologischen Forschung in Deutschland. Leske & Budrich, Opladen.
- Mielck A, Apelt P [1994]:** Krankheit und soziale Ungleichheit in der DDR: das Beispiel Görlitz. In: Mielck (Hrsg.) 1994, a.a.O., 243-252.
- Mielck A [1995]:** Soziale Ungleichheit. Anfänge und Entwicklung einer 'Sozialen Medizin', die sich mit sozialer Ungleichheit bei Krankheit und Tod beschäftigt. Zeitschrift für Allgemeinmedizin 71: 1338-1344.
- Mielck A, Satzinger W, Helmert U [1995]:** Gesundheitspolitische Reaktionen in der Bundesrepublik Deutschland auf das Problem 'Armut und Gesundheit'. Zeitschrift für Gesundheitswissenschaften 2. Beiheft: 39-53.
- Mielck A, John J, Winkelhake O [1997]:** Einkommensverhältnisse. Statistisches Bundesamt (Hrsg.): Gesundheitsbericht. Wiesbaden (in press).
- Ministerium [1995]:** Ministerium für Arbeit, Gesundheit und Soziales des Landes Nordrhein-Westfalen (Hrsg.), Gesundheitsreport Nordrhein-Westfalen 1994, Bielefeld.
- Mosse M, Tugendreich G (Hrsg.) [1913]:** Krankheit und soziale Lage, 1913. (new edition: Verlag Jürgen Cromm, Göttingen 1981).
- Mullen KA [1992]:** Question of balance: health behaviour and work context among male Glaswegians. *Sociology of Health and Illness* 14: 73-97.
- Navarro V [1976]:** Social class, political power and the state and their implications in medicine. *Social Science and Medicine* 10: 437-457.
- NHS Executive [1995]:** Health of the Nation Working Group. Health Service Guidelines: Variations in Health. HSG 95 (54) Report of the Variation in Health Subgroup of the Chief Medical Officers . London.
- Neumann G, Liedermann A [1981]:** Mortalität und Sozialschicht. *Bundesgesundheitsblatt* 24: 173-181.
- Noll HH, Habich R [1990]:** Individuelle Wohlfahrt: vertikale Ungleichheit oder horizontale Disparitäten? In: Berger PA, Hradil S (Hrsg.): *Lebenslagen, Lebensläufe, Lebensstile*. Verlag Otto Schwartz & Co., Göttingen, 153-188.
- Nuffield Foundation [1947]:** Old people: report of a Survey Committee and the Problems of Ageing and Care of Old People (under the Chairmanship of B Seebohm Rowntree). Oxford University Press, London.
- Oakley A [1980]:** Women confined: towards a sociology of childbirth. Martin Robertson, Oxford.
- Oppolzer A [1994]:** Die Arbeitswelt als Ursache gesundheitlicher Ungleichheit. In: Mielck (Hrsg.) 1994, 125-165.
- Pedleton D, Bochner S [1980]:** The communication of medical information in General Practice consultations as a function of patients' social class. *Social Science and Medicine* 14: 669-673.

- PDS (Partei des Demokratischen Sozialismus [1997]:** Diskussionsmaterial der AG Sozialpolitik, Bundesgruppe der PDS, für den Workshop am 27.9.1997. Bonn.
- Peters B [1996]:** Das öffentliche Bild von Armut. Aktuelle Armutsbilder im Spiegel der Presse. Zeitschrift für Sozialreform 42: 518-548.
- Pill R, Stott N [1985a]:** Choice or chance: further evidence on ideas of illness and responsibility for health. *Social Science and Medicine* 20: 981-991.
- Pill R, Stott N [1985b]:** Prevention procedures and practices among working class women: new data and fresh insights. *Social Science and Medicine* 21: 975-983.
- Popay J, Williams G [1994]:** Researching the people's health. Routledge, London and New York.
- Rice C, Roberts H, Smith SJ, Bryce C [1994]:** 'It's like teaching your children to swim in a pool full of alligators'. Lay voices and professional research on child accidents. In: Popay J, Williams G (eds.): Researching the people's health. Routledge, London and New York 1994, 115-133.
- Richards M [1993]:** The new genetics: some Issues for social scientists. *Sociology of Health and Illness* 15: 567-586.
- Roberts H, Smith SJ, Bryce C [1995]:** Children at risk. Open University Press, Milton Keynes.
- Rogers A, Popay J, Williams G, Latham M [1997]:** Health variations and health promotion: insight from the qualitative research literature. Health Education Authority, London.
- Rowntree B, Lavers G [1957]:** English life and leisure: a social study. Longmans, London.
- RUHBC [1989]:** Research Unit in Health and Behavioural Change: The social construction of health and illness. In: Research Unit in Health and Behavioural Change (eds.): Changing the public health. John Wiley and Sons, Chichester 1989, 29-50.
- Ryan M, Birch S [1991]:** Charging for health care: evidence on the utilisation of NHS prescribed drugs. *Social Science and Medicine* 33: 681-687.
- Schutz A [1972]:** The phenomenology of the social world. Heinmann Educational Books, London.
- Siegrist J [1989]:** Steps towards explaining social differentials in morbidity: the case of West Germany. In: Fox J (ed.): Health inequalities in European Countries. Gower, Aldershot 1989, 353-371.
- Siegrist J, Peter R, Junge A, Cremer P, Seidel D [1990]:** Low status control, high effort at work and ischemic heart disease: prospective evidence from blue-collar men. *Social Science & Medicine* 31: 1127-1134.
- Siegrist J [1996]:** Soziale Krisen und Gesundheit. Eine Theorie der Gesundheitsförderung am Beispiel von Herz-Kreislauf-Risiken im Erwerbsleben. Hofgrefe, Göttingen 1996.
- Solinger H [1996]:** Gesundheitsförderung als wesentliches Element moderner Gesundheitspolitik. In: Sozialministerium (Hrsg.) 1996a, 9-13.
- Sozialministerium [1996a]:** Sozialministerium Baden Württemberg (Hrsg.): Soziale Ungleichheit als Herausforderung für Gesundheitsförderung. Dokumentation des Gesundheitspolitischen Symposiums in Baden-Württemberg vom 28. November 1995. Stuttgart.

- Sozialministerium [1996b]:** Sozialministerium Baden-Württemberg(Hrsg.): Gesundheitsförderung mit sozial Benachteiligten. Eine Bestandsaufnahme von Initiativen, Projekten und kontinuierlichen Angeboten. Stuttgart.
- Sparks G, Craven MA, Worth C [1994]:** Understanding differences between high and low childhood accident rate areas - the importance of qualitative data. *Journal of Public Health Medicine* 16: 439-446.
- SPD (Sozialdemokratische Partei) [1994]:** Resolution 'Bürgernahe Gesundheitspolitik' der Bundesdelegiertenkonferenz der 'Arbeitsgemeinschaft der Sozialdemokraten im Gesundheitswesen' (ASG).
- Stacey M [1986]:** Concepts of health and illness and the division of labour in health care. In: Curren C, Stacey M (eds.): *Concepts of health, illness and disease*. Berg Publications, Leamington Spa, Hamburg and New York, 1986, 9-27.
- Stacey M [1994]:** The power of lay knowledge: a personal view. In: Popay J, Williams G (eds.): *Researching the people's health*. Routledge, London 1994.
- Statistisches Bundesamt (Hrsg.) [1992]:** Ergebnisse des Mikrozensus 1992. *Wirtschaft und Statistik Heft 7*: 11-41.
- Steinkamp G [1993]:** Soziale Ungleichheit, Erkrankungsrisiko und Lebenserwartung. Kritik der sozialegpidemiologischen Ungleichheitsforschung. *Sozial- und Präventivmedizin*; 38: 111-122.
- Strong P [1990]:** Black on class and mortality: theory, method and history. *Journal of Public Health Medicine* 12: 168-180.
- Townsend P, Davidson N [1982]:** *Inequalities in health: The Black Report*. Penguin Books, Harmondsworth.
- Townsend P, Davidson N, Whitehead M [1990]:** *Inequalities in health: The Black Report and The Health Divide*. Penguin, London.
- Unschuld PU [1986]:** The conceptualisation (Überformung) of individual and collective experiences of illness. In: Curren C, Stacey M (eds.): *Concepts of health, illness and disease*. Berg Publications, Leamington Spa, Hamburg and New York, 1986, 51-70.
- Vagero D, Illsley R [1995]:** Explaining health inequalities: beyond Black and Barker. *European Sociological Review* 11: 219-241.
- Weber I [1987]:** Soziale Schichtung und Gesundheit. In: Geißler R (Hrsg.): *Soziale Schichtung und Lebenschancen*. Enke, Stuttgart 1987, 162-182.
- Whitehead M [1991]:** Die Konzepte und Prinzipien von Chancengleichheit und Gesundheit. WHO - Regionalbüro für Europa, Kopenhagen.
(German version of: Whitehead M: *The concepts and principles of equity in health*. WHO - Regional Office for Europe, Copenhagen.)
- Whitehouse C [1985]:** Effect of distance from surgery on consultation rates in an urban practice. *British Medical Journal* 290: 359-362.
- Wilkinson R [1996]:** *Unhealthy societies: the affliction of inequality*. Routledge, London.
- Williams SJ, Calnan M [1996a]:** *Modern medicine. Lay perspectives and experiences*. UCL Press, London and Pennsylvania.
- Williams S, Calnan M [1996b]:** *Modern medicine and the lay populace: theoretical perspectives and methodological issues*. In: Williams SJ, Calnan M (eds.): *Modern medicine. Lay perspectives and experiences*. UCL Press; London and Pennsylvania 1996a, 2-25.

- Zborowski M [1952]:** Cultural components in response to pain. *Journal of Social Issues* 8: 16-30.
- Zola I [1973]:** Pathways to the doctor: from person to patient. *Social Science and Medicine* 7: 677-89.