Health Systems in the European Union

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Diversity, Convergence, and Integration

by
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Preface

This book and our analysis of West European health behavior and health systems began as a response to the Schengen Agreement of 1985 that set out to advance European integration. The Institute of Sport Science at the Technical University of Aachen in collaboration with the sociology departments at the Universities of Cologne and Illinois had, at that time, just concluded a four-year comparative project of health systems in Germany and the United States, when the Department of Medical Sociology of South Limburg University at Maastricht/Netherlands - in line with the Schengen Agreement - suggested to start a similar comparative and more policy-oriented project in West Europe.

Eventually the Universities of Aachen and Düsseldorf in Germany, Antwerp in Belgium, Limburg (and the NIVEL, Utrecht) in the Netherlands, Nancy in France and Valencia in Spain took part in the project. The group of seven individual collaborators was also joined by William Cockerham (University of Alabama at Birmingham/Alabama), who was one of three co-authors in the German-American project.

A major problem was the financing of the project. After all, social research is expensive and that of a cross-national nature is particularly so. Obstacles were not so great, however, that there were no monies to go after and apply for. Rather, funding was not uniform enough to run a strictly comparative project at exactly the same time. I.e. the Dutch team was able to generate the necessary funds within weeks, among others through the support by NIVEL, the Dutch research institute for primary medicine at Utrecht. It took a little longer to generate funds in Germany from the Ministerium für Wissenschaft und Forschung in Düsseldorf, which was also gracious enough to provide some money for the central planning and data processing at Aachen and Düsseldorf. Antwerp had sufficient resources to conduct the field work in Flanders. But there was difficulty for a potential application in France; and Spain needed also some more time before it could join.

The respective Department V of the EC in Luxembourg expressed strong interest in the project but had no money and thus never requested a formal application. Thus, an omnibus of social research was arranged in which the Universities of Kentucky (Profs. Michael Reed and Leila Sfeir Lüschen) and Marburg (Prof. Johannes Siegrist) joined with questions of their own, namely

consumption patterns of food products and sleeping problems of the population; this together with the resources of the respective institutes generated the necessary funds needed to start the project in four countries by the end of 1991, and in Spain during 1992. As the project was supposed to be exploratory such arrangement with some restrictions for the size and range, but not the quality of the national samples in terms of randomness appeared to be adequate.

Advanced students in the social sciences acted as important resource personnel, serving as interviewers. Other valuable resources were lecturers at the Technical University of Aachen in the respective foreign and their native languages into which the interview schedules were to be translated and equivalently transferred.

There was some doubt whether telephone interviewing was appropriate for European populations. Only the German team had enough experience with such method. In the end such problems were overcome by training sessions of the interviewers across national borders and by the fact that telephone interviewing is indeed acceptable to European populations.

In what follows single chapters are written by individual authors, if they had the respective competence in such topical areas like culture, stratification, health policy or attitudes. Other chapters and the book overall are the responsibility of a team consisting of William Cockerham (Dpt. Sociology; University of Alabama at Birmingham), Jos Diederiks (Dpt. Medische Sosiologie, Rijksuniversiteit Limburg), Manuel G. Ferrando (Dep. Sociologia; Universidad de Valencia), Alphonse d'Houtaud (Medicine Sociale, Université Nancy), Günther Lüschen (Institut für Sozialwissenschaft, Universität Düsseldorf), Ruud Peeters (Dpt. Epidemiology and Community Health; Universiteit Antwerp), Fred Stevens (Dpt. Medische Sosiologie, Rijksuniversiteit Limburg) and Jouke van der Zee (NIVEL, Utrecht). Thomas Abel (Universität München) and Steffen Niemann (Universität Düsseldorf) were invited in as co-authors to lend their experiences for individual chapters. The collection and processing of data, the code-book, plus preliminary multi-variate analyses of key variables could not have been accomplished without the engagement and competence of Heinz-Gert Werth (Technical University of Aachen). There are many others from secretaries, assistants to students whose help was much appreciated to see this project through.

The end of all of this was a team effort that through considerable enthusiasm overcame the needs for compromise and cooperation quite easily. It was an integrated scholarly European affair. This was not the case for the results of the West European Study of Health (WESH): They show considerable variety of health systems across national borders as well as health specific cultures and behaviors. Still, in terms of basic policy there is a unity in conviction across Western Europe that a decent provision of health care at reasonable prices for the individual is a citizen's right. We hope we have wetted the appetite for those who want to better understand the system and who want to know whether there is diversity or integration and convergence in European health-systems. After all, it

is one of the most visible institutions of modern society. It concerns a vital interest of the people, maybe it is the number one expectation toward and within the modern welfare state. It were such understandings and concerns that initiated our scholarly interest in WESH.

January 1995

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Chapter 1:
Statement and Significance of the Problem: Theoretical, Historical Context and Comparative Methodology

This book presents findings from a major study of health-related behavior, attitudes, and culture in five nations of the new European Union. Known as the Western European Study of Health (WESH), social scientists from several countries cooperated in collecting data on health in Belgium, France, Germany, the Netherlands, and Spain. The intent was to identify and analyze patterns of health behavior across social classes and countries in order to determine trends in diversity and convergence as Europe moves towards integration.

The WESH project was conceived after the 1985 Schengen Agreement abolished border controls between the Benelux countries, France, and West Germany beginning in 1990. This agreement was a major prelude toward the wider European integration mandated by the Maastricht Treaty in 1991, leading to the subsequent formation of the European Union in 1994. With clear trends toward economic and political integration in Europe, the WESH project was developed to explore whether or not a convergence in health behavior, attitudes, and culture was also taking place. A special focus of the study was the area between the Maas (Meuse) and Rhine Rivers in Europe, especially the EUREGION where the borders and cultures of Belgium, Germany, and the Netherlands converge. If an inter-regional European health culture exists, it is likely to be in this area.

Spain was added to the study because of its historical connection to the region and to provide a comparison with a Latin European culture.

The WESH study focused on two major questions:

(1) What demographic, socioeconomic, and cultural factors in these societies influence health status, behavior, care, and policy.
(2) What degree of diversity, convergence or integration can there be found for a health system across the borders of West Europe with the implicit question: should there be unity in a stringent EU health policy and health care organization?

Diversity, a descriptive term, refers to the variety and dissimilarity of health systems across Western Europe and the variety within as far as culture and differential behaviors are concerned.

Convergence, a theoretical concept from comparative research, refers to the process of social change across nations or health systems toward greater similarity.

Integration, used here as a functional term, refers to the sum total of structures and forces in a system or society that bind its parts together. For modern societies and the present study it refers to the contribution that health systems make to the integration of modern societies, in particular in terms of class and social stratification.

The book takes up these challenges. After an introduction, the first chapter discusses the European health system and its significance for EU policy, followed by a historical review and comments concerning the approach and need for the WESH study. The second chapter presents aggregate statistical data on major features of the national health systems in the countries studied, such as number of physicians, the extent of life expectancy, and causes of death.

Thereafter, the results of the WESH project are presented from a comparative survey of 2,239 adults, age 18 or older, in five nations. The theoretical model and technical problems of the study are discussed in Chapter 3, followed by a descriptive overview of data on health status, behavior, and care for each nation in Chapter 4. Chapters 5 through 10 contain an advanced statistical analysis of data from Belgium, France, Germany, and the Netherlands. These analyses pertain to health culture (chapter 5), social stratification as a determinant of health (chapter 6), health life-style (chapter 7), attitudes toward health policy (chapter 8) and utilization of health care (chapter 9). Chapter 10 presents an analysis of health patterns and across-border extensions of health-care in the Euregion.

Why should the people and their health and health-care in these countries be analyzed? Despite many indications to the contrary, European unity is more of a reality than ever before. Health and health care are among the most profound needs of people. Should health therefore be part of European integration? Should national distinctions prevail despite European Union? In order to give answers to such questions one must know about the conditions across borders in individual nations and the attitudes and experiences of people concerning health.

Moreover, health care is probably the most profound part of modern welfare systems. Consequently, throughout this book, selected features of the modern welfare society will be analyzed and discussed. The term "welfare state" by itself is not well accepted internationally, especially in the United States. Even in Europe, the term welfare society is at times replaced by social state or "Sozialstaat"(Ritter 1991). We use the term deliberately and in particular with regard to the health system. We use it in contradistinction to Esping-Andersen's three worlds of welfare (1990); this concept has not led our analysis as it stresses political ideology over the impact of social structure. Modern welfare in health care is no more a matter of socialist programs and conviction on one hand and a conservative opposition to it on the other. Rather, modern welfare society in terms of its health system, means access in principle for poor and rich alike and in the delivery of services.* Whether such an open conception and acceptance of modern

* "De-commodification" for the health system indicated by sickness benefits is fairly even in Esping-Andersen's scores from Belgium (8.8), France (9.2), the Netherlands (10.5) to Germany (11.3) with a mean of 9.2 for 18 nations, Spain not included (1990, 50). While medical care and

welfare is indeed accepted throughout the system of health is an important and empirical question.

One may well state that the health system shows those features of civilization that Norbert Elias (orig.1939) describes throughout the history of human kind. He does not explicitly mention issues of health and the medical system in his theory of civilization, but the tendencies and changes of the health systems occur unplanned and yet with a certain coercion from within that matches his observation on the civilizing process.

It is noteworthy that, as a general feature of discussions on welfare in the social sciences, health and health care are strangely neglected. In most analyses (cf. Mommsen 1981; Flora and Heidenheimer 1981) the focus is rather on problems of power, political control and redistribution. Is there nothing of power and control in the health system? Is there no redistribution? Is it working so smoothly and providing an egalitarian structure without any social strain? Is it of no interest for higher political echelons? These are important questions.

As for social scientists, they seem to address first and foremost the behavior of individuals and the social dimensions of illness, rather than major system and policy dimensions. The empirical part of this analysis is no different. Based on the social characteristics and experiences of individuals in five nations, it pursues issues of health status, health behavior as effected by culture, stratification, and nationality and it extends into questions concerning what policies the people want to see enacted in health care and its financing.

There is one group of social scientists and related politicians that have seized upon the issue of health and health care in a wider political context: these are the health economists who, in the face of rising costs and a supposedly high usage of national resources, have gone so far as to ask what the payoffs for all financial efforts are? Health economists in their models have even suggested to ration health care benefits for those that are no longer productive (Callahan 1987). Of course, there is also a hidden agenda in terms of inequality: absolute equality in health care and ultimately equal health is a goal very difficult to accomplish. After all, there are genetic and biological differences beyond the reach of respective welfare measures (Gäfgen 1989).

The implicit question so far has been clearly answered by each one of the respective West European systems: the principle of solidarity requires that those not as well off in their health for whatever reason have a basic right for treatment and care. Thus, the issue of productivity of the individual as a determinant of health care has not been part of the European discussion. That there are practices

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health insurance fees of all kinds of welfare commitments fulfill a criterion of de-commodification, sick pay is connected with previous income and thus, unlike the other costs or payments, would not result in a form of redistribution. In terms of his three worlds of welfare capitalism health care would qualify largely in terms of socialist universalism with the private sector fulfilling liberal criteria, and conservative criteria being indicated by arrangements of sick-pay. Thus, the health sector, at least in four of the five nations of WESH, shows no clear distinction in terms of Esping-Andersen's typology.

that favor younger over older people, exclusive treatment for the very rich on their own account over the standard treatment for the total population unquestionably exists. Such tendencies occur also in the supposedly egalitarian British tax-supported system. The issue for the present project is essentially whether such impacts have any major weight in West European health systems and whether or to what degree in experiences and attitudes, the people in the nations of West Europe register such concerns.

The tone of this project focuses not only on illness but on health in order to learn what culture, value components or individual beliefs determine the health and health-related life-style of the population.

The European Health System and Its Significance in EU Policy

Health systems consist of behaviors and organizations deliberately constructed to provide for the health needs of individuals, groups, communities, and the wider society. Thus, a family may be said to have a health system of its own, including its physician, health practices, and the behavior of its members. On a higher level, the European Union (EU) might constitute its own system; and in between are national, regional, state and local systems. Health systems, as understood here, go beyond the concept suggested by Field (1989) who restricts the notion of health system predominantly to medical practice. We conceive that a health system consists of three distinct components: (1) the medical system, (2) health behavior of the general population and (3) health policy. Each of these components are analyzed in this study in relation to the social characteristics, behaviors, and attitudes of the population in five nations of the European Union.

We begin by asking to what degree does a health system exist in the European Union? Is it a well integrated system or one of diversity? The background for such a question originates, of course, from the more or less consistent move towards the European Union. The Schengen Agreement laid out steps toward economic union and, important for the present analysis, modes of integration that would allow the continuation of national, regional or local structural elements, if that would serve the people. The Single European Act of 1987 mentions explicitly that member states are allowed national regulations, if it would further the protection of health and life of humans.

As for the EU, there are numerous analyses about its progress towards unification or the absence thereof. However, health and/or health care are not alluded to, or as in Colchester and Buchan (1990) and Nugent (1991), receive a brief reference after economic, monetary and market-based integration developments, and only in relation to occupational health and the control of disease caused by animals and plants crossing borders. Other discussions include

recognition of the professional status of physicians and other health personnel across national boundaries. To date, even these health issues remain unresolved.

It is therefore apparent that the EU does not have a centralized health system at present, nor was it moving toward one in any deliberate manner; rather, health systems in the EU are characterized by considerable diversity among the nation-states that comprise its membership. Moreover, health and health policy do not rank prominently on the agenda of European integration. Only in the Maastricht Treaty there is Paragraph 129 that makes a statement on health; but from a political perspective there is no particular urgency to address this situation and no activity concerning the establishment of a European health system. Consequently, studies of health in the nations of the European Union may address the question of unity, but for structural and functional reasons they must still focus on the health systems of the various member states. Diversity, not integration, in health systems remains a major characteristic of European health.

However, within individual nations, health care policy is a matter of the highest order. Germany often experiences major public and parliamentary fights over health care budgets. In its corporate system of decision-making, Germany initiates health care reforms (Gäfgen and Oberender 1988), which by and large, are just repairs on an overall functioning system that was established by Bismarck in 1883. As de Swaan (1988, 187) comments: "(Bismarck's) scheme became the model for other countries and in its broad outline has survived two World Wars, National Socialism and foreign occupation as the foundation of the German welfare state." The Dutch have essentially the same system, enacted during Nazi occupation, when a reform was overdue. They have found it to work fairly well for them, although there are problems in financing and regulating the system.

The situation in Belgium and France is not much different. The new French Government in 1993, for example, addressed at once the solvency of the national health care fund and proposed an increase of fees and co-payments, thus, confirming the financial base as a matter of system participants as in Belgium, Germany, and the Netherlands. The Spanish system appears to be in a period of transition and does not fully match the other four in its organization. At present it does not operate at a high level of efficiency. Indeed, it gets poor evaluations from de Miguel and Guillen (1989). Of course, health is high on the agenda of national policy as well. Whether at a time of the slumping Spanish economy it will get the necessary attention, is an open question. The point is that health care here as elsewhere has increasingly become an act of political philosophy in which a nation's social values, historical experience, internal politics, and economic capabilities determine the type and extent of services provided.

Nation/Nationality and the History of Health Care

The very fact that health and health care are seemingly of little relevance on the level of the EU and that health care in particular is a consistent and major policy issue on the level of nations, poses a key question for this comparative analysis: To what degree at the level of nation and nationality do health and health care show their point of identification and accumulation? Is there any significance for such identity in terms of the political system, as well as the traditions of national health systems themselves? As we will discuss, expectations with health and health politics will contain important leads for the issue of national identity in health systems.

The very fact that nations or, for the political level more precisely, nation-states seem to have special relevance for health and health care, is of considerable interest in theoretical terms. It is probably no coincidence that with the emergence of nation-states in the 19th century there was a surge of innovations, institution-building and professionalization in medicine (Huerkamp 1988). Of course, this was accompanied by the prosperity of liberal economic systems, feeding necessary resources for mutual benefits into such systems. But it was not so much liberal capitalism that allowed such expansion on the political level. Rather, autocratic, non-democratic systems were among the first to initiate social welfare systems (de Swaan 1988). Later on, the autocratic, communist systems of Eastern Europe would pay special attention to the institution of medicine and other welfare benefits for their people. That it was not done at a high level of effectiveness and efficiency became really known only after the downfall of communism.

That health care received much acclaim and attention not only in the former communist states of East Europe, being one of the key areas where the state showed concern for the well-being of its citizens, reveals another component in the parallel emergence of the nation-state and what one may call medicalized health systems: The state and related public institutions in industrialized societies became guarantors for the general population's well-being and survival. This development followed the process of secularization in which personal fate in health and disease were no longer accepted as given and controlled exclusively by God. Matters of personal destiny and health have become much more rationally controlled. Indeed, it is health behavior and health care in particular where modern people follow a pattern of what Max Weber called "formal rationality" (Cockerham, Abel and Lüschen 1993). Many research results show that such motivation and attitude extend across social class boundaries. Thus, it is no coincidence that Bismarck's policy was successful. It played upon the rationality so typical for matters of health and personal destiny among industrialized modern people.

This process of a good policy that meets expectations and the rational mood of people, as well as integrative needs of modern society, is still continuing. Of course, one may criticize the latter and condemn the usurpation of responsibility of the state for health as a form of deliberate social control. Benedetto Croce (1932),

the late Italian social philosopher, was one of the most outspoken critics of Bismarck's reforms, holding they were intended to silence the "revolutionary spirit" of the workers.

However, Bismarck had major problems getting his legislation passed, as his own party did not back him initially. Moreover, recent research shows that he himself originally was not behind it (Tennstedt and Winter 1993), although from his time as a Prussian envoy in Paris he had learned to appreciate similar programs as means of political control in France. Gustav Schmoller (1899) at the occasion of Bismarck's memorial, nevertheless called these programs his major political achievement.

Bismarck's motivation in the end is irrelevant; in structural and functional terms, welfare and health programs have served individual nations very well. The latter in West Europe cover now all or a majority of the population; health care programs provide among others that element in nation-states which like few other institutional accomplishments such as in education and law through a relative equality of chance and social equity secure the integration of modern industrialized societies. Such interpretation corroborates the theoretical insight of such seminal thinkers as A. Marshall (1889), G. Schmoller (1905) and J. Schumpeter (1992) to name the most important sociologically inclined economists of the past and B. Abel-Smith (1985), C. v.Ferber (1989), T.H. Marshall (1977), G. Myrdal (1960), O. Nell-Breuning (1970), A. de Swaan (1988) R. Titmuss (1971), G. Weisser (1957) in modern social policy.

The emergence of such insights appear as early as the turn of the 19th century as seen in the thought of Freiherr vom Stein and Karl August von Hardenberg, when the latter claimed the state had a moral responsibility for all its citizens. Such notion, in part, had been suggested by the French Revolution with its cry for *liberté, egalité, fraternité*. It resulted in strong socialist movements prompting as early as 1881 a message of social reform by Bismarck in lieu of the Kaiser in Germany which, from 1883 to 1889, culminated in programs that covered not only health care, but protection from occupational hazards and the provision of old-age pension. With such measures the nation-state accepted its responsibility for the well-being of all its citizens. Of course, the program directed toward the poor was originally not thought of having ultimately such broad significance as it has today. Setting the retirement age at 65 meant that only few would experience a pension and it was quite typical that new pensioners were major stories in newspapers. As for health insurance it covered only the poor. The new programs were fought by liberals and socialists alike, needing the superior political skill of Bismarck at his time and that of Adenauer in later West Germany, of Drees in the Netherlands, and of Aneurin Bevan in Great Britain to get social and health reforms accepted.

Bismarck's reform program originated in combating occupational hazards and diseases. In the 19th century there were major social problems, as typically the worker himself was totally at risk in industrial production and responsible not only for health-care costs, but, with continued impairment, shut out from work altogether. At this time, health hazards at work are again signaling the beginning

of health programs in the EU. And again, there is strong opposition now on the level of the nation-state with the British government fighting for exemptions from standard rules that are supposed to protect the health of workers in production throughout the EU. Of course, it would also equalize the chances of business and industry.

Great Britain is an example of a system with much tradition in matters of welfare and its theory. While on the Continent, relief for the poor and sick was provided mainly through charity, a body of laws to provide relief for the poor and the sick under the title of Poor Laws was enacted in 16th Century Elizabethan England, and experienced a number of changes until after World War II. After a period of harsh enactments of laws against paupers in the early 19th Century, new humanitarian feelings in the late 19th century, plus the teachings and actions of utopian socialists, made for considerable changes. Around the turn of the 20th century, the reformist studies of Charles Booth also included information on problems of health posing issues of equity, and fighting the earlier notion of morale failure of those being poor and sick (1894). This development culminated in the creation of the National Health Service under Aneurin Bevan and the NHS Act of 1946. It provides comprehensive health care for all permanent residents, and is financed out of taxes. This system covers the vast majority of the population, and it is supplemented by a few smaller private systems that are not particularly relevant. The system has supposedly some drawbacks such as the control of access to special care by general practitioners, and some limits in technological supplies cause waiting lists; also doctors have supposedly limited incomes when compared to those in other countries, most notably Germany and the United States. Overall, in light of expenditures that are the lowest as a percentage of the GDP among developed countries and showing a relatively high satisfaction among people, this system of socialized medicine works reasonably well. Regardless of attempts to introduce some modifications to improve efficiency during the Thatcher Government, the NHS remains essentially the same as in 1946. Of course, besides the NHS, institutions like education are also reasonably efficient in providing equity and equal chances regardless of class and status background in Britain.

With regard to distinction of class and status, France is even less integrated than Great Britain. And yet, as far as its health system is concerned the health insurance systems cover practically 100 % of the population, with the vast majority being members in the *Régime Général*. It is financed out of contributions of which employers pay a higher rate, thus offsetting part of inequalities because of copayments. In addition, some 55 % of the population carry coverage by the so-called *Mutuelles*, a voluntary insurance system that dates back to the 19th century. Some 10 % of the population have other kinds of supplementary health insurance. Overall, the system appears to be fairly efficient and is strong on technological innovation. It obviously meets the integration needs of French society.

However, out of the British experience and the broader aspects of welfare systems within societies came a number of observations concerning the function of

welfare and, by implication, of state-supported health care systems in particular. As early as the late 19th century, one can already find remarks in A. Marshall (1890) that in class-divided industrialized society there was a profound need for social welfare in order to secure the integration of society. On the German scene, the so-called *Katheder-Sozialisten*, among them G. Schmoller, A. Wagner, L. v.Brentano, voiced similar concerns, and since 1872 engaged themselves in the solution of social problems through the *Verein für Sozialpolitik*.

It is worth observing that in the 188 published reports on social issues of the Verein (1872-1935), among them Max Weber's famous study of the rural workers East of the Elbe River, matters of health care and the institution of medicine were not dealt with. There were just two reports, one on company health funds and the other one on insurance matters, that could be interpreted as being relevant for matters of health. Of course, by the time the *Verein für Sozialpolitik* started, *Sozialmedizin* through the relentless efforts of Rudolf von Virchow had already become an agency to address health care as a matter of social welfare for both medical science as well as on the political level. After all, Virchow was not only the founder of *Sozialmedizin*, of cellular pathology, he was a politician and a member of parliament as well. German *Sozialmedizin* in its efforts and direction in the process became internationally a much acclaimed institution, only to be discarded during the Nazi period.

While the history of health systems in Europe suggests to take a comparative account of the present situation in terms of structure and efficiency, the prevailing question from the theory of society and welfare systems remains whether this institution and the organization of health care provide for system integration. Moreover, there is also a question whether integration occurs alongside structural diversity or whether health care shows a convergence toward ever higher system solidarity.

By now the so-called social-security model of health care has become the basis of most systems on the Continent. The Dutch Minister of Health and Welfare recently confessed that in terms of health care he felt to be a *Rhinelander*, alluding to the fact that by now all adjacent countries to the Rhine had more or less accepted the (originally Bismarckian) system. But how about the people in that system? How do they exist in and feel about it? That is one of the key questions to be answered throughout this book.

Another purpose is of course quite practical. Systems so close to one another need to understand and learn from across their borders. The policies designed and enacted need consistent scrutiny, as in the present study, also from the peoples' viewpoint.

Finally, outsiders will take an interest in European Health affairs and in results like the following analysis. Graig's *Health of Nations* (1993) takes a similar comparative perspective analyzing policy problems in Britain, France, Germany, Japan and the Netherlands for U.S. health reform. In methodological terms his study is not comparative in a strict sense.

The Comparative Approach and the Need for the Study

This is not the first comparative study of health; neither is it the first dealing with West Europe. The latter was the topic in Deppe's edited book on *Gesundheitssysteme und Gesundheitspolitik in Westeuropa* (1983). Individual authors in separate chapters described the systems of seven nations from problems of their historical development to the position of labor unions in the health system. In a politically inclined synopsis and comparative summary the editor observes that the economic crisis is the major cause for social polarization in the health systems (p. 23).

West European health systems are also a major part in Raffel's edited book *Comparative Health Systems* (1984). Among the 14 systems seven are West European with analyses that country by country account for the same issues from the social and political context of health care to issues of cost and public health. Raffel in his conclusion draws attention to costs and values as the dominant issues, of which cost factors and medical personnel problems prevail and the issue of values remains implicit at best. Both publications cited are not comparative in a strict sense of cross-national research. They also first and foremost deal with system indicators and aggregate data in political and economic terms, rather than with people within the system and their experiences.

There are also a number of essentially theoretical and in qualitative comparative analyses that like Krysmanski (1972), Fleissner, Kerner and Winterberger (1980), Light and Schuller (1986), Ceresoto and Waitzkin (1986) compare capitalistic and socialist health systems. The majority of these analyses from a Marxian theoretical perspective like the 'classic' in this genre (Navarro 1976) come out rather critically with regard to capitalist, Western systems. The comparative approach in the book by Field (1989) stresses pluralism and, with a good deal of theoretical reflection and the use of aggregate data, provides guidelines for system reform.

There are hardly any projects that in a strictly empirical-analytical manner with a standardization of variables and procedure stand in the tradition of a type of comparative sociology for which Emile Durkheim is the best witness. The great exception is Kohn and White *Health Care* (1976). Blendon's et al. (1990) analysis across 10 nations checking on people's satisfaction with their systems can also be counted among such approaches, although that study is strictly descriptive and does not employ advanced analytic statistics.

One of the newest products of descriptive and essentially subjective accounts that support the need for a study like WESH is *Health Care Systems and Their Patients* (Rosenthal and Frenkel 1992). Expert accounts or a patient's perspective discuss hospital care, doctors' attitudes, economic problems as these experts see fit. Yet, as the editors observe, recognizing the limits of such approach: "*This book is the last of a sequence of several books... With all deserved respect it should also be the last of its kind*". And they go on to state that "*the primary research methodology* (for cross-national, comparative research) *are present... What would*

be necessary is a Rockefeller-type research institute with long-range funding and relatively permanent staff. The lone-ranger type of research is no longer adequate for the advancement of cross-national research"(XI). Of course, it is not only manpower and money. There is also a problem of adequate design in a given project.

In methodological terms, WESH follows in the footsteps of comparative cross-national research that were at its peak around 1970. *Health Care. An International Study* by R. Kohn and K. White (1976) was the most prominent one in comparative medical sociology. Thereafter a decline in such studies occurred caused both by a tendency in the social sciences to opt for relevance in national contexts and by the supposedly enormous difficulties in the methodology of comparative designs.

Quite a bit has been learned in the meantime; and despite the "*imperfection of comparisons*" (Oyen 1990) there is again renewed interest in this department of social research. There is also encouragement to pursue comparative cross-national research after all and despite the theoretical and methodological difficulties (Scheuch 1989). The former continues to cause problems, and that holds for the theory of health systems as well, although the developments in action and systems theory in the work of Talcott Parsons were heavily influenced by the early encounters with the medical sociology of L.J. Henderson (1935, 1936). For the problems of comparative method, as Scheuch suggests, all that needs to be known has already been said.

In Przeworki and Teune's terms (1970) this project is one that follows the model of most-similar-systems-design, i.e. the systems in question are quite similar and as far as health systems are concerned the five West European countries in this project, among other similarities follow the social-security-model. Thus, differences are potentially to be explained by a few variables only.

As for the more substantial and theoretical issues of comparative research, a prevailing question has been the problem of "convergence" in social change of comparative systems. Thus, William Goode identified a tendency of convergence all over the world with families becoming more and more of the small nuclear type (1963). And modern technology was supposed to result in the convergence of industrial enterprises cross-nationally. The present analysis will have to answer to what degree and where convergence can be observed in the five national health systems of WESH, or to what degree diversity prevails.

WESH wants to provide a sense of theory for the system of health in West Europe at large. The theory of health systems advanced is, however, no more than a source of interpretation and suggestion for policy and further research. In the strictest sense such concepts as integration or convergence are not tested. A number of indications and results of a more limited ad-hoc-basis do, however, allow one to interpret the results beyond the strictly sense impression. Overall and beyond a predominantly descriptive account some testing of theory will occur along such constructs like health culture, stratification and policy as they interchange with matters of health. Moreover, being aware of Galton's problem,

one has to acknowledge that beyond the aggregate data for national systems the experiences of individuals interviewed provide only limited insights and positions toward system organization and direction. Much richer are the responses of individuals in terms of their own subjective health, their health behavior and attitudes on the background of such profound variables as age, gender, basic value orientations and their position in indicators of social stratification.

These individuals have been carefully selected and were interviewed at times far in access of one hour. We have to reiterate that the limits of money and personnel in three of the five countries allowed interviews for a restricted number and region only. The limits in funding for Spain did restrict the length of the interviews, thus inhibiting their use for most of the analytic statistical procedures in chapters 5 to 9.

The situation for Germany and the Netherlands is more positive. In both countries, medium-sized samples generated enough cases to produce results that are generally representative and significant, while overall our claim goes no further for WESH than being exploratory.

The following chapter will go into more detail as far as individual systems are concerned displaying and commenting on aggregate statistics of system efficiency throughout the five nations.

Thereafter, the design and the results of WESH are discussed in respective chapters. Of course, the implicit design and theoretical context address the system level; the actual project, however, is as much concerned with health behavior of people in the five nations as it is with system components. And the latter, for all practical purposes are also pursued by finding out about the experiences and attitudes of people concerning their health care in each of the systems. The implied model is to be found in Chapter 3 and the results of such mix of health, behavioral and attitudinal data vs. the control factors of culture, social stratification and national systems at large follow thereafter.

Chapter 2:
Organization, Present Problems and Efficiency of West European Health Care Systems

by Jouke v.d. Zee, Ruud Peeters, Alphonse d´Houtaud

Introduction

Two parallel developments raised health care cost during the last three decades in most industrialized countries. The first is a gradual extension of the number of beneficiaries of public health insurance schemes until practically the whole population is covered, extending at the same time (the second development) the scope of the benefits to substantial periods of specialist and hospital care. It is easily understood that these parallel processes were responsible for the steeply rising health care costs in the sixties and seventies. Typical for the eighties and early nineties are the efforts to swing the pendulum in the opposite direction by various cost-containment policies.

Although this is the general trend, there are considerable differences between individual countries, Great Britain and Finland belonging to the category of countries with early health care reforms and cost containment, Germany and France arriving late at this stage and the USA still hesitating to join.

The aim of this chapter is to describe general trends in health and health care developments in the five countries of the WESH-study, based on general and easily accessible parameters.

Due to the continuous efforts of the OECD health department (OECD 1985, 1987, 1990, 1993, Schieber & Poullier) a priceless data base is available containing valuable comparative information. This chapter is based mainly on their efforts with some complementary information; the latter pertain especially to ambulatory care (Verheij & Kerkstra 1991; Boerma 1993; Jamieson 1992; BIGE 1992).

From the tables with descriptive statistics some expectations can be derived about differences in attitudes, values and opinions of the citizens of the five countries that participated in the WESH-study. If we find, for example, large differences in health care provider density between the countries, we may assume that these differences influence utilization of health care services as reported in the WESH-study.

Describing a health care system should follow some structure. We opted - in this case - for a structure derived from the work of the Canadian economist Robert Evans (1981) who stated that understanding the dynamics of a health care system

is based on understanding the relationships between the four or five major actors. In a modified version he lists:

1.	The State	providing legislation and defining property rights.
2.	Health care insurers	in some cases part of the state in other cases consisting of private companies or social security organizations.
3/4.	Health care providers	to be distinguished in (3) primary (that is directly accessible) providers and (4) secondary providers (accessible by referral or prescription only).
5.	Health care consumers	representing health care needs and demands.

In this mainly descriptive chapter we will make also use of another scheme of Evans by dividing the chapter into 4 sections:

1. Health(care) needs and demands: the health profile of the population
2. Supply of health care: institutions and professions
3. Health care financing
4. Legislation and regulation.

Each section will contain a set of tables derived mostly from the OECD-database. A concluding section will contain a set of expectations about differences most probably to be found in the WESH-data file.

Health Status/Health Needs

A population's health status usually is described indirectly referring to lack of health like mortality rather than to health itself. There is an international database on 'happiness' (Veenhoven 1994), containing international data on the public's satisfaction with life in general and a limited number of major areas (income, family, work, death rates) in particular; but between these satisfaction figures on the one hand and death rates on the other hand, not many indicators can be found. Interesting indicators like the number of years free from disability or quality-adjusted life years are not (yet) collected routinely. Therefore, in this chapter we limit ourselves mainly to mortality figures; for data on subjective and self-reported health we refer to chapter 4 where the descriptive results of the comparative survey will be presented.

Death rates have one advantage: - as a Russian saying goes - "when a man dies, he is dead"; there is little confusion about death rates as long as one sticks to crude death rates and as long as one does not venture into the significance of differences in causes of death.

This section will describe the following indicators (for 1990 - with reference data for 1980, 1970 and 1960):

1. birth rates;
2. age-standardized death rates (m/f), direct standardization on an average European population;
3. causes of death;
4. infant mortality;
5. life expectancy at birth (m/f);
6. life expectancy at 60 (m/f);
7. alcohol and tobacco consumption.

Birth rates have fallen almost a third between 1960 and 1990. The Dutch and German figures are slightly rising since 1980. Spain had the highest birth rate in 1960 (21.8%), now it has the lowest. In France the decline has been smallest.

Table 2.1: Birth Rates (per 1000 Population) and Index Rates

	1960		1970		1980		1990	
BE	17.0	100	14.6	86	12.7	75	12.4	73
FR	17.9	105	16.7	98	14.8	87	13.5	79
GE	17.4	102	13.4	79	10.1	59	11.5	68
NE	20.8	122	16.3	96	12.8	75	13.2	78
SP	21.8	128	19.6	115	15.2	89	10.2	60

BE 1960 = 100 (Source: OECD - Health Systems, Facts & Trends, 1993 Table A1.1.2.)

Like birth rates, age-standardized death rates fell with an average pace of 30-40% between 1960 and 1990. The rank order of the five countries changed. Where the Netherlands had by far the lowest rates in 1960, it lost its leading position to France (and Spain), although within narrow margins. German death rates are still slightly higher, as in Belgium; although for Belgium, the most recent data stem from 1985 instead of 1990.

Table 2.2: Age-Standardized Death Rates (per 1000 Population) and Index Rates

	1960		1970		1980		1990	
BE	12.4	100	11.5	93	9.9	80	8.8 '85	71
FR	11.4	92	9.7	78	8.5	68	7.0	56
GE	12.7	102	11.7	94	9.6	77	8.5	68
NE	9.5	77	9.3	75	8.2	66	7.5	60
SP	11.4	92	10.4	84	8.2	66	7.4 '88	59

BE 1960 = 100 (Source: OECD - Health Systems, Facts & Trends, 1993 Table A1.1.9.)

The considerable differences in Table 2.3 of infant mortality existing in 1960 (the lowest in the Netherlands, being almost 2.5 times as low as the highest, in Spain) vanished in 1990. The range narrowed from 17.9 - 43.7 in 1960 to 7.1 -

7.9 in 1990, which is an amazing and laudable achievement. Differences have almost vanished, parallel with the fast decline in birth rates.

Table 2.3: Infant Mortality (per 1000 Live-Births) and Index Rates

	1960		1970		1980		1990	
BE	31.2	100	21.1	68	12.1	39	7.9	25
FR	27.4	89	18.2	58	10.1	32	7.2	23
GE	33.8	108	23.2	74	12.7	41	7.1	23
NE	17.9	59	12.7	41	8.6	28	7.1	23
SP	43.7	140	26.3	84	12.3	39	7.8 '89	25

BE 1960 = 100 (Source: OECD - Health Systems, Facts & Trends, 1993 Table 3.2.6)

Table 2.4 shows no time series data. Cross-section data for the five countries reveal a striking difference between France and Germany regarding cardiovascular deaths. Half of the German deaths are due to cardiovascular diseases - while in France it is hardly over a third.

Table 2.4: Death Rates by Causes for 100 000 Population in Nations of West Europe

Total and in %	BE (1987)	FR (1990)	GE (1991)	NL (1990)	SP (1989)
Total	1065.4	927.7	1135.7	862.1	835.3
	100.0	100.0	100.0	100.0	100.0
Infections	8.5	12.1	8.9	5.6	9.6
	0.8	1.3	0.8	0.7	1.2
Cancer	271.3	243.2	262.4	235.4	192.9
	25.5	26.2	23.1	27.3	23.1
Diabetes mellitus	19.8	11.4	24.5	24.6	22.8
	1.9	1.2	2.2	2.9	2.7
Cardiovascular disease	428.4	307.7	568.0	345.4	344.9
	40.2	33.2	50.0	40.1	41.3
Respiratory disease	77.7	67.1	67.0	71.4	75.5
	7.3	7.2	5.9	8.3	9.0
Diseases of digestive system	38.9	47.7	53.6	30.9	48.0
	3.7	5.1	4.7	3.6	5.8
Urological. venereal disease	18.4	12.7	12.5	16.9	18.5
	1.7	1.4	1.1	1.9	2.2
Accident (traffic)	19.6	17.6	13.6	8.6	21.1
	1.8	1.9	1.2	1.0	2.5
Suicide	22.6	20.1	17.5	9.7	7.7
	2.1	2.2	1.5	1.1	0.9
Others	160.2	188.1	107.7	113.6	94.3
	15.0	20.3	9.5	13.1	11.3

(Source: Statistisches Jahrbuch für das Ausland 1993/1994, Statistisches Bundesamt)

The following two tables (2.5 and 2.6) give time-trends for life expectancy (at birth and at the age of 60).

Table 2.5: Life Expectancy at Birth (in Years) and Index Rates

	1960				1970				1980				1990			
	M		F		M		F		M		F		M		F	
BE	67.7	100	73.5	109	67.8	100	74.2	110	70.2	104	76.8	113	72.4	107	79.1	117
FR	67.0	99	73.6	109	68.8	102	76.1	112	70.2	104	78.4	116	72.5	107	80.9	119
GE	66.9	99	72.4	107	67.4	99	73.8	109	69.9	103	76.6	113	72.6	107	79.0	117
NE	71.5	106	75.5	112	70.9	105	76.6	113	72.4	107	79.2	117	73.8	109	80.1	118
SP	67.4	100	72.2	103	69.6	103	75.1	111	72.5	107	78.6	116	78.6	108	80.3	118

BE 1960 Males =100

(Source: OECD Health Systems, Facts & Trends, 1993, Tables 3.1.1/3.1.2)

Table 2.6: Life Expectancy at 60 (in Years) and Index Rates

	1960				1970				1980				1990			
	M		F		M		F		M		F		M		F	
BE	15.4	100	18.7	121	15.2	99	19.2	125	16.3	106	20.9	136	17.5	114	22.5	146
FR	14.6	101	19.5	127	16.2	105	20.8	135	17.3	112	22.4	145	19.0	123	24.2	157
GE	15.5	101	18.5	120	15.3	99	19.1	124	16.4	106	20.7	134	17.8	116	22.2	144
NE	17.8	116	19.9	129	16.9	110	20.7	134	17.4	113	22.5	146	18.3	119	23.4	152
SP	16.5	107	19.0	123	18.7	121	19.9	129	18.4	119	22.1	144	18.7	121	22.7	147

BE 1960 Males =100

(Source: OECD Health Systems, Facts & Trends, 1993, Tables 3.1.5/3.1.6)

Over the past 30 years, Spanish males and females experienced the highest increase in life-expectancy, especially at 60 years. The French (both males and females) also gained more years after 60 - while the life expectancy of Dutch males over 60 actually decreased from 1960 - 1980 and started to increase at a moderate pace only recently. The Dutch, who had the best indicators in 1960, lost their place to Spain and France, although also in this area differences narrowed considerably.

Consumption of tobacco and alcohol as major causes of bad health are shown over time in the next two tables (2.7 and 2.8).

Table 2.7: Tobacco Consumption (Grams per Person > 14 Yr.) and Index Rates

	1960		1970		1980		1990	
BE	3217	100	3555	111	3077	96	2460	76
FR	2180	68	2130	66	2262	70	2272	71
GE	1790	56	2685	83	2843	88	—	—
NE	2647	82	2963	92	3588	112	2931	(88) 91
SP	—	—	—	—	—	—	—	—

BE 1960 = 100

(Source: OECD - Health Systems, Facts & Trends, 1993 Table A1.1.9)

Data fluctuations might be a sign of limited reliability of certain figures. However, there seems to be a decrease of the tobacco consumption in Belgium and an increase in Germany and the Netherlands (if, however, the 1960 figures are correct).

Table 2.8: Alcohol Consumption (Litres of Pure Alcohol Intake per Person >14 Yr.) and Index Rates

	1960		1970		1980		1990	
BE	8.9	100	12.3	138	14.0	157	12.4	139
FR	23.7	266	16.7	251	20.6	231	16.7	188
GE	7.5	84	13.4	151	12.7	143	12.3 '86	138
NE	—	—	—	—	11.1	125	9.9	111
SP	—	—	16.8	189	14.1	158	15.1 '86	170

BE 1960 = 100

(Source: OECD - Health Systems, Facts & Trends, 1993 Table A1.1.9)

Consumption of alcoholic beverages in France, although still being the highest of the five countries, decreased considerably in these decades, especially between 1980 and 1990. In the other countries there is more fluctuation of the indexes.

In conclusion: Differences between the countries in birth rates, death rates and life expectancy decreased to a great extent. Lower birth rates coincide with a sharp

decline in infant mortality rates. A country with a rather favorable position in 1960 like the Netherlands, lost its position to France and Spain where especially life expectancy has increased considerably. Life expectancy at birth for women is around 80 years now in all five countries; male life expectancy still lagging behind and showing more variation.

Death rates tell something about death and about the last years of someone's life. Whether that life is relatively care- and disability-free cannot be derived from this set of statistics.

Regarding to causes of death, the striking difference between France and Germany (with respectively 34 and 49% of cardiovascular deaths as percentage of all deaths) will reflect itself in health and illness behavior of this population. As mortality indicators converge, differences in health status - as measured, indirectly, by mortality rates and life expectancy - in 1990 are not big enough to yield expectations regarding the WESH-study. We presuppose no systematic differences in self reported health status between the populations of the 5 countries. Perhaps with the exception of the differences between Germany and France in cardiovascular deaths.

The Supply of Health Care

Where the previous section on health status and health needs was rather straightforward in terms of definition and operationalization, in this section about health care supply data depend to a much larger extent on the way a particular health care system defines a particular service.

This can be illustrated by an example from the OECD 'Facts and Trends' book. According to this book (table 5.1.4) there is one general practitioner per 1000 inhabitants in Germany. According to Boerma (1993) it is closer to 1 GP per 2000 inhabitants. This discrepancy can only be understood when one knows that in Germany two types of independently established doctors (*niedergelassene Ärzte*) exist, both providing ambulatory medical care: *Allgemeinärzte* (general practitioners) and *Fachärzte* (specialists). Together they are considered as independent doctors (*niedergelassene Ärzte*), providing ambulatory care, mostly without a hospital connection. Counting both subgroups as GPs would not be correct; confusion, however, can easily be understood.

The same goes for hospital statistics. 'A bed, is a bed, is a bed' does not describe the situation properly. In France there are short term, medium term and long term beds (*lits de court séjour, moyen séjour, long séjour*). In the Netherlands the long term beds are mostly in separate (medical) institutions (nursing homes), that, however, have certain elements in common with (non-medical) 'homes for the aged'. Especially in care for the elderly, terms are not unambiguous. Countries vary to a great extent in the provision of long term care, either institutionalized or ambulatory. Catastrophic illness legislation is a

prerequisite for a flourishing long term care sector, but, even in cases where such a legislation exists, variation is abundant.

Nevertheless a rough distinction can be made between institutional and ambulatory care on the one hand and acute versus long term care on the other hand. In the OECD-tables, a distinction has been made between acute beds, psychiatric beds, and nursing homes (long term beds). This is a rough subdivision that could provide insight, if these distinctions have been made empirically correct.

For the hospital sector we present the above-mentioned subdivision plus some information about all admissions, acute admissions, length of stay per admission for respectively all admissions and acute admissions. The health care professionals are represented in the tables by all physicians (per 1000 inhabitants), general practitioners, nurses, dentists, and pharmacists. For the collection of these indicators, the tradition is not as deeply rooted as it is for the previous section on life expectancy and mortality. The tables show many gaps and inconsistencies. Some data from local sources have been supplemented; but a full dataset is not available.

Despite possible inconsistencies and incorrectness of the data, the number of hospital beds in Spain is visibly lower than in the other four countries (almost half as low).

In the acute sector, Belgium and the Netherlands have lower rates than France and Germany. In the long term sector there are too few data for comparison.

From Table 2.10 it is clear how misleading indicators can be. In previous OECD-studies (OECD, 1987), there was no distinction between length of stay for all admissions and for acute admissions. For most countries there is, of course, a certain difference between the two: for the Netherlands this difference is almost threefold (length of stay per acute admission 11.2 days, all admissions 34.1 days) because of the considerable size of the long term nursing home sector.

In Germany admission rates increased (by over 50%) while the average length of stay declined from 21.6 to 13.4 days (38%). Technology is mainly responsible for this rapid decline in length of stay per admission (Sloan & Valvona, 1986). In the Netherlands a similar pattern is visible; for the other countries the time series is incomplete, but we suppose a similar trend.

In spite of the gradual decline of the average LOS (length of stay all admissions), there seem to remain considerable differences in admission rates between Belgium and the Netherlands on the one hand and Germany and France on the other hand (almost twice as high in France as in the Netherlands). This finding reflects a generally found pattern (Van der Zee et al 1991, Van Noordt et al 1992), where France and Germany appear to be much more hospital-oriented than the two smaller countries (the studies mentioned describe regional variations

Table 2.9: Hospital Beds (per 1000 Population)

	1960				1970				1980				1990			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
BE	—	6.0	—	—	8.3	4.7	2.7	—	9.4	5.5	2.5	—	7.9	6.0	1.9	1.9
FR	—	—	—	—	—	—	—	—	11.1	6.2	—	0.7	9.7	5.2	1.8	1.2
GE	10.5	7.2	0.9	—	11.3	7.5	2.0	—	11.5	7.7	2.0	—	10.4	7.5	1.6	—
NE	11.0	5.0	—	—	11.4	5.5	—	—	12.3	5.2	1.7	3.3	11.5	4.3	1.6	3.5
SP	—	—	—	—	4.7	—	—	—	5.4	—	1.1	—	—	—	—	—

1 = All Beds 2 = Acute Beds 3 = Psychiatric Beds 4 = Nursing Homes

(Source: OECD Health Systems, Facts & Trends, 1993, Tables 5.2.1-4)

Table 2.10: Admissions / Length of Stay (in Days)

	1960				1970				1980				1990			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
BE	—	—	—	—	—	9.3	—	15.1	13.6	11.9	19.5	10.0	14.4	10.9	14.4	9.8
FR	—	—	—	—	7.4	—	18.3	16.0	19.3	17.5	16.8	9.9	23.3	21.0	12.3	7.0
GE	13.3	11.9	28.7	21.6	15.4	13.4	24.9	18.3	18.8	16.3	19.7	14.9	20.9	18.5	16.5	13.4
NE	—	8.0	—	20.1	10.0	9.7	38.2	18.8	11.7	11.2	34.7	14.0	10.9	10.3	34.1	11.2
SP	—	—	—	—	—	—	—	—	9.3	—	14.8	—	—	—	—	—

1 = All Admissions 2 = Acute Admissions 3 = Lenght of Stay al Admissions 4 =Length of Stay Acute Admissions

(Source: OECD Health Systems, Facts & Trends, 1993, Tables 5.2.7-10)

Table 2.11: Nurses, Physicians and General Practitioners (per 1000 Population)

	1960			1970			1980			1990		
	1	2	3	1	2	3	1	2	3	1	2	3*
BE	—	1.3	—	—	—	—	4.7	2.5	1.1	8.9	3.4	1.6
FR	1.8	1.0	0.4	—	1.3	0.5	4.6	2.0	0.8	5.4	2.7	1.0
GE	(1.7)	1.4	X	(2.4)	1.6	X	(4.0)	2.3	X	8.0	3.1	0.5
NE	—	1.1	0.4	—	1.2	0.3	—	1.9	0.4	6.0	2.5	0.4
SP	—	1.2	—	—	1.3	—	—	2.3	—	—	4.0	—

1 = Nurses 2 = All Physicians 3 = General Practitioner X = Data not correct

(Source: OECD Health Systems, Facts & Trends, 1993, Tables 5.1.2/4/8; * Boerma et al.,1993)

Table 2.12: Dentists and Pharmacists (per 1000 Population)

	1960		1970		1980		1990	
	D	Ph	D	Ph	D	Ph	D	Ph
BE	—	0.6	0.3	0.7	0.4	1.0	0.7	1.2
FR	—	—	0.4	0.5	0.6	0.7	0.7	0.9
GE	0.6	0.3	0.5	0.3	0.5	0.5	0.7	—
NE	0.2	0.1	0.3	0.1	0.4	0.1	0.5	0.2
SP	0.1	0.4	0.1	0.5	0.1	0.6	0.3	0.9

(Source: OECD - Health Systems, Facts & Trends, 1993 Table 5.1.6-7)

in hospital admission rates in Belgium, the Netherlands, Germany (Nordrhein-Westfalen) and the North of France)*. The tables for 1990 show that inhabitants of France and Germany will be more than twice as likely to have experienced an acute hospital admission compared to their Dutch counterparts.

In spite of many gaps in the data one can conclude that, for instance, there is a threefold difference in the number of general practitioners between the Netherlands and Belgium, Germany resembling the Netherlands and France finding itself in between.

It will make a profound difference whether a GP takes care of 600-700 patients (like in Belgium) or of approx. 2200 (like in the Netherlands). Accessibility and approachability of GP-services will certainly differ between the countries, based on these density figures.

Most striking are the differences in pharmacist density between Belgium and the Netherlands (6 to 10-fold). Even when one takes into account that in Holland approx. 1 out of 9 GPs dispense pharmaceuticals, the difference between the two neighboring Low Countries is striking. The number of dentists is especially low in Spain (in rural areas); proper dental care is a luxury service, typical for full grown economies. From 1960-1990 differences declined from six-fold to two/three fold. One expects lower drugs utilization in the Netherlands and lower dentists utilization in Spain compared to the other countries.

In conclusion: In spite of lack of data and lack of specification of the definitions there are huge differences in health care supply both between the countries and between the years. France and Germany are typical (acute) hospital countries; in the Netherlands the long term care is responsible for a considerable average length of stay per admission, although in all countries LOS per admission declined, between 1960 and 1990. General practitioners and pharmacists are unequally divided over the countries. Belgium with very high GP density and pharmacists, the Netherlands with much lower rates for both indicators. This undoubtedly will influence the number of contacts with general practitioners and the height of the threshold for utilization. In Belgium and France it is low for general practitioners. In the Netherlands and Germany it will be higher. Belgium has the highest density for dentists per 1000 population, followed closely by France and Germany. Drugs consumption will be higher in France and Belgium than in the Netherlands and Germany. Utilization of dental care will be lowest in Spain.

As far as we formulate expectations, we limit ourselves to expectations regarding the utilization of services. It is quite common to relate the availability of facilities and providers to the outcome in terms of health. There is however no clear causal association between the two. For instance, Spain has the lowest rates for dentists, and spends the lowest amount on health care. Still it has good values for life-expectancy among the two sexes, a low mortality rate, and by far the

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* For Belgium, Groenewegen and van der Zee (1985) show that the Walloon part of Belgium has much higher admission rates than the Flemish part.

lowest suicide rate. In contrast, the German system is costly, has high supply figures for physicians and hospital beds. Yet, these figures are not reflected in indicators such as life-expectancy, cause-specific mortality (e.g. cardiovascular, accidents), and several morbidity rates. Another country where health indicators do not seem to be in relation to the value invested in terms of expenditure and supply is Belgium. Conclusions like the above need to be taken with great caution if based only on statistics available at the national level. It is in this debate that population surveys such as the WESH-study can contribute and complement the existing statistics.

Health Care Expenditures

The attention given to the care and prevention of illness as part of the care system of Western Europe leads to the following expenditures in real currency (Ecu per capita) and as part of the GDP found in the following tables.

Table 2.13: Total Health Expenditure (in % of GDP) and Index Rate

	1960		1970		1980		1990	
BE	3.4	100	4.1	121	6.6	194	7.6	224
FR	4.2	124	5.8	171	7.6	224	8.8	259
GE	4.8	141	5.9	173	8.4	247	8.3	244
NE	3.9	115	6.0	176	8.0	235	8.2	241
SP	1.5	44	3.7	109	5.6	165	6.6	194

BE 1960 = 100

(Source: OECD - Health Data, 1993)

The average expenditure for all member states in 1988 was 997 ECU and 7.89% of the GDP. Except for Spain, the countries within the WESH-survey are either like Belgium (close to the average), whereas the three others are well above with (West) Germany in real currency being in first place. One should add that expenditures like cash benefits (sick-pay) are not included in these rates, ranging for an individual employee from full pay during six weeks (Germany), and 30 days (Belgium) to varying contractual agreements in Spain. Moreover, in particular Germany has its system of *Kur* for rehabilitation and preventive health paid for both blue and white-collar workers by the social security system. The latter expenditures are indeed included in the tables.

In addition to the expenditures paid by the national social security system, there are private health expenditures, such as co-insurance for hospitals and pharmaceuticals and over-the-counter-drugs. The expenses of the former are usually not (completely) covered by the national social security, and hence individuals are free to insure themselves and their families against these risks.

Consequently, these expenses are not shown in the table. Beyond the figures in the tables, one should add between 2% and 3% of the GDP to the above percentages to arrive at realistic figures. Excluding Spain, one would have to estimate the real costs for health at a rate above 10% of the GDP in the four other nations of the WESH-survey.

Table 2.14: Total Health Expenditure in US$ per Capita (current Prices PP$) and Index Rates

	1960		1970		1980		1990	
BE	55	100	128	233	571	1038	1242	2258
FR	75	136	203	369	698	1269	1528	2778
GE	98	178	216	393	811	1475	1522	2767
NE	74	135	207	376	696	1265	1286	2338
SP	14	25	80	145	325	591	744	1353

BE 1960 = 100

(Source: OECD - Health Data, 1993)

Table 2.15 shows whether the emphasis of the system is on in-patient or on out-patient care. Both Belgium and Germany have relatively low figures. France (acute hospitals) and the Netherlands (long term hospitals) showed much higher expenditures, in 1990.

Throughout the EU the percentage of health expenditures spent on hospital care is high, although there is a trend towards stabilization (or even a reduction) in time. Data on psychiatric hospital care are so scarce that it is not sensible to discuss them. Data on nursing home care show the exceptional position of the Netherlands, although information about most of the countries is lacking.

Table 2.16 shows the expenditures for ambulatory care. Belgium spends relatively much money on ambulatory care. The other countries (with the exception of Spain, no data available) devote slightly more than one quarter of their health expenditures on ambulatory care.

Finally, the expenditure for drugs as shown in Table 2.17 may be regarded as an indirect indicator of the drug-orientation of a nation. Differences between Germany and the Netherlands are most striking. In both countries (and in contrast to Belgium and France) prices are high but the number of prescriptions is apparently much lower in the Netherlands compared to Germany. Contrary to widely accepted beliefs the French show a decline in their expenditures for drugs from 1970 to 1980. In 1990 their previously prominent position is now occupied by the Germans. Of course, national drug prices as a percentage of health expenditures complicate any conclusion for actual drug usage. To whit, Germany has higher drug prices than other countries and among the highest total expenses of the 5 nations.

Table 2.15: Expenditures Hospital Care (% of Total Health Expenditure)

	1960				1970				1980				1990			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
BE	38.4	—	—	—	25.7	—	—	—	33.1	—	—	—	32.8	—	—	—
FR	34.7	—	—	—	38.0	30.0	—	—	48.1	48.1	—	0.2	44.2	43.3	—	0.9
GE	—	—	—	—	35.7	—	—	—	36.1	—	—	5.6	36.6	—	—	7.9
NE	—	24.8	—	—	55.1	31.2	—	—	57.3	34.5	6.1	10.6	51.8	29.7	5.8	10.2
SP	—	—	—	—	—	—	—	—	54.1	—	2.3	—	—	—	—	—

1 = All Beds 2 = Acute Beds 3 = Psychiatric Beds 4 = Nursing Homes

(Source: OECD Health Systems, Facts & Trends, 1993, Tables 5.2.1-4)

Table 2.16: Total Expenditures Ambulatory Care (% of Total Health Expenditures) and Index Rate

	1960		1970		1980		1990	
BE	41.3	100	42.5	103	39.2	95	40.0	97
FR	27.6	67	26.6	64	24.8	60	28.4	69
GE	—	—	29.0	70	26.6	64	28.0	68
NE	30.9	75	—	—	27.7	67	26.9	65
SP	—	—	—	—	12.6	29	—	—

BE 1960 = 100

(Source: OECD - Health Data, 1993)

Table 2.17: Total Expenditures for Pharmaceuticals (% of Total Health Expenditures) and Index Rate

	1960		1970		1980		1990	
BE	24.3	100	28.1	116	17.4	72	15.5	64
FR	22.1	91	23.2	95	15.9	65	16.8	69
GE	—	—	19.5	80	18.7	77	21.3	88
NE	9.5	39	7.5	31	7.9	32	9.9	41
SP	—	—	—	—	21.0	86	—	—

BE 1960 = 100

(Source: OECD - Health Data, 1993)

In conclusion: In all five WESH-countries the main source of finance of the health system is through contributions paid by individual members. However, a part is paid for by taxes as well; such is the case in Belgium.

In four of the five countries under study, the total expenditures for health according to OECD-figures revolve around 8% of the GDP; Spain is an exception with 6.6% in 1990. Actually, rates for the former are estimated above 10%.

Belgium has expenditures for ambulatory care far above that of the other countries and has (together with Germany) relatively low figures for institutional care.

Germany spends most on pharmaceuticals, while the Netherlands show the lowest expenditure rates for drugs.

Some of these differences should also be found in the WESH-survey, e.g. low figures on drug utilization in the Netherlands; but expenditures always have two components: price and volume. Therefore, predictions about volume (to be found as utilization figures in the WESH-survey) can only be formulated if prices are known. If not (like in this chapter), one should abandon formulating specific predictions or expectations. These background data can, however, be used for the interpretation of the differences found in the survey.

Legislation and Regulation

All five countries that will be discussed here belong to the so-called welfare-oriented health systems. According to Roemer (1991), welfare-oriented systems cover a high proportion (sometimes up to 100%) of the population. The support program is largely limited to payment of health care expenses, while the supply side of health care remains largely in private practice. Roemer contrasts these systems to the so-called universal-comprehensive systems, where the whole

population is protected without any special requirements for eligibility or entitlement.

The following description of organization of and insurance for health care is very general and contains only the most striking issues per country. No attempt was possible, in such a brief overview, to be exhaustive. The key issues, described here are: coverage of the insurance and finance of the costs, benefits in kind (prevention, dental care, hospital care, and pharmaceuticals) and benefits in cash.

BELGIUM

Insured Population: Coverage and Financing

All of Belgium's 10 million inhabitants are compulsory insured for health care through membership of one of the 6 public sickness funds. The National Insurance Institute for Sickness and Disability (RIZIV), is responsible for administrating and monitoring health insurance fund benefits. The system also includes the 1.4 million members (about 14% of the population) who belong to the group of self-employed and their dependents. The latter group has a smaller benefit-package (only specialist and hospital care is covered). Insurance contributions are income-related. In the second quarter of 1989 the contribution rate of the salary for benefits in kind was 2.55% for the employee and 3.80% for the employer. These contributions for the employee are considerably lower than in most neighboring countries. For nearly all benefits in kind, copayment and co-insurance is required. Co-insurance differs according to the type of social position (e.g. for WIGW (widows, disabled, retired people under a certain income ceiling, and orphans) co-insurance is smaller or even non-existing). There is no co-payment for the patients in the following cases: delivery, treatment of so called "social diseases" (like tuberculosis, cancer, STD's, mental illness, polio), rehabilitation after severe illness, and where a major medical need is apparent. Besides these contributions, the state finances an additional 51% of health insurance via taxes.

Benefits in Kind

Prevention

In Belgium, all aspects of prevention and promotion belong to the authority of the communities (the Dutch-speaking Flemish community in the North, and the French-speaking community in the South). Therefore, sometimes large differences between the communities may occur. The ministries organize screening campaigns (e.g. for breast cancer), occupational health programs, maternal and child clinics, school health programs, and occupational disease detection programs. All this is entirely preventive in nature, but only the occupational disease program is covered by the federal health insurance system.

Ambulatory Medical Services

Most GPs work in single-handed practices. Specialists can be consulted without prior referral from a GP. Many specialists work both in hospitals (in-patient as well as out-patient departments) as well as in their private practice. Patients are free to choose their physician(s). Benefits consumed by the patients will be paid by them according to the patient-pays principle. Later the social sickness fund (or any other supplementary insurance the patient subscribes to) will reimburse the payment. In 1991 the insured paid a co-insurance of 25% via a user charge of BEF 95 (ECU 2.16). For WIGW-members this is 15% and a user charge of BEF 36 (ECU 0.85).

Doctors are paid by a fee-for-service system, for which the fees are agreed nationwide in negotiations between physicians' representatives, sickness funds, and the government.

Dental Care

Dental care is supplied by dentists working in private practice. Dental prophylaxis is not covered by the public health insurance system. Dentists are paid on a fee-for-service system. The fees are negotiated between dentists' representatives, the sickness funds and the government.

Hospital Care

For hospital in- as well as out-patient services, the usual patient-pays system was abolished and replaced by a so called third-party system in which the hospital is being paid directly by the sickness funds. The basis of this payment is calculated one year in advance and includes flat rates for accommodation, medical care, nursing, etc. for all patients. This is called the per diem tariff and needs to be approved by the ministry of health annually.

Drugs

The sickness funds have to comply to a positive list of drugs, which can be prescribed by physicians for reimbursement. This list is subdivided into 3 groups: A, B and C (according to therapeutical relevance). The co-insurance for the patients varies according to the category (0%, 25%, 50%). The patient-pays principle applies. The insured is then reimbursed (according to the category). Drug prices are strictly controlled.

Cash Benefits

In case of sickness there is a waiting period of 1 day. Entitlement to benefits lasts one year at a level of 60% of the average wage.

FRANCE

In France, as in Belgium, social health insurance covers almost the total population and can rightly be called 'public' insurance, while health care provision

is dominated by independent self employed practitioners acting as contractors to this public insurance system.

Insured Population: Coverage and Financing

Where in Belgium public health insurance is divided into socio-political categories (Christian Democrats, Social Democrats, Liberals) in France the major socio-professional groups are agrarians, employees, self employed teachers, railwayman etc., the biggest group being the CNAMTS (Caisse Nationale d'Assurance Maladie des Travailleurs Salariés). The employees sick fund covers 80% of all Frenchmen. Illustrative for the variations between various categories of insured are the following three examples.

- the craftsmen, traders, and farmers pay (moderately low) contributions to their own sickness funds. This group contains large proportions of elderly people, which explains why there is a growing deficit.
- the blue-collar workers, who are well insured through the social security. Their number is too small to enable them to be co-insured on the private market at a reasonable price.
- the teachers, who have secured themselves in a corporatist way, giving them a strong position and a very high degree of protection against sickness.

The salary earned is the basis for the level of the contribution. The contribution rate of 18.5% of income is paid for by the employee (5.9%) and the employer (12.6%). There are exceptions and special arrangements for certain insurance groups. Exempt from copayment are insured persons with extensive surgery, long-term hospital stay (over 30 days), pregnant women from the 6th month onwards, severely disabled persons, and treatments caused by occupational accidents.

Benefits in Kind

Prevention

There is a program for regular (every 6 months) medical check-ups (for all those persons covered by the social sickness funds up to 60 years old) paid by the government. There are programs for eradication of tuberculosis in schools, occupational health programs, school health and family planning programs.

Ambulatory Medical Services

Ambulatory medical services are offered predominantly through GPs in private practices. The insured have a free choice of doctor; the PPP principle applies; afterwards (usually 75%) is reimbursed to the patient. It is possible for a physician to charge higher fees to the patient. In these cases the doctor should have opted out of the collective tariff bargaining because of outstanding qualities or other reasons. Reimbursement does not vary accordingly - patients just pay more - they only do so, if the doctor has special qualifications or an outstanding reputation.

Dental Care

Most dental treatment is provided by self-employed dentists. It is also offered in health centers and hospitals. There is a co-insurance of 25% for dentures. Also here, like for all ambulatory care, a fee schedule exists. The PPP applies.

The Hospital Sector

The insured is free to choose between public and private hospitals approved by the social sickness funds. The patient faces a co-payment in the form of a daily fee ('*forfait hospitaller*'). Here the TPP applies. The level of co-payment and the hospital deductible vary between the various socio-professional categories. This is the case for maternity admissions, occupational injuries and diseases, for dental and eye care. The co-payment level for the patient for hospital in-patient care is higher for the privately insured than for those belonging to the public sector. Even in the public hospital sector, certain doctors have the right to reserve a proportion of their bed capacity to privately insured patients. Co-payment levels for this latter group are higher.

The better technical equipment of the public sector (paid for by the state) leads to certain anomalies. The private sector is tempted to direct patients with chronic and/or fatal diseases to the public sector, which is not entitled to refuse any admission. Instead, patients with short stays and minor illnesses will be admitted to private hospitals.

Psychiatric care has its own network of care with special hospitals and personnel. However, the mental health sector is getting involved more and more in a competition struggle with other sectors of health care. This competition revolves around the so called '*petits mentaux*', patients with minor psychosocial problems. Also belonging to this category are the many individuals who cannot support themselves and their families, have no job and are financially dependent on welfare.

Pharmaceuticals

As a rule, only drugs on the positive list of pharmaceuticals qualify for reimbursement. Both the PPP and the TPP apply. For the so called essential drugs, there is no co-insurance of the patient. Prices for drugs are strictly controlled by the government; utilization, however, is extremely high in France - which causes - in spite of the price restrictions - high expenditures for drugs and pharmaceuticals.

Cash Benefits

In the event of sickness, a waiting period of 3 days applies before cash benefits are applicable. Entitlement lasts for 12 months over 3 years, or up to 36 months for long-term illnesses. The level of benefit is 50% of the normal salary; in some cases (e.g. children) the insured receive two-thirds of their normal wage from day 31 onwards.

GERMANY

Insured Population: Coverage and Financing

About 75% of Germany's population is compulsory insured through one of the social sickness funds (*Gesetzliche Krankenversicherung GKV* - legal health insurance). Additionally, there are people who have taken a voluntary insurance with the social sickness funds. The total coverage amounts to 90% organized in more than 1.100 separate units. Those who are compulsory insured through the GKV earn a salary below a certain threshold, presently (1994) at a gross of 4.800,- DM per month. The others are covered by a diversity of insurance arrangements, one of which is the private insurance sector. It is possible to subscribe to a complementary private health insurance covering optional benefits, like a two-bed room in hospitals, a private doctor, etc.

Insurance contributions for compulsory health insurance are mainly income-related. They are usually shared 50/50 by employer and employee (varying by district between 8% and 16%, with 12.9% average). Premiums vary also by socio-professional group. The subdivision differs from France in this respect that blue collars workers and white collars workers have separate health insurance funds; the latter (having a wealthier and healthier membership) charging higher premiums than the former. This was not a real problem when membership was determined by one's social position. Since, however, competition is allowed between these different funds, there is a considerable drain from 'goodrisks' (the young and healthy) to these cheaper funds creating a vicious circle - that might be fatal for the blue collar funds such as the AOK in very short time.

The country is divided in 19 *Länder*, which have a great deal of autonomy in matters of health. The federal government promulgates standards for designated health functions, such as the operation of maternal and child health centers, school health programs, regulation of the medical and allied professions, pharmaceutical and food regulation, and consumer protection. Also, at this central level, social insurance, medical care under sickness insurance, hospitals, rehabilitation, and occupational health are regulated. Overall, the German health system, its policy and finance is a corporate system where the government has a certain overseeing and legislating function. Decisions are taken by a joint agreement of physicians, hospitals, insurance funds and patient representatives.

Benefits in Kind

It is noteworthy that there are no existing co-payment restrictions on access to medical care (there is only a small co-payment for prescribed drugs, and for 14 days per year in case of hospitalization). Nor is there any deductible, such as commercial health insurance carriers have often considered essential for controlling costs.

Prevention

Prevention activities cover screening (annual cancer screening tests), regular check-ups for so called diseases of civilization, vaccination, maternity care check-ups, school education and health promotions by the sickness funds. Several voluntary health agencies are subsidized by government to conduct programs in health education.

Ambulatory Care

Patients have a free choice of doctor. GKV-insured patients have a photo-ID which gives them access to doctors without restrictions. There is no co-insurance for them. Within the GKV, doctors are bound by a mutually agreed upon fee system. There is a difference in remuneration for doctors depending on a patient's membership in public or private health insurance funds. Private patients are subject to a patient-pays-system. Reimbursement is settled later between patient and insurance. Out-patient medical care is usually provided by self-employed physicians in private practice. Almost half of them (42%) are GPs, the rest are specialists.

Dental Care

Prophylactic examinations, fillings and extractions are provided without co-insurance. Dentures are usually reimbursed 50% by the sickness fund. Settlement is done in the same way as for doctors.

Hospital care

Basically, hospitals are staffed by full-time salaried specialists, whose work is entirely devoted to in-patients. German hospitals have no out-patient departments, since ambulatory care is the prerogative of community doctors, GP's as well as specialists. For hospital care the sickness funds make payments directly to the hospital on a per diem basis; these per diem amounts are negotiated between hospitals and a federation of the sickness funds, and subjected to the approval of the Länder. Patients are free to choose any hospital.

Cash Benefits

In case of sickness, regular pay is continued by the employer for 6 weeks in full and at 80% for 1.5 (3) years thereafter by the sickness funds.

The *Kur*, a German Specialty

Funded by contributions to the social security system, the *Kur* is a means of rehabilitation or prevention that patients (upon recommendation of their doctor and after approval by public health officials) can benefit every 3 years for 4 weeks. Originating from vacations and taking the waters by German nobility the *Kur* has by now become commonplace with some 5% of adults going per year. It should be noted that the *Kur* is financed outside the regular sickness funds by the social security system and by private contributions. It is typically provided to restore or

maintain the capability to work. Yet, often pensioners will take it instead of a regular vacation.

THE NETHERLANDS

Insured Population: Coverage and Financing

The Dutch population (approximately 15 million) is insured against costs of illness by three types of insurance: two forms of public health insurance and one private. The first public health insurance (AWBZ - General Exceptional Medical Expenses Act) is valid for all inhabitants and was originally (1968) intended as a catastrophic illness legislation covering exceptional and 'non-insurable' medical risks, like a life-long stay in an institution for mentally retarded. It covered in some cases institutional stay over 1 year (c.q. in psychiatric institutions) and in other cases right from the start (nursing homes, homes for mentally retarded, etc.). The rather well developed nursing home sectors in the Dutch health care (see paragraph 2.3) is directly related to this legislation.

Gradually all sorts of services intended for 'non-catastrophical' events of illness were included in this public health insurance legislation.

Home nursing was brought under this regulation in 1980, ambulatory mental health care in 1982, all mental health care in 1989 and in 1992, even all costs of prescriptions. The AWBZ was supposed to play a major role in health reforms in the Netherlands.

Additional to this basic coverage - especially for long term care - costs of illness insurance consist of a public and mandatory insurance for wage-earners, pensioners, unemployed with wages below a certain ceiling (NLG 56.650, Ecu 26.722, in 1993). This regards 62% of the population. The other part is as a rule privately insured against costs of illness (there is 1% not insured, mostly in the strictly religious groups). Insurance benefits in the public sector are *third party pays*; in private health insurance hospital bills are usually paid directly by the insurance companies, for the other costs patients send bills to the insurance company and get refunds depending on the condition of their insurance policy (deductibles can vary from zero to thousands of guilders). Public health insurance is funded by premiums paid by employers 5,05% and employees 1,3% of income in 1993. The insurance for long term care (AWBZ) is paid by the employees.

Table 2.18: Health Care Funding in 1991

Public health insurance (AWBZ)	24.3%
Public health insurance sick funds	39.1%
Private health insurance	17.3%
Copayments and employers contribution	11.1%
General taxation	8.2%

(Source: Schneider et al. 1992)

Benefits in Kind

Prevention

Well baby care is generally provided by the National Home Care Association (vaccination program), school health care and screening programs by the Public Health Authorities that cover clusters of municipalities.

Ambulatory Care

Patients have to register with a GP and are supposed to stay with that GP, unless the relationship is seriously damaged. A Dutch GP has an average of 2.350 registered patients (1992). GPs provide first-line care in their private practice, while specialist care is being provided almost exclusively through hospital in- and outpatient departments of hospitals. A GP referral card is always required before consulting a specialist. There is no copayment for patients for ambulatory care in the public insurance. For private patients this depends on the conditions of the insurance policy.

GPs are paid by a capitation fee, whereas specialists are paid mainly by a fee-for-service system based on number of cases. This is the situation for the patients insured through the social sickness fund. For privately insured patients, GPs and specialists are paid on a fee for service. They bill their patients for consultations and visits. The patient-pays-principle applies to private patients; the others are under a third-party payment scheme.

Dental Care

The social sickness fund provides 6-monthly dental checks for young people. If insured patients see the dentist every 6-months, they receive a bonus for every incidental surgical treatment: no coinsurance, no copayment applies in this case. Dentists are paid by fee-for-service. The insured pays his coinsurance to the dentist, the rest is refunded to the dentist by the third-party-principle. For private patients, dental care is an (expensive) option in their policy, so it is often not included in the benefits. Consequently, they pay their own dental bills.

Hospital Care

Hospital care is provided primarily by private non-profit-making hospitals. For hospital care the patient pays no co-insurance.

Drugs

There is no copayment for drugs. There is a negative list of drugs for which there is no insurance coverage. Like in Germany for each group of therapeutically comparative drugs, refunds are limited to the price of a selected number of drugs. This selection is based on a cost/effectiveness analysis.

Cash Benefits

The insured receive a continued payment of salary for 6 weeks. A person must be unable to work in order to receive cash benefits. The waiting period is 2 days; the duration is 12 months: the level is 70% of the normal wage. Most collective

bargaining outcomes between employees and unions provide 100% income maintenance for the first year. After that period the Disability Act is valid, regardless of the kind of illness or injury (whether it is specially work related or not at all. A complex scheme of cash benefits (depending on age, degree of disability, duration of employment) guarantees some income maintenance which can last until the age of 65.

SPAIN

Insured Population: Coverage and Financing

Since 1986 Spain has progressed towards the installation of a National Health System (NHS) which, by now, covers all 40 million inhabitants. About 96% of the population are currently compulsory insured under this scheme. Exceptions are most civil servants, who are under private health insurance. The National Health Service provides services in different areas of health care: out-patient treatment, hospital treatment, provision of drugs, ambulance. All this is delivered in their own establishments or via a contract system in private practices and non-profit hospitals.

In case of illness, the state social security body (INSS) is responsible for cash benefits. Contributions are paid as a percentage of the income, shared between the employer and the employee (1.4%). Co-payments are requested for drugs, dentures, and medical aids and appliances.

The state is taking on a gradually increasing share of the funding of the National Health Service.

Benefits in Kind

Prevention

A number of preventive measures has been taken, most of them governed by ministerial orders. Examples are the health card for pregnant women, routine newborn screening on impairments, the national child vaccination plan, safety programs at work, and road safety prevention programs.

Ambulatory Medical Services

These are mainly provided through NHS *consultarios* or *ambulatorios*, with a minimum staff of one GP, one nurse and one paediatrician. These facilities are primary health care provisions. Everybody who is insured receives a family insurance card, giving access to the NHS facilities. Members have to register with a GP and can only change their doctor under special circumstances. Referrals to specialists have to be made by a GP or a paediatrician, except in emergency cases. There is no user charge, nor a co-payment for out-patient medical services. Specialists work in their own private practice, as well as in hospital out-patient clinics.

Most payments are done via the third-party-payment system and settled directly between providers and the NHS. Physicians outside the NHS are paid on a fee-for-service basis.

Dental Care

Dental care is mainly provided in private practices according to the patient-pays principle. Reimbursement is done partly through the civil servants insurance, or through private co-insurance (e.g. in large companies). The dental care provided by NHS only covers extractions, all other treatments are on the account of the patient.

Hospital Care

Hospital care requires a referral, and often a waiting period. The NHS has its own network of in-patient facilities, working on a third-party-payment principle. There is no user charge for hospital care if the patient uses the NHS facilities. The use of all other facilities is not refunded by the insurance scheme (except for emergencies). The NHS has 147 hospitals (66.000 beds): this is about half of all public hospitals, and one third of total bed capacity. Financing of NHS hospitals is done by local health authorities. Physicians working in hospitals usually have a fixed salary and certain fringe benefits.

Drugs

There is a positive list with all pharmaceutical products refunded by the NHS. Decisions about the list are being taken on the basis of cost-effectiveness. The third-party-principle applies for drugs. For some drugs or patient categories there is no co-payment, like e.g. for pensioners, people with a reduced ability to work, drugs dispensed in the hospitals run by the NHS. If there is a co-payment, it is at an average of 40%, which the patient pays to the pharmacist directly.

Cash Benefits

Anyone unable to work because of illness or accident is classified as temporarily disabled (initially for a 12-months period) and receives sickness benefits (starting at the 4th day of illness). The level of such benefit is at 60% of the reference wage (between day 4 and 20) and 75% (from day 21 onwards).

Conclusion for Legislation and Regulation

Among all five countries belonging to the WESH-study, only Spain has a mixed system of a National Health Service combined with a social insurance. Both subsystems operate more or less independently and parallel to each other. The other four countries have a social security based health insurance; the state only intervenes as a privileged partner in the supply, financing or regulation of the system. The German and the Dutch system have much in common, which is no surprise as the Dutch public health insurance was established in 1941 under

German occupation. The typical Bismarckian elements (premium based - shared by employers/employees - compulsory for lower incomes and free choice for the higher incomes) were attractive at the time and persisted over more than half a century in the Netherlands and more than a century in Germany. The Belgian health care system had greatly been inspired by the French, although the division of the public insurance bodies along socio-political lines is typical for Belgium.

Choice of Facilities

As far as the choice of physician is concerned, Belgians, French and Germans have no restrictions for selecting GPs or specialists, while the choice for both is limited in Spain and that of a specialist in the Netherlands. A Dutch patient needs a referral voucher from his/her family physician before being allowed to see a specialist. In general, the choice of hospitals is free within some limits for the Dutch, in the other four countries the choice is completely free. Only in the Netherlands and in Spain there is no co-insurance for hospital care. The Dutch are also the only ones who have at present (they used to have it, but abolished it) no co-payment for drugs. In the other countries co-payment is sometimes up to 60%. Here, the PPP applies to Belgium and France, in the other countries the TPP is common; France uses both payment systems.

Ambulatory Care

For the payment of ambulatory care (physician consultations), the PPP (patient pays principle) is common in Belgium and in France. Afterwards the patient is being reimbursed (partly) by their sick fund. The TPP (third party principle) is used in France (in addition to the PPP), in the Netherlands, Germany and Spain. For dental care the PPP applies to Belgium and France. In Germany, the Netherlands and Spain the TPP is common. Co-insurance levels are sometimes quite high for dental treatment and for dentures, ranging from 25% in Belgium to up to even 100% in France, the Netherlands and Spain. This will inevitably restrict the number of contacts between the public and the dentist in these countries. The expectation is then that fewer respondents have seen a dentist in France, the Netherlands and Spain, than in Belgium or Germany. This latter expectation applies in the first place to dentures; there is no coinsurance in Spain, Germany and the Netherlands. In France and Belgium it is 25%.

Dental care

There is some variation for dental care, where only the Dutch have free access, while the other three countries require variant contributions and the Spanish are on their own.

Type of Benefits

All countries cover the risk of health care (health benefits, such as in-patient admissions, out-patient consultations, pharmaceuticals, etc.) as well as the loss of work (cash benefits) sometimes via separate legislation and organization. Coverage is reaching variable degrees from country to country, and may also vary between various categories of beneficiaries.

The duration of sickness benefits is one year in Belgium, France, the Netherlands and Spain (sometimes 1,5 years). In Germany the duration is between 1.5 and 3 years. Benefit levels are around 60-70%, with one outlier: Germany (100% for six weeks and then 80%). Disability payments are in all countries, except the Netherlands, different (that is: more generous) for work related injuries or illnesses that for the rest. In the Netherlands there is no debate whether the employee's asthma is caused by his boss or his cat.

General Conclusions

The most striking impression is the convergence of vital statistics in the five countries. In 1960, only a generation ago, there were considerable differences in birth rates, death rates, infant mortality and life expectancy between the five countries.

Differences narrowed so far that it is doubtful whether one can attach any conclusions to today's differences in infant mortality or life expectancy. The only parameter that still differs in the domain of health status measurement is the cause of death: Germans dying for almost 50% of cardiovascular diseases, the French for only a third. The parameters that were used are perhaps too crude for comparison. New parameters like life expectancy without disability might yield more insight - but - these are not yet routinely collected data.

With regard to the supply of health care facilities: differences between the countries are more pronounced both in regulation (direct access to specialists or GPs as 'gate keeper') and in actual supply (Belgium having four to five times more GPs per 1000 persons than its neighbor Holland). We expect more contacts with the health services where supply is ample and there are no limitations of access (and - but that is another topic - where there are no financial barriers to utilize a specific type of services).

France and Germany show an ample supply of acute hospital beds. In Germany this feature is countered by a large supply of ambulatory specialists, in France it is not (to that extent), in the Netherlands long term hospital beds are abundant. Roemer's Law (a bed built is a bed filled) predicts higher admission rates and bed-days per head in case of higher supply. France is the most (acute) hospital dominated country; in the Netherlands long term care is predominant, while in Belgium the supply of ambulatory care is the most striking feature.

Regarding health care financing and regulation, most countries have almost universal coverage, dental care being the exception in Spain (and advanced dental care in most public health insurance systems), while Germany, France, Belgium and Spain have only limited facilities for long term institutional care or home nursing (this observation is valid for 1990).

The influence of copayments is difficult to assess in advance; where they are applied, there are many countermeasures to avoid adverse effects, like additional insurance and expenditure caps especially for vulnerable groups in society. It is not a bold statement, if one intends to predict that we expect no effect of these copayments because of all the additional measures. Some countries (the Netherlands and Germany) have a private health insurance in addition to the public health insurance. In this case too, effects are difficult to predict in a general sense, because any insurance effect is blurred by the SES-effect (the most wealthy and healthy part of the population has private insurance). Besides, there is such a variety of insurance policies with different levels of deductibles and exclusions that one only can say that generally - and for what ever reason - privately insured patients will consume less services than publicly insured patients.

We expect the most pronounced features, expressed in those statistical parameters, to be found back in general descriptions derived from the WESH-survey, in the self reported parts, values and attitudes of this population in the five countries. The next chapters will show whether these expectations are correct.

Chapter 3:
WESH - Method, Fieldwork, and Selected Indicators of the Study

Introduction

Assuming the continuation of stratified modern society as a matter of reality or functional necessity on one hand and the increased emergence of individual rights and personal integrity as features of modern society on the other has resulted in the emergence of institutional arrangements. De Swaan has described this as typical for health care, education and welfare in Europe and the USA (1988). One could have added the system of law as another institutional arrangement to provide integration and identity for a system and solidarity for and among its members.

If health care responds to such system constraints, then one would not expect major disadvantages in care and subsequent expressions of political concerns towards the health system along lines of social class. Of course, there is Wilensky's contention (1974), that the better educated, in a process of social control, serve as critics in the system. Education would not be a matter of material resources, rather it would relate to increased expectations towards and critique of the system. In terms of behaviors, one would expect the individual to express her/himself in differential forms of lifestyle which may show some form of class-relatedness (Taylor and Ford 1981). Actually, the latter is not expected unless there are basic resources. Any emergent hierarchy in lifestyle may emerge regardless of traditional patterns of social stratification, that may well contribute to one's status. It will definitely be of relevance to an individual's health. It may be determined by variances of culture as well.

Model

The model underlying our analysis addresses the system level. Yet it depends, outside of the aggregate data in Chapter 2, on global descriptions based on responses and characteristics of individuals. This is no minor issue. Indeed, in terms of theory there have been large debates about individual vs. society, macro vs. micro or system vs. person. There are opinions that behavioral theories cannot be derived from systems; rather, methodological individualists claim that social

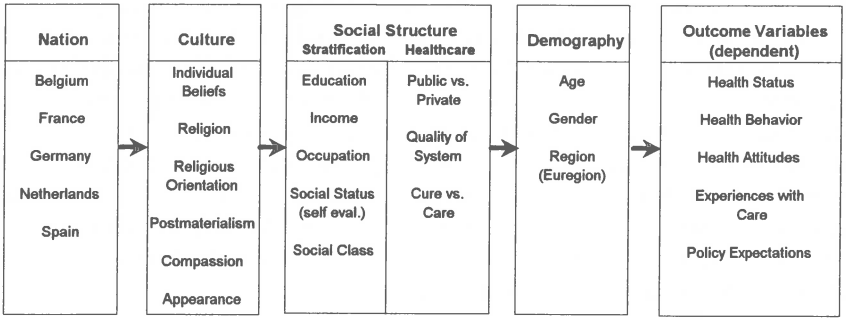
theories are strictly the result of persons, their attitudes and behavior (Esser 1994). Of course, system or structural theorists using a different concept of theory will claim with Parsons that their concern for a conceptual outlay of norms and the social units of a given system holds just as well.

We shall take no sides in this open dispute; rather, we want to stress that both points of view are quite relevant in the analysis of health behavior and health systems. Dealing at one level with individual acts and motives, and on the other with such notions as nation and culture requires us to address both levels, even if the data are mainly social characteristics and responses of individuals. Yet, the structure of nations within the EU, as well as policies on health, are, in the end, the very if only latent topic of this book. To disregard the system level and address only behavioral regularities that are at best rational choice in character would undermine the policy relevance of such research.

Overall the project deals with a block of dependent variables addressing health behavior, health status of individuals and their experiences in and attitudes toward health care systems. Broadly speaking these variables will answer to questions like: What is the health status of people in the five countries? What is their experience with health care? What policies do they favor in health care and its organization? What health related and other behavior do they display?

This set of four areas of dependent variables will then be analyzed and explained in terms of four sets of independent variables that are listed in Figure 3.1.

Figure 3.1: Model for WESH-Analysis



It should be understood that either one of these blocks can be analyzed separately in their impact on health or health policy, for that matter. They can also interdependently be analyzed due to their differential impact with an implicit understanding in this model that this impact reaches from the most general (nation) to the most specific individual level of gender and age.

Selection of Variables

WESH was at once conceived of as having to stress the problem of European integration and health policy. After all, the Schengen Agreement had just raised and suggested before the initiation of the project a glorious and unified future for West Europe. Unlike the American-German project it implied immediate policy suggestions since all systems are related and are reference systems to one another. What one country does is of immediate and high interest to the others. The recent and now almost defunct health care policy initiated by President Clinton does not refer to European systems. For WESH and the EU the situation is different: There may be no discussions, there may be little sensitivity for national and joint health systems in Europe among the population, but health care is still highly relevant for joint and complementary health policy. What the Dutch do is closely observed in Germany. What the French enact gets immediate attention in Belgium. Thus, a substantial part for matters of health policy was introduced in the design of the project.

The other three areas pertained to health conduct, i.e. the behavior and attitudes relevant for health, to the people's health status and to experiences with health care. As suggested above, these areas of dependent variables were exposed to the groups of independent, explanatory variables mentioned before.

Some of the variables were introduced as single items, such as age, gender, education, religion, nationality. Others were the result of multiple indicators the validity and reliability of which were tested by respective factor analyses and Cronbach's alpha. Compassion was the result of a theoretical design that predicted a three-fold index, while after careful testing only two factors emerged. Only one of those two factors (compassion) is being used, while the other (egocentrism) turned out to be a poor predictor in substantive analyses.

Postmaterialism is an index introduced in many comparative analyses, developed and often tested out by Ronald Inglehart (1982), of which the so-called short version was used in WESH.

The list of dependent variables in a similar fashion introduced also individual as well as multiple indicators. As for the latter, a modified version of the Langner-Scale was introduced to indicate psychological distress, and a modified Health-Locus-of-Control (HLC) index after Wallston and Wallston (1976) was used to measure direction of internal and external control of health behavior. With the latter, we had interesting and viable results, as the index produced not two, but three dimensions self-direction, doctor's-control and control by fate. The index for Food-Habits turned out to measure best by using the regularity of eating breakfast and fruit/raw vegetables. Risk-behavior such as smoking and drinking of alcohol was fairly difficult to measure with regard to the latter, indicating similar experiences in other alcohol studies. We finally used number of glasses of alcoholic drinks and grouped the excessive drinkers together. Yet, a three-point-

scale for non-smokers, occasional smokers and regular smokers seemed to measure the variable smoking just fine.

Developing the Interview Schedule

The selected variables were transferred to an interview schedule that followed certain procedures of questionnaire design and the requirements of telephone interviewing, as the project was to be conducted as a telephone-survey. As for the latter, there are very few procedures that through sufficient precaution and technicality can not be used via telephone interviewing that previously did become standard in personal interviews. There are a few exceptions: Long lists, so typical for personal interviewing, can not be conveyed over the telephone; it is, however, quite possible to introduce a list via telephone as long as it does not extend a certain limit, when mutual discrimination of items is required.

As a case in point, in the measurement of postmaterialism vs. materialism (Inglehart 1982) four items were read first to the interviewee, namely:

(1) *Retaining order in the nation*
(2) *Increased participation of the people in governmental decisionmaking*
(3) *Fight against increased prizes*
(4) *Protection of freedom of speech*

The question was introduced by stating: "*Today there is much talk about the future in this society. Which of the following four goals is the most important for you?*" The four items were then read again. After the option for the most important item the least important was identified to be followed by a repetition of the two remaining and which of the two would be more important. The procedure at first sight looks rather complicated. It is true, the interviewer has to be well trained to handle this and other comparable questions, but the procedure is rather easy for the interviewee and rarely requires much time. Indeed, the procedure seems to speed up interviewing at this point. In the later analysis a seven-point-scale was developed that ranked postmaterialism as 7 and materialism as 1, with 4 being the neutral point.

Variables are either single items such as age (in years), gender (female), education (in years of schooling), nationality. Others are the result of multiple indicators; of these some are composed from present results, others were borrowed as valid and reliable measures from other sources. The figure below lists a selected set of variables grouped in blocks as outlined above. The behavioral items are introduced in a descriptive analysis in Chapter 4.

The questionnaire was designed for a total of 35-40 minutes. It is a commonly held belief that telephone interviews have to be short. All indications and experiences are that this is not the case (Frey, Kunz, Lüschen 1990). It is, however, true that in the same amount of time as in personal interviews more

questions can be asked and will be answered. As for methodological items like non-responses, telephone-interviewing is hardly different from personal or written interviews. A typical test for what appears to be possible via telephone interviewing is contact with older people. Outside of illness and frailty, there is no indication from respective studies that older people have different rates from the population in general. Refusals over the telephone are no higher than those by personal interview, while written interviews give no valid results in that respect.

Beyond many other items of a comparable nature, telephone interviews, as one would expect, are cheaper than personal interviews. However, they are not that cheap as close controls of the interviewing and selection process require dedicated personnel. Overall, in terms of reliability telephone interviewing has probably more advantages than disadvantages over other methods of data-collection; that holds in particular for reliability and the control of the process of data collection.

The text of the interview schedule, popularly called the questionnaire, was the result of variables introduced, questions and indices composed, tested, plus their assemblage into a coherent whole that turned out to be interesting for the interviewee and was supposed to hold his/her attention for a rather long time. Logical as well as psychological considerations went into the final sequence of questions.

Of course, even after careful consideration and exploratory testing with various questions, plus the extensive borrowing from other studies and other test-questions for an international, comparative project, there was the problem of translation and further testing. To meet the great challenge of producing an equivalent measurement-instrument a number of standard tests had been introduced that had been used before across nations with different languages, such as the Postmaterialism-Scale by Inglehart. For the rest, very careful translation occurred by native speakers of the language to which the interview schedule had to be translated. As the model was a German master questionnaire with an English version, the translation was conducted by native speakers of Dutch, French, Spanish who were lecturers at the Technical University of Aachen. These translations were then further checked and (where needed) re-translated again, only to be exposed to another pre-test. Thereafter, in a joint conference, the final version of the interview schedule to be used in the five countries was approved. It should also be mentioned that beyond the translators listed above, in Germany and the Netherlands there were a total of four speakers on the national teams who were native in an adjacent language and were practically bi-lingual. Consequently, problems in the so-called equivalence of meaning were cut to a minimum, and the non-equivalence of structure across nations is of course the very subject of this study.

In the long ranging debate of comparative research, it is at times being said that there are three problems of equivalence, - that of meaning, structure and function. This formal listing does rarely indicate what basic problems are suggested. As stated above the degree of structural equivalence is of utmost concern: It harbors the question are hospitals and patterns of treatment the same across nations? Or are

they perhaps structurally non-equivalent, yet provide the same functions? In health care what the groups of doctors and nurses provide for outside patients on ambulatory care of a hospital or a policlinic may in another country be delivered via a stay of several days in the hospital. The result (or function for that matter) may be exactly the same.

Drawing the Sample

Whatever discussions may have lead in the past, whatever is still practiced for reasons of cost-containment, random-sampling is the only viable method of survey research. It was followed in all five countries, although as previously indicated above, not all samples are large in terms of numbers and regional extension. However, it is entirely possible in cross-national research to work with smaller samples and, for specific global features, such as the organization of the health-care system, produce valid and reliable results. Overall, however, because of sample-design and size this project makes no other claim but being exploratory.

In the five countries the following areas were included:

(1) Belgium. Eastern Flanders and the Province of Liège
(2) France. Northern Lorraine
(3) Germany. State of Northrhine-Westphalia
(4) Netherlands. Total country.
(5) Spain. Total country

Within these areas such as in Belgium, France, Germany lists of telephones were being used and then telephone-households were selected by random numbers. At Utrecht in the Netherlands random-digit-dialing was used for all of the Netherlands with the exception of the Province of Limburg; there the team at Maastricht conducted the field work via lists of phone-numbers as it was done elsewhere.

Typically, like in Germany, the random selection first identified a page-number in a set of phone-books, selected at random a field on such page which had been cut in half and then was made out of 10 fields (1-10). Within that field a column of up to 60 numbers generated via a random number the respective household to be called up to ten times. Within such household at times more than one member was in the respective age-group of 18 years and older. Of the many methods to deal with that problem of randomness the so-called last-birthday-method was used. This meant, that a person 18 and older who in the respective household was the last to celebrate her/his birthday was the randomly selected respondent (O'Rourke and Blair 1983).

The sample in Belgium, Germany and the Netherlands was stratified in such a way as to generate enough cases of respondents for a separate analysis in the so-called Euregion (Provinces of Liège, Belgian and Dutch Limburg and the former

District of Aachen). This area in public pronouncements, cultural and political exchanges has since more than a decade tried to demonstrate a unified Europe. The City of Aachen established early after the 2nd World War the Karls-Preis, an international award for politicians and notables that had fostered European unification and beyond. For health-care in particular it posed an interesting and challenging question to find out whether in that area there was exchange of medical services across national borders. One should also observe that Aachen built a major clinic a decade ago with officials expressing the hope, in a call to legitimize an enormous financial investment, that this clinic would become available for all those seeking high-powered help across national borders. As it happened, the Dutch in Heerlen and the Belgians in Liège soon built their own clinics to match the challenge by Aachen. Thus, the hope for across-border medical treatment at this occasion came to no avail.

In terms of the technicalities of the Euregion-sample, the Belgian field work generated enough cases for the region, while the Dutch and German in sample-selection was doubled for the Euregion. This intended balance was not corrected in later analyses as the type and amount of stratification and other demographic data appeared to have no influence for crucial sample characteristics and in a number of test-analyses did not generate different results.

Conducting the Field Work

In terms of time the field work was conducted in the Summer to Fall of 1990 and in the Spring of 1991. Slight differences in terms of season, i.e. in between Germany (starting in 1990) and Spain (starting in 1991) as the first and last to conduct the field work, should have no influence on the results. Interviewers in Belgium, France, Germany and the Netherlands were advanced students of sociology or psychology. They were extensively trained for conducting the telephone-interviews, among others by mock-play of expected answers and evasions. They were given a differentiated list of potential challenges that might come up in the interviewing process. At Utrecht/Netherlands experienced employees of NIVEL conducted the interviews, whereas in Spain a commercial survey firm at Madrid handled the field work.

Table 3.1 lists the results of the field work via telephone interviewing for the five countries. It lists as well the so-called gross sample, i.e. all numbers that were drawn, as well as the net sample which contains only those cases that are known to be part of the unit of analysis.

Table 3.1 discloses in the total response rate results that are typical for survey research. The same can be said for refusal rates. However, there are also differences in between nations. Fairly easily explained are differences for gross vs. net sample and the rates for other losses. These neutral losses pertain to numbers that were not households but businesses, were no numbers at all in random-digit-

dialing or had any number of technical problems that were neutral as far as the selection of the sample was concerned. The category "other losses" pertains to prolonged absences, to language difficulties or, as was the case in Germany, to the fact that the time schedule did no longer allow to call a specific number of phone-numbers that had already been selected. For all practical purposes "other losses" are in part neutral for the sample, in part they pertain to special groups such as foreign labor or to persons in institutions.

Table 3.1: Gross Sample, Net Sample and Different Rates of Field Work in WESH (Summer 1990 to Spring 1991)

	BE	FR	GE	NE	SP	Total
Gross Sample	1007	305	1.155	1.671	1.766	5.904
Neutral Losses	211	55	108	308	912	1.594
Net Sample	796	250	1.047	1.363	854	4.310
Completed	380	156	686	666	351	2.239
Response Rate in %	47.7	62.4	65.5	48.9	41.1	51.9
Refusals	362	78	235	623	366	1.664
Refusal Rate in %	45.5	31.2	22.4	45.7	42.9	38.6
Other Losses	54	16	126	74	137	407
Other Rate in %	6.8	6.4	12.0	5.4	16.0	9.4
Total n	380	156	686	666	351	2.239

The differential response rates are a composition of a number of facts. First of all, they may be the result of differential attitudes toward survey research; this seems in part to explain the comparatively higher number for the Netherlands. In Belgium the rather high rate is the result of interviews being conducted from across the border, where the University of Limburg in Maastricht employed native speakers of French to conduct the project in the Province of Liège. Proper training of interviewers can help a lot to reduce refusals and there are, of course, considerable technical problems in establishing a connection and be in a clear position to decide whether there is a household or not under a given phone-number. The principle of randomness and the equality of chance are not being violated by the latter, when a number is being found invalid.

A Check on the Quality of the Samples

Beyond a careful observation for principles of method as indicated above, in order to secure confidence in a given sample of people, there are general statistics describing in selected terms the composition and structure of the population. The best and most common statistics pertain to age and sex. As Table 3.2 shows there is according to age a tendency to have younger people more represented than is

their share in the total population, while people of 65 and older are represented less. The differences are not startling, but they are particularly pronounced for Belgium.

Table 3.2: Age Distribution of Population in the Nations of WESH and for the Total Population in Five European Nations

	18-44		45-64		65 +	
in %	WESH	Pop.	WESH	Pop.	WESH	Pop.
Belgium	64.6	56.5	27.7	29.2	7.7	18.8
France	56.8	53.6	28.4	27.9	14.8	18.5
Germany	52.1	49.4	33.2	31.8	14.6	18.8
Netherlands	63.4	56.5	24.1	26.5	12.5	17.0
Spain	57.0	53.8	31.3	28.9	11.7	17.3
Total	58.7	52.1	28.9	29.4	12.4	18.5

For Belgium the sample in Flanders was limited to persons up to 65 years of age. In the other sub-samples it can be expected that in a few cases of the oldest they were either living in institutions or were too sick to be interviewed.

Table 3.3: Distribution by Sex of Respondents in WESH and for the Total Population in Five European Nations

	Male		Female	
in %	WESH	Pop.	WESH	Pop.
Belgium	46.3	48.9	51.1	53.7
France	37.2	48.7	62.8	51.3
Germany	49.4	48.2	50.6	51.8
Netherlands	44.7	49.4	55.3	50.8
Spain	47.9	49.1	52.9	50.9
Total	46.4	48.7	53.6	51.3

In Table 3.3, which shows the distribution according to gender, the majority of rates appear to be within ranges of probability and sampling errors, except that the differences for the Netherlands and in particular for France are too high. As for the latter, a combination of influences may have caused this deviation. The majority of interviews were conducted by female assistants and mainly during the daytime. Moreover, the area of Lorraine has potentially a higher migration rate for males. In the case of the Netherlands, interviewing was mainly conducted out of Utrecht during daytime and thus resulted in a higher participation of female respondents. Overall, the distortions are not major; for the total sample they are not so strong as to have a major influence on the results. Moreover, respective controls for age and gender are later on included as a routine in the analysis.

Overall, it has to be reiterated that this study is exploratory and can at best for the State of Northrhine-Westphalia and to the same degree for the Netherlands

claim representativeness. Yet, that was not the intention to begin with as structural interdependencies were supposed to be followed through plus an insight on policy and organizational impacts on health care. That, however, can also be inferred from samples with low numbers and from samples like the French that are somewhat distorted without an expected impact on health policy and health care organization.

A List of Key Variables and their Definitions in Five Nations

A list in the Appendix shows all variables that will appear in the following analysis, including their definition and technical or variable-name. By convention the latter is expressed by a total of no more than 8 symbols. Their listing is intended to familiarize the reader with procedures of method as well as substance.

The list of variables with means and standard deviations found in Table 3.5 contains basic information on such demographic items like age and gender. After all, these are important descriptors of the respective national populations, they are also important variables in matters of health under any circumstance.

A second set of variables pertains to matters of social stratification. As was indicated above, stratification in terms of health and welfare is crucial for equity and a key area of social evaluation in modern society and its welfare system. The variables listed are four. Two of them refer to the individual, i.e. years of education completed and one's self-evaluation of social status on a scale of 1 to 10. Two of the stratification variables measure status via family or household status. These pertain to the highest occupational status in a given household; that position must not be occupied by a given person but may refer to the head of household. The other one refers to total family income which according to respective experiences is a better indicator of status than an individual's income alone. For the latter this may be rather low, or it may be none, if a person is still a student. Yet, such person may still have considerable material resources at hand in his/her household or family. Occupational status was measured by the Treiman-Scale which identifies a beggar with a score of 8, while the Federal President would score 92 with the rest of occupations ranked in between (Treiman 1977). Family income was measured as total annual income in Ecu; at the time of the fieldwork it was roughly equivalent to the US-Dollar.

A third set of variables is composed of four variables/indicators that are supposed to measure value or cultural orientation. These include the degree from 1 to 5 in the strength of one's religious orientation within a given faith. The three others are composite indicators that like the Inglehart-Scale contains a standard validated scale of social and international research (Inglehart 1977), while the two others were specifically developed for the purpose of this or a foregoing research project. Physical Appearance indicates the degree of value one assigns to show good appearance, having good posture, a healthy reflection, being attractive to the

other sex, fixing oneself up so that one likes oneself. Scales rank 1 to 5 and were checked for consistency through alpha and generated an Eigenvalue of 2.5 in factor-analysis.

The index for compassion (COMPASSN) resulted from a high alpha consistency and an Eigenvalue of 3.0 generated from the following question and statements:

"I would now like to read you some statements that you in your life may have experienced to be important or unimportant. Please, tell me whether they are very important, important for you or whether they are unimportant or very unimportant for you. How important is it for you (1) to engage oneself for environmental problems... (10) to live as consciously as possible?" (for detail see Table 3.4).

Table 3.4: Eigenvalues, Communalities and Factor Loadings for Indices COMPASSN and EGOCENT

		Factor 1 (COMPASSN)	Factor 2 (EGOCENT)
Eigenvalue		3.02	1.10
Perc. of Explained Variance		30.2%	11.0%
	Commu-nality	Factor Loadings	
(1) to engage for environmental problems	.394	.603	-.174
(2) to enjoy life	.264	.389	.336
(3) to fulfill one's duty	.404	.611	.175
(4) to be considerate for other people	.505	.709	.039
(5) to enjoy secret moments	.406	.629	.106
(6) to get ahead in life	.485	.204	.666
(7) to do something for the community	.424	.617	.209
(8) to promote equality in society	.256	.351	.229
(9) to do whatever one likes	.625	-.031	.790
(10) to live as consciously as possible?"	.361	.544	.257

The surprise in this set of 10 items, as Table 3.4 shows, was that they generated only two factors, while our projected theory in line with David Riesman (1958) expected one for self-direction, one for inner-direction and another one for other-direction.

As factor-analysis and the respective alpha and Eigenvalues show, the three dimensions of the theory did not materialize. There were two factors only and we called items 1, 3, 4, 5, 7, 10 COMPASSN for compassion and the second factor made up of items 6 and 9 EGOCENT for ego-centric or self-directed, which was actually not used in later analysis.

In the list of dependent variables a set of seven variables measure welfare and health system experiences and evaluations. These relate to six items that make up an index of equity in welfare society (EQUITY) showing an Eigenvalue well above 2.3 and consisting of statements that rated equity and integration high.

The evaluation of the health-system (HSYSEVAL) drew on only two items, namely (1) *I have the best hospitals and doctors in my disposal*, and (2) *In our health-system I have the same rights like everybody else.*

Two indicators each consisting of three items check on problems of communication with doctors (DOCCOM) and on having timing problems (waiting, scheduling), when visiting a doctor (TIMING).

A question with four items favoring either a medicine of care or an interventionist medicine of cure makes up a scale called curative medicine (CURATMED), i.e. at point 3 on the 5-point-scale indicating the neutral point between care and cure. The "legal right for free care" (FREECARE) is checked out via a three-point scale from advocacy of private responsibility (=1), a neutral point (=2) to having a legal right for free care (=3).

The final index is the result of a question when people were asked to propose who should pay future increases of medical costs. Two item-scales measure "individual responsibility"(SELFFIN); four items "public or institutional financing" for future costs of the health care-system (INSTFIN).

Table 3.5 lists the actual means and standard deviations of variables; it is by and large self-explanatory. Some of the variances and highlights are:

The German population is by far the oldest. Disregarding the Belgian population because of exclusion of those 65 and older in Flanders, the youngest population is to be found in the Netherlands. The sex distribution shows the differences as discussed above. While occupational status is fairly even, and years of education are close, there are marked differences for family income with the Germans showing by far the highest and the French the lowest income. It was not possible to make an inquiry for family income in Spain. In terms of self-evaluated status the Dutch show the highest self-esteem, while the French show the lowest. The latter may well have regional reasons.

Physical Appearance is fairly well valued throughout with the highest scores in Belgium and France, and the lowest in Germany and Spain. Compassion shows little difference in between nations, while Germans score high and Spaniards, Dutch and French low on Postmaterialism (POSTMAT). It reflects part of political culture in Germany and the emergence of the Greens. Religious orientation is lowest in France; it is highest in the Netherlands.

Among the variables describing equity in society, equal rights and a just distribution of income one should note that modern society does not get high marks for equity and welfare. It is lowest for Spain and relatively highest for Germany, although its score of 3.1 is just above the midpoint for Germany and thus indicates no praise for that society either. Compared to EQUITY in welfare-society the health-system gets better marks, in particular in the Netherlands, where people show agreement that they have best hospitals, doctors and equality in access to medical care. Communication and timing problems with doctors are barely a problem across nations. Indeed, with an occasional complain in Germany, such problems are the exception.

Table 3.5: Means and Standard Deviations for Major Groups of Variables in Five Nations of WESH

	BE	FR	GE	NE	SP	Total	Variable
I. Demographic							
Age in Years	42.03	45.07	45.89	43.12	43.73	44.01	AGE
	14.68	*17.08*	*16.74*	*15.85*	*17.11*	*16.28*	
Sex (0 = Male/1 = Female)	.54	.63	.51	.55	.52	.54	FEMALE
II. Stratification							
Maximum Occupation in Household (Treiman-scale)	45.05	44.99	46.57	46.08	43.03	45.58	OCCMXEST
	11.98	*14.79*	*12.70*	*11.17*	*12.39*	*12.29*	
Years of Education	12.37	11.41	11.34	12.37	-	11.91	EDYEARS
	3.53	*3.43*	*3.47*	*3.85*	-	*3.65*	
Family Income in 1.000 Ecu	25.71	20.29	27.86	23.25	-	25.18	INCOME
	9.20	*8.97*	*14.39*	*11.37*	-	*12.26*	
Selfevaluation of Soc.Status (1-10)	5.94	5.21	5.82	6.31	-	5.96	SESOSTAT
	1.45	*1.43*	*1.50*	*1.32*	-	*1.46*	
III. Value Orientations							
Physical Appearance (5 items 1-4)	3.21	3.22	3.09	3.13	3.04	3.12	APPEAR
	.51	*.44*	*.47*	*.44*	*.53*	*.48*	
Compassion (6 items 1-5)	4.21	4.34	4.36	4.25	-	4.29	COMPASSN
	.43	*.39*	*.39*	*.39*	-	*.41*	
Postmaterialism (4 Item Inglehart 1-5)	3.22	3.05	3.60	3.02	3.00	3.24	POSTMAT
	1.19	*1.28*	*1.31*	*1.27*	*1.06*	*1.27*	
Religious Orientation (1-5)	2.79	2.54	2.74	3.18	-	2.89	RELORT
	1.03	*1.03*	*1.01*	*.79*	-	*.99*	
Health Locus of Control - Internal	3.03	3.01	3.07	2.90	2.94	2.99	HLCINT
	.44	*.38*	*.44*	*.41*	*.40*	*.43*	
Health Locus of Control - Doctor	2.45	2.56	2.41	2.15	2.69	2.39	HLCDOC
	.42	*.37*	*.45*	*.41*	*.43*	*.46*	
Health Locus of Control - Chance	2.44	2.36	2.30	2.39	2.55	2.39	HLCCHA
	.43	*.41*	*.48*	*.44*	*.51*	*.47*	
IV. Health Care/Welfare							
Equity of Welfare Society (6 items 1-5)	2.75	2.59	3.10	3.07	2.31	2.87	EQUITY
	.66	*.51*	*.63*	*.56*	*.62*	*.67*	
Health System Evaluation (2 items 1-5)	3.78	3.68	3.69	3.93	-	3.79	HSYSEVAL
	.74	*.68*	*.76*	*.64*	-	*.72*	
Communication Problems with Doctors (3 items 1-4)	1.39	1.59	1.76	1.56	-	1.60	DOCCOM
	.52	*.64*	*.73*	*.71*	-	*.69*	
Timing Problems with Doctors (3 items 1-4)	1.75	1.91	2.32	1.76	2.36	2.04	TIMING
	.73	*.78*	*.89*	*.78*	*.89*	*.87*	
Curative Medicine Preference (1-5)	2.91	3.47	2.47	2.77	3.06	2.79	CURATMED
	1.02	*1.19*	*1.25*	*1.24*	*1.26*	*1.24*	
Legal Right Free Care (1-3)	2.39	2.41	2.42	2.51	-	2.45	FREECARE
	.74	*.81*	*.86*	*.73*	-	*.79*	
Favor Institutional Financing (4 items 1-5)	3.27	3.39	3.36	3.23	-	3.29	INSTFIN
	.61	*.66*	*.72*	*.63*	-	*.67*	
Favor Self Financing (2 items 1-5)	2.44	2.52	2.45	2.52	-	2.44	SELFFIN
	.75	*.77*	*.76*	*.79*	-	*.75*	
N =	380	156	686	666	351	2239	

Curative medicine is being advocated strongly in France, as Lynn Payer (1988) observed, in good tradition of Descartes, while Germans favor a medicine of care. A legal right for free care is widely favored regardless of nation and so is the

displacement of financial responsibility toward some form of institutional arrangement ranging from government, community to employers.

These indicators and data provide a first impression of results and analyses to come. They show moderate differences by country. The latter may well suggest that there are fairly similar standards and beliefs across the five nations. Of course, this would suggest that there is something like a unity of an European health system. It should be noted that some of the data could for cost- and time-reasons not be collected in Spain

A final note should pertain to the so-called variable-names in the last column. These are meant to facilitate data-operation and manipulation. They are part of statistical operations via computer in the form shown in Table 3.5. They should also indicate that the index listed under such label is an abstraction from most times more than one item, signifying a higher validity of measurement as compared to a single item or question.

Chapter 4:
A Descriptive Overview Concerning Results for Health Behavior in the 5-Nation-Study of WESH

In order to stake out major points of information and also to familiarize the reader with the data and procedure results for 13 key issues by nation are being presented.

The Value of Health and the Health Situation

It is quite common to suggest that health is the one most important item in a person's life. When pronouncing health as the number 1 value, it is in particular old people who like in German will quickly state: "*Hauptsache gesund*" (first of all healthy). In this project respondents were asked where among four different items (family, health, property, work) they would rank each one of the four.

Table 4.1: The Value of Health (HLTHVAL) as a Rank from 1 to 4 among Four Central Areas in Life

"Which one of the following is most important, second, third, least important to you? Your property, your family, your health, or your work..."

in %		BE	FR	GE	NE	SP	Total
Most important	4	42.4	31.4	46.9	47.7	n.a.	45.0
Second	3	52.4	62.2	47.7	47.9	n.a.	49.9
Third	2	2.6	5.8	3.6	1.4	n.a.	2.8
Least important	1	1.8	0.6	1.6	1.4	n.a.	1.5
Don't know		*0.8*	*0.0*	*0.1*	*1.7*	*n.a.*	*0.8*
Mean of scale		3.36	3.24	3.40	3.44	n.a.	3.39
n=		380	156	686	666	-	1888

Table 4.1 lists percentages for the position that people ranked health. The result is probably in light of the introductory remark as surprising as it is at variance across the four nations where data were collected for this question. In short, not health, but family claims the number 1 value, although health is almost in the same position, with health among the Dutch coming closest. Of considerable interest is certainly the low figure for France, and also Belgium shows a considerable distance between health and family. Beyond the high acclaim that family gets in particular in France health is certainly of high importance as it occupies either rank one or two across the four nations.

Another question to check on the health situation and expectation was raised in asking "*In general, how much do you worry about getting sick? Would you say very much, quite a lot, somewhat, not very much, or not at all?*" The results in Table 4.2 show in the average that people are not too much worried.

Table 4.2: The Degree of Worry to Get Sick (SICKWOR) in Four Nations of WESH
"In general, how much do you worry about getting sick? Would you say ..."

in %		BE	FR	GE	NE	SP	Total
Very much	5	6.3	10.3	14.7	6.0	n.a.	9.6
Quite a lot	4	12.9	10.9	13.3	11.4	n.a.	12.3
Somewhat	3	21.3	31.4	33.8	20.7	n.a.	26.5
Not very much, or	2	34.7	30.1	23.5	35.9	n.a.	30.7
Not at all?	1	22.9	17.3	14.0	25.4	n.a.	20.1
Don't know		*1.8*	*0.0*	*0.7*	*0.6*	*n.a.*	*0.8*
Mean of scale		2.44	2.67	2.91	2.36	n.a.	2.60
n =		380	156	686	666	-	1888

However, there are considerable differences again for nationality. The Germans are by far the most worried, the Dutch the least. In Germany every seventh person says that he/she is "very much" worried. It is at this point an open question whether these responses reflect a genuinely lower health status for Germany or whether the expressed worry is rather an outcome of a general pessimism. Of course, one should also have in mind that the Germans are older in the average and thus should have a different outlook on life and health. The fact that the French with their higher age express themselves also somewhat more worried suggests that age may indeed contribute to sick-worry. While it is possible to analyze the outcome and data net a difference in age by nation, we shall introduce such forms of multivariate statistics only in the later analytical chapters.

Table 4.3: The Subjective Health Status (HLTHSTAT) in Five Nations of WESH
"In general, would you say that your health is ..."

in %		BE	FR	GE	NE	SP	Total
Very good	5	29.2	17.9	15.6	25.7	11.1	20.4
Good	4	46.3	39.7	43.3	51.5	45.9	46.4
Satisfactory	3	17.6	25.0	24.9	15.6	18.8	20.0
Not so good	2	6.1	14.1	11.4	5.4	19.1	10.1
Bad	1	0.8	3.2	4.7	1.8	5.1	3.1
Don't know		*0.0*	*0.0*	*0.1*	*0.0*	*0.0*	*0.0*
Mean of scale		3.97	3.55	3.54	3.94	3.39	3.71
n =		380	156	686	666	351	2239

The health status itself is being measured by an indicator of subjective health and secondly by an account of illness, disease and handicaps. The subjective

indicator of asking: "*In general, would you say that your health is very good, good, satisfactory, not so good, bad?*" is probably the one most widely used question in surveys on health. It is actually a reliable question, and it supposedly is a better predictor of long-range health effects than a careful checkup by a physician (Mossey and Shapiro 1982).

Table 4.3 contains the results concerning subjective health status. The vast majority of people are at least satisfied with their health; 2/3 claim their health to be good or very good. Once again and in this case together with the French, the Germans stick out to report a relatively bad health status. However, results for the Spanish are even worse. Vice versa the Belgians and the Dutch show considerably better values. To be sure, also the French, Germans and the Spanish have a majority who claim to be in good or very good health.

Another way to test health status can be provided by a series of questions concerning serious illness, chronic disease or having a physical handicap. Table 4.4 lists these results. It confirms almost overwhelmingly what appeared already in death rates, in attitudes and in subjective health: The Germans are with a distant worst off in their health status. Indeed, in each one of three categories they have the highest percentage of people being seriously ill, having a chronic disease or suffering from a handicap.

Table 4.4: Serious Illness, Chronic Disease and Physical Handicap in the Nations of WESH

"In the last 12 month did you have a serious illness, a chronic disease or were you physically handicapped?"

in % of total	BE	FR	GE	NE	SP	Total
Serious illness	5.0	5.8	17.5	7.1	6.6	9.7
Chronic Disease	6.8	12.8	25.9	11.7	13.7	15.6
Handicap	3.4	9.6	13.0	6.2	11.1	8.8
Total of ill/handicapped	12.9	21.2	41.1	21.0	25.6	26.5
Don't know	*0.0*	*0.0*	*0.1*	*0.2*	*0.0*	*0.1*
n=	380	156	686	666	351	2239

multiple responses possible

More than 40 % of adults in Germany (NW) suffer from an illness. It is worth noting that both the French and the Spanish do not confirm at this point their low level of health as it was suggested from the question on subjective health status. Still, the Spanish are second worst off after the Germans. According to the figures the Belgians are displaying the best health status. However, that result is in part caused by the exclusion of those 65 and older in Flanders.

Table 4.5 finally reports the degree of distress as measured by a modified Langner-Scale across the five nations (see Appendix question 34; and Cockerham et al. 1988). Only France shows somewhat higher values for distress, while the four other nations all score in the 2.4s. In short, this result indicates a lesser variance of distress by nation than did rates of physical health.

Table 4.5: Percentages of average scale values and the means of scales for Psychological Distress (DISTRESS) in Five Nations of WESH

in %		BE	FR	GE	NE	SP	Total
High	4	5.5	12.2	6.3	6.5	5.1	6.4
	3	35.5	46.2	39.2	35.1	37.9	37.7
	2	45.3	35.9	48.0	45.3	44.7	45.4
Low	1	8.2	3.2	4.7	8.6	7.1	6.7
Missing		*5.5*	*2.6*	*1.9*	*4.5*	*5.1*	*3.8*
Mean of scale		2.41	2.69	2.48	2.41	2.43	2.46
n =		380	156	686	666	351	2239

The Utilization of Doctors, Dentists and other Personnel

As Table 4.6 shows Germans go the most to doctors. What appears to be more interesting is the fact that they more than the people in any other of the four nations go to specialists.

Table 4.6: The Utilization of General Practitioners and Specialists (DOCUTIL) in the Last Year in Four Nations of WESH

"In the past 12 month have you seen a ..."

in %	BE	FR	GE	NE	SP	Total
General practitioner	47.4	56.4	68.1	61.4	n.a.	60.4
Specialist	32.1	42.3	59.8	30.1	n.a.	44.6
Don't know	*0.0*	*0.0*	*0.1*	*0.0*	*n.a.*	*0.1*
n =	380	156	686	365	-	1587

As far as the utilization of specialists is concerned, the Germans, unlike the Dutch, are not required to seek permission from their family physician first. Consequently, Germans will often decide to go to a specialist right away.

Table 4.7: The Utilization of Dentists (DENTUTIL) in the Past Year in Four Nations of WESH

"In the past 12 month have you seen a ..."

in %	BE	FR	GE	NE	SP	Total
Dentist	47.6	46.8	66.3	72.9	n.a.	61.4
Don't know	*0.0*	*0.0*	*0.0*	*0.0*	*n.a.*	*0.0*
n =	380	156	686	365	-	1587

Table 4.7 lists the visits of dentists. Here the Dutch are surpassing the Germans in frequency of dental care, while both the Belgians and the French have a

relatively lower rate, a result that does not fully coincide with expectations above (cf.p.48).

Table 4.8 contains an interesting set of data as it lists different other practitioners of health care and their utilization. The use of psychologists or psychotherapists as it appears is not high, but it is almost uniformly around 3 % in each country. Totally different are services by physiotherapists. They are seemingly widely accepted in the Netherlands and in France, while their usage is considerably lower in Germany.

Table 4.8: Utilization of Other and Alternative Health-Care Personnel in the Past Year in Four Nations of WESH

"In the past 12 month have you seen a ..."

in %	BE	FR	GE	NE	SP	Total
Psychotherapist, Psychologist	3.2	3.8	3.2	3.8	n.a.	3.4
Physiotherapist (masseur)	11.6	17.9	8.3	17.0	n.a.	12.0
Alternative Practitioner, (Healer, Homeopath)	6.8	7.1	3.6	7.1	n.a.	5.5
Don't know	*0.0*	*0.0*	*0.0*	*0.0*	*n.a.*	*0.0*
n =	380	156	686	365	-	1587

A special case are finally alternative practitioners such as healers or homeopaths. It is believed that the latter are particularly popular in Germany. Actually, as the figures in Table 4.8 show they are not. Indeed, alternative practitioners according to this survey are more popular in the three other countries we have data for. Of course, also there alternative practitioners appear to be no match for regular medical and physician services. As for the German result, one should add that there is some regional variation for alternative practitioners and the so-called "*Heilpraktiker*" in particular. As statistics show they have a lower membership in their association in NW than in Northern or Southern Germany. One should also add that a certain group of German physicians will prescribe natural, homeopathic substances as well, thus preempting a widely held belief in Germany that natural products are more health-worthy and thus would require to attend a "*Heilpraktiker*".

Data on Health-Related Behavior

As sick and as worried the Germans appear to be among the five nations, they are the ones to claim the most involvement in sport. While the Germans show an involvement as high as 64 % or almost two-thirds, the Spanish on the other show an involvement of only 38 %, a little more than one-third. Both countries are the extreme cases, while adults in the other three are involved in sport to a little bit

more than one-half. Perhaps, it is worth mentioning that the French despite the high proportion of women in the sample have a rate of almost 60 %.

Table 4.9: The Intensity of Sport Participation (SPORTINT) in Five Nations of WESH
"Do you participate in any kind of physical activities, exercise, or sports? (if yes:) Do you do this..."

in %		BE	FR	GE	NE	SP	Total
Vigorously	4	7.1	3.8	7.4	6.8	5.7	6.7
Somewhat vigorously	3	18.9	16.0	26.8	25.1	17.9	22.8
Not very vigorously	2	19.7	30.8	27.1	20.9	13.4	22.1
Not at all vigorously	1	4.7	7.7	2.5	3.3	0.9	3.2
No sport	0	49.2	41.0	36.2	43.7	62.1	45.0
Don't know		*0.3*	*0.6*	*0.0*	*0.3*	*0.0*	*0.2*
Mean of scale		1.30	1.34	1.67	1.48	1.04	1.43
n=		380	156	686	666	351	2239

Of course, one should add that the responses do not mean competitive sport. They must not even mean any form of recreational sport such as gymnastics, swimming or soccer. Acceptable was any type of physical activity or exercise that could be done in solitude, on the bicycle or while "*bathing*" in a pool or lake. The question following a 'yes' to the introduction concerning "*sport, physical activity or exercise*" explored the intensity with which the sport or exercise was performed. Also here the Germans with a rate of more than one-third appear to be strongest; but the Dutch are also serious and close in this regard.

Table 4.10: Healthy Food Habits (FOODHAB) via Eating Breakfast, and Consumption of Fruits and Vegetables, and as a Mean of Two Scales in Five Nations

a. "How often do you eat breakfast..."

in %		BE	FR	GE	NE	SP	Total
Daily	5	75.8	78.2	81.9	79.1	89.2	80.9
Often	4	5.8	4.5	3.6	4.8	2.0	4.2
Sometimes	3	4.2	7.7	5.0	4.2	2.6	4.4
Seldom	2	3.7	4.5	6.3	3.8	2.0	4.3
Never	1	10.0	5.1	3.1	8.0	4.3	6.0
Don't know		*0.5*	*0.0*	*0.1*	*0.2*	*0.0*	*0.2*
b. "How often do you eat raw fruits and vegetables..."							
Daily	5	57.9	46.2	58.0	66.1	14.0	52.7
Often	4	26.3	39.7	22.2	20.3	16.8	22.7
Sometimes	3	7.9	10.9	11.1	7.7	20.8	11.0
Seldom	2	4.5	2.6	7.6	3.5	10.0	5.9
Never	1	2.9	0.6	1.0	2.3	38.5	7.5
Don't know		*0.5*	*0.0*	*0.1*	*0.3*	*0.0*	*0.2*
Mean of 2 scales		4.34	4.37	4.42	4.44	3.64	4.29
n=		380	156	686	666	351	2239

A good indicator and one of rather high health conscience is the consumption of food. Among different products consumed and eating patterns followed a widely used indicator has become the regularity by which people eat breakfast. Another valid indicator is the consumption of raw fruits and vegetables. Both items were posed as questions concerning healthy food habits and produced the results as found in Table 4.10.

As the figures indicate, to eat a regular breakfast is a common pattern in West Europe with some variation; i.e. the Spaniards are the most observant of such pattern, the Belgians are relatively the least.

A much more divergent pattern appears to be the consumption of raw fruits and vegetables. This pattern is the most accepted in the Netherlands, and surprisingly the least in Spain. Indeed, there are almost 40 % in Spain who indicate that they never eat raw fruits and vegetables. That appears to be very unusual, given the fact that Spain appears to have an abundance of fruits.

The question whether one would take vitamins and the frequency of such intake was introduced as another indicator of health-related behavior. As it turned out in factor-analyses not reported here, consumption of vitamins showed no high correlation with healthy food habits, rather it seemed to indicate an interventionist and rational strategy to influence health; i.e. it showed fairly clear correlations with the use of over-the-counter and other drugs.

Table 4.11: The Amount of Vitamin Intake (VITAMIN) in Five Nations of WESH

"How often do you take vitamins..."

in %		BE	FR	GE	NE	SP	Total
Never	1	57.4	58.3	56.4	67.6	59.0	60.4
Seldom	2	18.9	16.0	17.8	8.0	17.9	15.0
Sometimes	3	11.3	13.5	11.5	9.5	14.5	11.5
Often	4	3.4	3.8	4.2	4.2	3.1	3.9
Daily	5	8.4	8.3	9.8	10.7	5.1	9.0
Don't know		*0.5*	*0.0*	*0.3*	*0.2*	*0.3*	*0.3*
Mean of scale		1.86	1.88	1.93	1.82	1.77	1.86
n=		380	156	686	666	351	2239

A majority in all five countries takes no vitamins, quite a few do so seldom; but there are in between 5,1 % (Spain) to 10,7 % (Netherlands) who do so daily. The mean for vitamin consumption differs only slightly among the five nations and there appears to be no clear pattern by nation. Perhaps the Dutch are of some interest as they either don't take vitamins at all or have a stronger tendency to take vitamins daily.

The Health at Risk in Smoking and Drinking

Beyond and above all other health-hazards, smoking and drinking of alcohol are among the worst forms of behavior that are hazardous to health from a public health perspective. Those that engage in such behavior are well aware of such hazards, and while they may rationalize their behavior, they are certainly very conscious of the fact that they smoke and drink.

Table 4.12: The Degree of Smoking (SMOKING) in Five Nations of WESH

"Do you now smoke regularly, only sometimes or not at all..."

in %		BE	FR	GE	NE	SP	Total
Yes, regularly	2	29.5	19.9	27.8	32.7	24.2	28.5
Yes, sometimes	1	9.5	9.0	11.1	9.8	11.7	10.4
No	0	61.1	71.2	60.8	56.8	64.1	60.9
Don't know		*0.0*	*0.0*	*0.3*	*0.8*	*0.0*	*0.3*
Mean of scale		0.68	0.49	0.67	0.76	0.60	0.67
n=		380	156	686	666	351	2239

As Table 4.12 shows the rate of smokers is almost 40 % with some variance from the Netherlands to Spain and France. Of course, for the latter one should be reminded again that this sample is in the majority female and from Lorraine. Overall, the rates reflect what has been established in other surveys as well: Almost a third of adults are regular smokers, and regardless of slight declines the total amount of tobacco smoked is not declining at all. Among others, an increase among young females makes up for quite a bit of decline among males.

Table 4.13: The Amount of Alcohol Consumption (ALCOHOL) in Four Nations of WESH

"In the past 6 month did you drink alcohol such as beer or wine?" (if yes) "If you think of the past week. How many glasses or drinks did you drink from Friday to Sunday, how many from Monday to Thursday..."

in %		BE	FR	GE	NE	SP	Total
No alcohol last 6 months	0	33.2	32.1	14.6	19.8	n.a.	21.6
1 glass last week or drank in last 6 months	1	20.5	22.4	25.5	21.5	n.a.	22.8
2-7 (up to 1 daily)	2	28.2	26.3	30.8	30.5	n.a.	29.8
8-21 (more than 1 daily)	3	14.5	16.0	22.7	21.8	n.a.	20.2
22 + (more than 3 daily)	4	3.7	3.2	5.5	6.2	n.a.	5.2
Don't know		*0.0*	*0.0*	*0.9*	*0.3*	*n.a.*	*0.4*
Mean of scale		1.35	1.36	1.79	1.73	n.a.	1.64
n=		380	156	686	666	-	1888

The consumption of alcohol is a common pattern of European culture and of countries like Belgium, Germany, the Netherlands, and Spain as well as France in particular.

The figures in Table 4.13 contain probably some surprises as one would have expected a lower rate of non-drinkers for Belgium. Vice versa, the low rate of non-drinkers in Germany may appear as a surprise as well. In comparison and as indicated by the mean of the four-point scale the Germans and the Dutch drink the most, the Belgians and the French the least of the four countries for which data were collected. For France this is the result of the sample being above average female.

From a number of questions pertaining to the culture of alcohol in the respective four countries one addressed the number of alcoholic drinks that the respondent considered to be of no harm to one's health. If stringent medical considerations would prevail, the proper answer would probably have to be '0'. This answer was given by the following percentages in:

Germany.....17.5
Belgium.....11.1
Netherlands 10.5
France 6.5

This appears to be an interesting reflection of the normative control of alcoholism in these countries. At least for France and Germany the rates are detrimental to the amount of usage of alcohol as indicated by the respondents in WESH.

There was yet another set of questions directed toward the national alcoholic beverage as much as a single one could be identified. After inquiring about their usage, the question was posed whether these drinks were very healthy, healthy, unhealthy or very unhealthy. As could be expected, the national alcoholic beverage was considered more healthy than that of a different country. There was one exception: Belgians considered Dutch Genever slightly more healthy than the Dutch themselves. Of course, this test was none dealing with alcoholism: It was a clear test of ethnocentrism or the way how the usage of alcoholism is rationalized for the national drink via ethnocentric beliefs (L. Lüschen and Reed 1994).

Health Care as EU-Policy

To be sure policy analysis is one of the most complex areas in the social sciences (Lüschen 1992-93). Consequently, individual and single questions pertaining to an area of high abstraction do neither provide valid nor reliable results. Having this restriction in mind, we present data to the question 30b with great and serious caution.

Table 4.14: The Importance of European Health Policy (EUHPLCY) in Four Nations of WESH

"How important is it that the European Community engages itself in a European health care system. Is the EC..."

in %		BE	FR	GE	NE	SP	Total
Very important	4	23.2	31.4	34.1	29.1	n.a.	29.9
Important	3	59.5	51.9	54.7	53.3	n.a.	54.9
Unimportant	2	4.2	7.1	7.7	8.4	n.a.	7.2
Very unimportant	1	0.8	1.3	0.4	1.1	n.a.	0.8
Don't know		*12.4*	*8.3*	*3.1*	*8.1*	*n.a.*	*7.2*
Mean of scale		3.20	3.24	3.26	3.20	n.a.	3.23
n =		380	156	686	666	-	1888

Overall, the result in its meaning is difficult to interpret. At best it means that health and health care are important to the people no matter in what context such question is being raised. Thus, the foregoing figures rather raise the question: Do people really want the EU to get involved? Are they in Brussels going to rule and regulate health care?

Summary

In summary there is a variance in health status and health concern, with the Germans showing the lowest state of health and the most worry to get sick. The Germans attend doctors most and visit specialists in particular. It is also apparent that they attend members of the medical profession more regularly and go less to alternative practitioners or therapists.

Preventive behavior such as engagement in sport is fairly high and there appears to be wide-spread consciousness for proper food-habits. Still, while smoking is modest, alcohol consumption is fairly high. It is again of interest that the Germans score higher on sport participation as well as alcohol use.

This first overview was intended to provide some preliminary information, it was also supposed to familiarize the reader with the kind and type of data; and that included a glimpse towards these data's trustworthiness. What is to come now is a set of chapters that with more detail and analytic statistics will try to reveal how the culture of health appears throughout the countries of WESH, how problems of inequality in health status and health care prevail, what type of health policies are advocated and how they are seen by the people within the health system as a whole.

Chapter 5:
Health Culture in Europe: An Exploration of National, and Social Differences in Health-Related Values

by Fred C.J. Stevens and Joseph P.M. Diederiks

Introduction

In this chapter the focus is on cultural dimensions of modern health care. Divergencies and convergencies in health culture across four WESH nations will be explored: Germany, the Netherlands, Belgium and France. Health culture refers to the collection of ideas, habits and customs as they relate to health and illness (Lüschen et al. 1987). It determines how members of a society think and feel, direct their actions and outlook on health, illness and health care. In general, health culture is defined as a set of (implicit or explicit) guidelines which members of a specific society inherit, and which gives direction to a) how to view illness, health and health care, b) how to experience it emotionally, and c) how to behave in relation to others and to their (natural) environment. This definition, in fact derived from a more general description of the concept of culture, gives direction to our analyses which will be for an important part exploratorily.

There is little doubt, that in the course of societal modernization the health care sector has become more and more rationalized. This modernization appears at the institutional level as an increase in differentiation, bureaucratization and professionalization, and coincides on the individual level with a peculiar individualization of modern man (Zijderveld 1986). Autonomous technological developments in Western societies have led to instrumental, cure and treatment oriented health care systems, notwithstanding the fact that differences exist in the way national health care systems are organized (Philipsen 1985; Helman 1990). Consequently, the hypothesis can be put forward that due to universal developments in medical science and technology, modern societies are becoming increasingly similar with regard to the organization of their health care systems and in basic values underlying the way in which they solve their health care problems (Gallagher 1988).

The convergence of modern health care systems is not undisputed. Although modern societies are evolving in the same direction with rationality, efficiency and utilitarian individualism as basic value orientations, differences exist in degree and similarity of developments. It cannot be denied that modern societies still vary

considerably in the way they deal with health and illness (Field 1989). Part of these differences can be attributed to the historical foundations of the particular health care systems under focus, as has been pointed out in other chapters of this book. For instance, differences between the American, German, French or Dutch systems of health care are founded on specific models for health care organization that have been arranged in earlier periods (Cockerham 1995; Graig 1993).

Differences in health care organization, however, are not only based on structural characteristics but reflect the general value orientations of that society. Anthropologists have pointed out, that differences between health care systems are imbedded in the values and social structure of the societies involved (Helman 1990). As a consequence, based on their specific histories, their traditions, customs and so on, differences in health care organization give insight into the way in which a society wishes to deal with health and illness. Health and health care are imbedded in value systems which give explanations why and how in specific cultures health care problems are managed. The fact that some health care systems are more government-controlled than others, or give more priority to primary health care, might be influenced by this.

Thus, if we try to understand how health care systems are functioning, it is not sufficient to know how they are structured. One should also have insight into the norms, values, ideas, habits and customs underlying choices that are made in a particular society concerning issues of health and illness. Cultures or nations can vary in value orientations to a considerable degree, for instance in solidarity between people, individual responsibility for health, or in instrumental rationality (Hofstede 1991). More or less emphasis on hospital care, on individual responsibilities or solidarity in relation to health insurance and social security reflect general value orientations that have priority in a given society (Philipsen 1988; Hofstede 1991). If we, for instance, compare the American health care system with that of the Netherlands, it becomes quite clear, that the American system is more oriented towards the free market and more hospital-based than that of the Netherlands (which is more primary care oriented and government controlled). These differences not only reflect systems characteristics, but also point to alternative value orientations underlying the solutions that have been chosen for organizing and managing health care. Comparing social security systems for instance, one might hypothesize that care and solidarity are more important health-related values in the Dutch society than in the American society. Health care is a segment of society and therefore reflects the cultural values of societies involved. Up till now however, little is known about the core values underlying health care systems in modern societies.

Each society has more than one culture. Highly developed and differentiated societies contain multiple, diverse value systems which are associated with positions in the social structure. Differences in life experiences, based on gender, socio-economic status and age may also account for variations in health culture. Thus, the question can be raised whether differences in value orientations will be

better predicted by national characteristics, than by factors such as age, gender or economic status.

The cultural embeddednes of health care in western societies is an often discussed, but empirically rather unexplored area. Most studies were not specifically designed to test the cultural embeddedness of health, illness and health care, nor were they developed to explore the dimensionality of what might be called the concept of "health culture" (Lüschen et al. 1987). Those that pointed to differences in health culture often used global indicators which only highlighted striking differences or compared cultures that were obviously very different from each other (Payer 1988; Abel and Kohlmann 1989).

The aim of the chapter is twofold. In the first part of the chapter the concept of health culture will be explored by constructing dimensions of health culture and comparing these across four WESH nations. In the second part, the aim is to find out to what extent these health culture dimensions are specific for certain societies - indicated by nation and language area - and/or dependent on positions within the social structure. With regard to the latter, we expect that norms, values, attitudes with respect to health and illness will also be related to health status, gender, age and level of education.

Sample and Variables

The sample for the following analyses consists of the 1668 adults that range in age between 18 and 65.

Several instruments in the WESH study were specifically designed to indicate dimensions of health culture, such as a scale on priorities in health care for cure, care and prevention respectively, or the ranking of priorities for medical technological interventions, or the care for chronically ill persons. Other variables, not primarily developed for this purpose, are used to the extent that they fit into our definition of health culture. They indicate for instance attitudes towards responsibilities in health care, e.g. individual vs. external responsibility, like the health locus of control, and attitudes towards solidarity, justice, equity, availability and access to health care.

Health culture variables were constructed in several steps. First, several scales were made by means of principal component analyses and reliability analyses. These scales were, together with discrete items or variables subjected to a second-order principal component analysis to indicate health culture dimensions (Rummel 1970). A specific problem in comparing samples is, that factor patterns preferably should be the same for all subsamples involved. Cattell's salience index was used to compare factor structures across samples. This index focuses on the existence of similarly high and near-zero loadings, while the intermediacy loadings that contribute little to identifying simple structure are ignored (Cattell and Baggaley 1960; Rummel 1970). As region is the lowest aggregation level, Cattel's salience

index was constructed for the factor solution of the total sample with each of the regional subsamples. Indices of the variables are presented in Table 5.1. Fifteen variables were constructed, partly based on a principal component analysis, partly already referred to in Table 3.5. These were the following.

Table 5.1: Indices and Scales for Health Culture Variables plus Cronbach´s Alpha

Variable	Type	No. Items	Alpha
Curative Orientation	Factor Score	3	.68
Care Orientation	Factor Score	3	.58
Prevention Orientation	Factor Score	3	.66
HLC Internal Orientation	Sum Score	3	.68
HLC Chance Orientation	Sum Score	3	.61
HLC Physician Orientation	Sum Score	3	.58
Equity	Sum Score	5	.70
Solidarity	Dichotomy	1	-
Free Care	3- Point Scale	1	-
Technology Orientation	Dichotomy	1	-
Compassion	Sum Score	5	.70
Perceived Health	5-Point Scale	1	-
Sickworry	5-Point Scale	1	-
Psychological Distress	Factor Score	5	.72
(See Doctor for) Minor Complaints	Factor Score	4	.61

A principal component analysis was conducted on nine items concerning priorities for cure, care and prevention in health care, resulting in three scales computed from responses to the question:
"*Where should the government, administrations and other respective offices do much more, more, less, much less? How is this with regard to...*

- *medical technology,*
- *training of medical specialists,*
- *scientific medical research*" (curative orientation).

"*How is this with regard to...*

- *care for chronic ill persons,*
- *the elderly,*
- *home care*" (care orientation).

"*How is this with regard to...*

- *health education,*
- *programs for sports and exercise,*
- *healthy food habits*" (prevention orientation).

Nine items of the original 18 items Health Locus of Control were selected for the WESH questionnaire. For each dimension three items were selected, based on the highest loadings in a Dutch validated translation of the instrument (Halfens

1985). A principal component analysis confirmed the three dimensions, resulting in the following scales:

- HLCINT for a 3-item internal Orientation
- HLCCHA for a 3-item chance or fatalism Orientation
- HLCDOC for a 3-item physician Orientation.

With regard to the measurement of opinions on equity in welfare society, the first five items were used concerning Belgian, Dutch, French, German society (Question 29,1-5). Principal component analysis revealed one dimension that is called EQUITY.

To indicate solidarity in health care insurance, three items in the questionnaire asked whether specific categories of people with higher risks should pay more, the same or less for their health insurance. These referred to smokers, obese people and older people (Question 25b). Respondents who answered on all three questions that everyone should pay the same got score 1 indicating SOLIDARITY. All others were scored 0.

In question 23 respondents were asked to choose between the alternatives: "*Everybody is responsible for their own health care*" (Score 1) and "*Adequate and free health care is a right for everyone*" (Score 3). Respondents who could not decide between both possibilities got score 2 for the variable (FREECARE).

Priorities in health care were measured by having respondents rank ordering of the following items: "*There are many important health policy issues. Can you give priorities to the following ones...*

- *care for the chronically ill,*
- *the purchase of the newest medical equipment,*
- *the accommodation of psychiatric patients,*
- *organ transplants.*"

Respondents who gave highest priority on the purchase of medical equipment or organ transplants got score 1 (TECHNOLOGY ORIENTATION). Those who gave priority to the chronically ill or psychiatric patients got score 0.

General value orientations were measured with items, adapted from a study by Felling et al. (1983) on religious value orientations. From a principal component analysis it appeared that five items clustered in one dimension (COMPASSN). These were: "*How important is it for you...*

- *to fulfill ones duty,*
- *to be considerate of other people,*
- *to fully enjoy silent moments,*
- *to render services to the community,*
- *to live as conscious as possible.*"

Health perception and the worry to get sick were measured with the two variables HLTHSTAT and SICKWOR. Psychological DISTRESS was measured with an abridged modified Langner-scale consisting of 6 items.

Inclination to visit a physician with minor complaints was measured according to question 8a and weather one "*should see a doctor*" for the following four items:

- *occasional heartburn after a heavy meal,*

- *sore throat or running nose for at least two days,*
- *occasional trouble sleeping at night,*
- *aching or sore muscles that last 2-3 days* (MINOR COMPLAINTS).

Indicator Construction

Factor analysis. A principal component analysis (PCA) was conducted on 15 health culture variables. The principal components after varimax rotation for the total sample are presented in Table 5.2. The PCA resulted in 5 components with an explained variance of 50 percent.

Table 5.2: Factor Loadings* for Principal Component Analysis on 15 Health Culture Variables in Four Nations (n = 1668)

	Commu-nality	I	II	III	IV	V
Curative Orientation	.53	.68	-.05	.09	-.24	.06
Technology Orientation	.53	.58	-.21	-.12	-.21	-.30
HLC Physician	.53	.57	.29	.10	.32	-.05
HLC Chance	.49	.44	.09	-.36	.35	.19
Minor Complaints	.36	.55	.15	.05	.16	.12
Perceived Health	.50	-.11	-.70	.04	.03	.06
Psych. Distress	.50	-.13	.68	-.00	-.16	.01
Sickworry	.46	.15	.65	.03	.02	.12
Prevention Orientation	.53	.01	.10	.71	-.15	-.04
HLC Internal	.46	.10	-.22	.62	.01	.15
Solidarity	.51	.02	-.22	-.52	-.43	-.02
Equity	.51	.15	-.16	-.14	.66	-.08
Freecare	.38	.09	.07	-.02	-.60	.03
Care Orientation	.70	-.04	.05	-.12	-.11	.82
Humanism	.49	-.13	.01	-.39	-.02	.57
Explained Variance		.13	.11	.10	.09	.07

*Loadings above .40 underlined

The first component has high loadings (above .40) on the variables cure, HLC external orientation (both physician orientation and chance orientation), technology orientation (priority for medical equipment and organ transplants in contrast to priority for care for chronically ill and the accommodation of psychiatric patients), and willingness to see a doctor with minor complaints. It combines favorable attitudes towards spending (more) resources on the scientific, professional and technological development of health care, the feeling that responsibilities for health are mainly external (chance as well as physician orientation) and a

willingness to see a physician with minor complaints. In effect, the component indicates an orientation on the curative oriented character of modern health care. The value orientation underlying this dimension is probably best characterized by instrumental rationality, or in health care terms the belief that health care is best served by further development of medical science and technology, paralleling the variable CURATMED in Table 3.5.

The second component combines high loadings on the variables perceived health (negative), sickworry and psychological distress. Thus, a perceived negative health status goes together with concern about health and feelings of psychological distress. Scores on this dimension indicate that a person is concerned about his or her health, while the value orientation underlying this dimension points to uncertainty: the amount of health uncertainty and anxiety that people are experiencing.

The third component has high positive loadings on the internal dimension of the Health Locus of Control, on priorities for prevention, and on the denial of shared responsibility in health care (Solidarity). What seems to be the core characteristic in this dimension, is the degree to which people want an individual responsibility for health care. In terms of value orientations, the dimensions appears to indicate health autonomy.

The fourth component has high loadings on variables concerning political attitudes with regard to health care. The highest one is the belief that we live in a society in which equity prevails, and everyone who needs care has access to it. The second one is a negative loading on the variable FREECARE, indicating the opinion that everyone should be held responsible for his/her own health care (in contrast to the opinion that health care should be free available). Faith in fairness and justice in society and feelings of self responsibility seem to be the main characteristics of this component, we want to call justice.

Finally, the fifth component combines care orientation and the scale on collectivism/humanism values. Care for others seems to be the main characteristic of this dimension. The value orientation that underlies this dimension is the feeling of charity.

Summarizing, the dimensions which resulted from the exploratory principal component analysis point to five different (health-related) value orientations underlying the dimensions: a) instrumental rationality, b) uncertainty, c) health autonomy d) justice, and e) charity. Factor scores for subsequent analyses were made, labeled and defined as:

- **curative orientation** (instrumental rationality): scores on this dimension indicate the value that is attached to the technological, cure oriented development of modern health care
- **health uncertainty**: scores on this dimension indicate the amount of uncertainty that is experienced by a person
- **health autonomy**: scores on this dimension indicate the value that is attached to individual responsibility with regard to health care issues and autonomy in health care

- **justice**: scores on this dimension indicate the amount of confidence people have in the justice and fairness of society and the way in which health care is organized
- **charity orientation**: scores on this dimension indicate the importance of giving care to others.

Results

Average scores on health culture dimensions for the four nations are presented in Table 5.3. As can be seen, the CURATIVE orientation is highest in France and lowest in Germany and the Netherlands. All average national scores differ significantly from each other (multiple comparisons, $p < .05$). The highest health UNCERTAINTY scores are found in Germany and in France; the lowest in the Netherlands. Comparing national scores two by two reveals, that it is the Dutch score that differs significantly from all others, and that there are no differences between the scores of Germany and France ($p < .05$). The belief that people have an individual responsibility with regard to their health (HEALTH AUTONOMY) is highest in Germany and lowest in the Netherlands. Again, it is the Dutch score that differs significantly from the others, while there are no differences between the averages of France and Germany. Also in Germany, JUSTICE is relatively high, which is in contrast to France. Both German and French average scores differ significantly from the other nations ($p < .05$). The scores of Belgium and the Netherlands do not differ from each other. Finally, the CHARITY orientation is higher in the Netherlands and in Germany than in Belgium or in France. In fact, there is only a significant difference between both groups of nations ($p < .05$).

Table 5.3: Standardized Scores for Health Culture Dimensions by Nation (n = 1668)

	Curative Orientation	Uncertainty	Health Autonomy	Justice	Charity Orientation
Netherlands	-.26	-.30	-.52	-.14	.12
Germany	-.11	.28	.41	.30	.08
Belgium	.39	-.09	.03	-.10	-.26
France	.63	.28	.30	-.46	-.26

If we summarize the results of the comparison, by looking at each nation, the following remarks can be made: German health culture is characterized by a relatively high degree of health uncertainty, strong feelings of health autonomy and a relatively strong charity orientation. People in France are characterized by a strong curative orientation, a high degree of health uncertainty and a weak charity orientation. In contrast, people in the Netherlands are characterized by a relatively strong charity orientation, a weak curative orientation and a weak developed

feeling of health autonomy. Belgian scores are somewhat in between on all health culture dimensions, and are mainly characterized by a relatively weak charity orientation.

Regression analysis. In order to explore hypothesized factors that may account for differences in health culture, regression analyses were run with factor scores of five health culture components as dependent variables. Three groups of independent variables are used. Firstly, nation will indicate national differences: Germany, the Netherlands, Belgium and France. Secondly, the fact that language is generally considered as one of the most binding elements with regard to the development and consolidation of a national or regional culture led us to discern three language areas as a second group of independent variables: German (Northrhine-Westphalia), French (Lorraine and the French speaking Belgian province of Liege) and Dutch (the Netherlands and the Flemish speaking Belgian province of Limburg). Each nation and each language area will be introduced in the regression analyses as a dummy variable. In the case of Germany, nation and language area are the same.

As a third group of independent variables, positions within the social structure, indicated by gender, age, level of education and illness status were introduced in the analyses. Age was coded into five categories: 1 = age 18 to 25; 2 = age 26 to 35; 3 = age 36 to 45; 4 = age 46 to 55; 5 = age 56 to 65. Gender was coded as male (0) and female (1). Level of education was coded into quintiles for each national sample. Illness status is a dichotomous variable, indicated by the answer on the question whether the respondent has suffered from a serious illness, injury or chronic illness during the last twelve months (1 = yes; 0 = no).

Using different kinds of independent variables makes it possible to trace the relative importance of the national, lingual and social structural embeddedness of health culture. The regression analyses presented in Table 5.4 were therefore run stepwise. Independent variables were entered in the equation one by one according to their level of significance. Beta's and R^2 are presented. R^2 indicates the increase of explained variance for each step. In this case however, beta's have to be interpreted with caution. Due to the fact that nation variables and language variables are strongly intercorrelated, multicollinearity is sometimes unavoidable and will affect beta's. More important is the increase in R^2 which indicates the amount of explained variance that is added at each step.

As can be seen from table 5.4, level of education is the first variable to enter the regression equation with CURATIVE orientation as dependent variable, followed by language (French) and nation (Belgium, France). That is, curative orientation appears to be weaker for higher educated persons, and stronger for French-speaking persons, and people living in Belgium or in France. Comparing the increase of R^2 on each step indicates that cure orientation mainly depends on level of education and on living in a French-speaking region.

Not surprisingly, health uncertainty mainly depends on illness status. People who suffered from a chronic disease or serious illness during the last 12 months are more concerned about their health.

Table 5.4: Stepwise Regression-Analysis (Beta-Coefficients $p < .01$) for Health Culture Variables by Social Position (Age, Gender, Education, Health), Language Area (German, Dutch, French) and Nation (n = 1668)

Curative Orientation

	STEP 1	STEP 2	STEP 3	STEP 4
Education	-.38	-.38	-.39	-.38
French		.24	.19	.07
Belgium			.17	.22
France				.15
R^2	.14	.20	.22	.23

Health Uncertainty

	STEP 1	STEP 2	STEP 3	STEP 4
Illness Status	-.27	-.25	-.24	-.23
Netherlands		-.20	-.20	-.24
Age			.13	.13
Belgium				-.10
R^2	.07	.11	.13	.14

Health Autonomy

	STEP 1	STEP 2	STEP 3
Dutch	-.40	-.42	-.28
Education		.11	.11
Netherlands			-.18
R^2	.16	.17	.19

Justice

	STEP 1	STEP 2	STEP 3	STEP 4
Age	.25	.23	.24	.24
Germany		.20	.16	.16
French			-.11	-.11
Female				-.07
R^2	.06	.10	.11	.12

Charity

	STEP 1	STEP 2	STEP 3	STEP 4
Female	.20	.20	.20	.20
Belgium		-.13	-.15	-.14
France			-.12	-.11
Age				.11
R^2	.04	.06	.07	.08

Interesting however is, that in subsequent steps this is followed by nation (the Netherlands), age (higher), and - to a lesser extent - again nation (Belgium). Thus, a lower level of health uncertainty is primarily dependent on having a positive illness status, living in the Netherlands and being younger.

Health autonomy as a health culture variable is mainly predicted (negative) by language (Dutch) and by level of education. Thus, health autonomy is not a high priority in Dutch-speaking areas and also not for higher educated persons.

Comparing different steps with JUSTICE as the dependent health culture variable indicates that the feeling that people live in a fair society in which care is available for those who need it, is strongest among older persons and among Germans. People living in the French-speaking regions and women have less trust in justice.

Finally, gender and nation are the strongest predictors of charity orientation. Women tend to have a stronger charity orientation than men; Belgians and French have a weaker charity orientation. It further appears that older persons have a stronger charity orientation.

Discussion

Based on the WESH data, five health culture dimensions could be discerned, labeled as curative orientation, health uncertainty, health autonomy, justice and charity orientation. There is little doubt that the five dimensions can only reflect a very small part of what might constitute health culture. Health culture probably encompasses more than the variables that were analyzed here. Also, some of the indices that were used, do not necessarily reflect sure values. This is for instance the case with the dimension uncertainty. At this stage, we therefore must stress again that our analyses were exploratory. Notwithstanding this, it also cannot be denied that the health culture dimensions found, reflect value orientations that are considered as very central in modern life to solve basic problems of societies (Inkeles and Levinson 1969; Hofstede 1991). These are the relationship between society and individual (health autonomy, instrumental rationality), ways of dealing with conflicts and uncertainty (health uncertainty, justice) and social inequalities (charity orientation). More specific, the dimensions that we found deal with:

- the level of medical technology and health care facilities that is desired and accepted to solve health problems,
- the amount of uncertainty that is accepted in a given society,
- the amount of self-responsibility that people should have to solve their health problems, and
- the amount of solidarity with persons who are disadvantaged.

The second question for this chapter, whether health culture depends on national characteristics or on positions within the social structure is not simply to be answered. Some health culture dimensions were better explained by nation or

language area, some better by social position. Overall however, the results of the analyses seem to indicate that most health culture dimensions are mainly dependent on positions in the social structure, and to a lesser, but still substantial degree on nation and language. With regard to the position in the social structure it is interesting to find that low educated persons have a stronger curative orientation than high educated persons. Probably, lower educated persons have more faith in the development of medicine, while higher educated persons have a more critical attitude. Interesting is also, that women have a stronger charity orientation. Particularly this finding leads to the hypothesis that a charity orientation (including care) is more "feminine" (Hofstede 1991).

Also age appeared to be an important predictor of several health values. Older persons are more uncertain about their health, have more confidence in the fairness of, and equity in society and are more charity oriented. An explanation could be, that older persons are more vulnerable to disease than younger persons which makes them more concerned about their health and more willing to care for others. Moreover, as other studies also indicated that confidence in institutions is more often found among older people, it might be hypothesized that older persons are more willing to accept existing institutional arrangements in society than younger persons (Halman, Ester and De Moor 1993). That of course, may be due to cohort effects and not age per se.

Next to social structural characteristics however, both nationality and language area are important predictors of health culture dimensions. Curative orientation appeared to be typical for the French-speaking regions; belief in individual responsibility is atypical in the Dutch-speaking area. Curative orientation appears to have a north - south gradient: going from the northern to the southern regions in this study leads to an increase in curative orientation. And the Spaniards, not analyzed here for reasons of missing data, fall nicely into this pattern as CURATMED in Table 3.5 shows.

With regard to nation, it appeared that compared to the other nations the Dutch and the Belgians are less uncertain about their health, even after controlling for illness status. Average scores indicated that the Germans have the highest scores on health uncertainty, which is in line with other observations. In a comparison of health and illness between Germany and the U.S.A. Lüschen et al. attributed higher levels of health concern in Germany as an indication of a less optimistic view of the world among Germans, compared to Americans (Lüschen, Cockerham, Kunz, 1987; 1988). Germans have the reputation of being pessimistic (Laqueur 1985; Townsend 1987; Payer 1989). Hofstede's finding that German society compared to others has a relatively high tendency to avoid uncertainty (for instance by rule enforcement), is consistent with this (1991).

The Germans also have more positive beliefs about equity in society, while the French have more negative feelings about this. This difference in justice might also indicate a difference in power distance. Hofstede defined power distance as: "the extent to which the less powerful members of institutions and organizations within a society expect and accept that power is unequally distributed". From our

analysis it may be suggested that the Germans are more willing to accept power distances than the French.

Especially the Belgians and the French have a strong curative orientation and a weak charity orientation. This is in contrast to the Germans and the Dutch who seem to have a stronger charity orientation. It might be, that the Dutch society is a "feminine" society in which care for others is an important value. Some authors have pointed for instance, to the relatively high number of nurses compared to doctors in the Netherlands, the high number of homes for the elderly, and the high level of solidarity with the disadvantaged. These might be indicators for the "feminine character of the Dutch society" (Hofstede 1991).

From this it might be hypothesized that in terms of general value orientations especially the French-speaking areas and more particularly France, is characterized by a high degree of instrumental rationality (curative, technology) and a low level of solidarity (care, charity). Germany seems to be characterized by positive feelings about justice and by the idea that existing inequalities between people are acceptable (power distance). Dutch society is characterized by a low degree of uncertainty and the Dutch-speaking areas by low degrees of health autonomy. Belgian society is characterized by a high degree of instrumental rationality, low level of uncertainty and low level of solidarity (charity).

Earlier cross-cultural comparison mainly focused on structural or systems characteristics, such as investments in health care, number of health care professionals, institutional facilities, legislation, health care demand and so on. Health culture is seldom a topic of research, although there are striking examples of the way in which cultural values play a part in diagnosis and treatment of illness (Payer 1989; Helman 1990; Spector 1991). Further work has to be done to develop the concept of health culture and to use it as an instrument in cross-cultural research of health care systems.

Summary

In this chapter, the concept of health culture was explored. Health culture refers to the collection of ideas, habits and customs relating to health and illness. It shapes thinking and feeling of members of a society and directs their action and outlook on health, illness and health care.

By means of factor analysis, five health culture dimensions were found. These emphasize a person's curative or health technology orientation, care or solidarity orientation, individual responsibility for health (health autonomy) feelings of uncertainty with regard to health and illness and (public trust in) justice.

Analyzing for differences in these health culture dimensions, based on nation, language area (French, German and Dutch) and indicators of social position (age, gender, education) leads to the conclusion that a strong curative orientation is related to a low level of education and living in a French-speaking language area

(France and the French-speaking part of Belgium). A low degree of uncertainty with regard to health and illness relates to having a positive health status and living in the Netherlands. Feelings that one lives in a fair society are mainly found in older persons and in Germans. Care is typically feminine (women). Finally, the Dutch are characterized by a relatively weak individual responsibility orientation.

The results clearly indicate that health culture dimensions are mainly dependent on positions in the social structure, and to a lesser but substantial degree on nation and language area.

Chapter 6:
Health and Social Stratification

by Günther Lüschen and William C. Cockerham

Introduction

This chapter explores socioeconomic differences in relation to health in the WESH data. In many ways, the topic of health and social stratification can be considered the most crucial sociological question pertaining to health. In all nations, from the most advanced to the least developed, socioeconomic status is one of the strongest and most consistent predictors of a person's level of health and life expectancy (Cockerham 1995). This has been observed since the 19th century when Rudolf Virchow addressed the issue of poor health among Silesian weavers or when, in 1913, Mosse and Tugendreich found major differences of health and mortality by social class. The situation has not markedly changed.

Numerous studies throughout Europe have found, for example, that persons living at the bottom of the socioeconomic scale have more sickness and die sooner than persons at the upper end of society, including Scandinavia where social equality in living conditions is among the best in the world and the formerly socialist countries of Eastern Europe (Arber 1993; Dierichsen 1990; Fox 1989; Lahelma and Valkonen 1990; Siegrist 1987; Valkonen 1989). Persons living in socially and economically disadvantaged circumstances have greater exposure to physical (crowding, poor sanitation, extreme weather), chemical and biological (diet, pollution, smoking, alcohol and drug abuse), biological (bacteria, viruses), and psychological (stress) risk factors that produce ill health than the affluent.

An individual's status in the system of social stratification is typically determined by his or her income, occupational status, and formal education. Although interrelated, each of these measures reflects different dimensions of a person's position in the system of social stratification of a given society.

While such variables will be the major focus of our analysis one has to observe that there are systems of stratification at large that control and determine a person's life-chances and life-style. Prominent in this regard is the Marxian analysis of social class which includes comparative studies in medical sociology (Ceresoto and Waitzkin 1986; Deppe 1983; Krysmanski 1972; Light and Schuller 1986; Schönbäck 1980). Such analyses may go as far as relating the economic power of the tobacco industry to the detrimental health and life-chances of the lower classes in England (Hart 1989); and yet, despite the fact that the poor are worse off (Abholz 1976) systemic explanations concerning class and health are still inconclusive. Moreover, there is sufficient evidence to conclude that a class

analysis no longer represents the one and best approach to a systemic analysis of stratification per se and that connected with health in particular.

Bourdieu's emphasis on the 'produced' taste and culture in Western society and the emergence of social distinctions appears to be as valid, and a Weberian approach recognizing both the class and status dimensions will mean a much better approach to address both the systemic and individual level of stratification in relation to health.

The five nations included in the WESH study are all welfare states, with extensive state-controlled health care benefits for the general population. Such benefits are not based on income or old age, as is the case in the United States, but are provided to the majority of people on the basis of citizenship or residency. Under these conditions differences of stratification in health are primarily due to differing externally determined social conditions (life chances) and individually controlled health-related lifestyles rather than a lack of access to quality medical care. This development underscores the importance of Weber's (1992, 1946) concepts of class and status or life-chance and lifestyles for research on health. Applying his notion of lifestyles in general to health lifestyles in particular, Weber provides a major contribution through his recognition of the complexity of forces contained with such lifestyles (Cockerham, Abel, and Lüschen 1993). Especially important is the identification of life chances as the opposite of lifestyle in his scheme, which provides the theoretical key to conceptualizing the manner in which lifestyles are operationalized in the real world. Individuals have a range of freedom, but not complete freedom in choosing lifestyles. That is, people are not entirely free in choosing their lifestyle but are able to choose within the social constraints that apply to their situation in life. Constrained life-chances do not mean a total control by external forces, but this concept in Weber contains a notion that an individual may well alter his or her position because of the situation into which he/she is placed.

Life chances, are largely socioeconomic in origin. A person's social class position therefore provides structural boundaries to the options that he or she can successfully execute in life. Thus, the health lifestyles of the upper classes, featuring more healthy diets, greater opportunities for relaxation, greater resources in dealing with stress, higher levels of participation in sports and leisure-time exercise, more physical checkups and other preventive care activities -- assist the affluent in living a healthier and longer life. The members of lower classes, in particular through conditions of work, appear to be determined and controlled in their life-chances to higher degree.

For Europe, one of the more recent and most conclusive studies is that of Valkonen (1989) who compares adult mortality and level of education in France, Great Britain, Denmark, Norway, Finland and Hungary. Using education as the most equivalent cross-national indicator, Valkonen found a particularly strong association between level of education and mortality. This also suggests that better educated persons have greater motivation for disciplined behavior and a lifestyle that leads to enhanced health. In each of the countries studied, level of education

was significant and, overall, the mortality rate for those persons with an elementary school education was double that of university graduates. Social class differences and mortality rates were lowest in Denmark, Norway, and Sweden; conversely, class differences were greatest in France and Great Britain, and it was in these countries that differences in mortality by socioeconomic position were particularly high. They were even higher in Hungary, although the former communist system was oriented toward removing class distinctions as a fundamental principle of Marxist theory. Nevertheless, in Hungary, manual workers outside of agriculture and especially manual workers in agriculture had mortality rates well in excess of nonmanual workers. Obviously, the removal of class in the Marxian sense on the systemic level had not altered the life-chances on the individual level.

Elsewhere, Siegrist (1987) in a review of the research literature in the United States and Western Europe, and results from his own study (1989), concluded that education and work situation were especially important determinants of health. Those persons with the highest education and occupational status invariably have the lowest mortality rates from chronic disease and this trend becomes apparent beginning in middle age. Higher education and occupational status translate into the level of knowledge and better work situation plus higher income that allow an individual to live in the most healthy circumstances. Siegrist suggested, accordingly, that the social dimensions of unequal health primarily result from two major factors: (1) greater stress among lower socioeconomic groups and (2) greater risk of exposure to unhealthy living and work environments.

Arber (1993) studied chronic illness over the life course in Britain and found that by the time lower-class men and women reached old age, they were significantly less healthy than better educated and more affluent elderly persons. The highest levels of chronic illness were among unskilled workers and the lowest among higher professionals. Class differences in health were more modest below age twenty-five but increased thereafter. The lower class also had greater physical disability and the differences became especially pronounced among the elderly.

Therefore, as noted, lower social strata have the poorest health and the causes of this situation appear to be due primarily to social and economic factors. Whereas it can be argued that social class is a decisive variable in health matters, little or nothing is known about the intervening effects of nationality. After all, stratification systems still show differences across nations as among others the accumulation of distributable income in annual OECD-statistics show. Nationality will therefore be added to our analysis. In addition, this chapter will explore the manner in which the various social classes are concerned about equity, evaluate the health care delivery system, and have problems with doctors due to social status and class.

Social Stratification and Health Status

The present analysis uses the standard status indicators of occupational status (highest within household), education (number of years completed), and family income, along with self-evaluations of social status (SESOSTAT). The analysis controlled for gender and age, plus a set of variables that describe value - or cultural orientations. As the total sample was used for the analysis, the introduction of nationality via dummy - variables and standardized against the dummy 'German' appeared to be appropriate and should introduce an additional control beyond stratification, demographic, and cultural variables.

Table 6.1: Regression Analysis (Beta-Coefficients) for Subjective Health Status (HLTHSTAT) on Four Steps of Demographic, Stratification and Value Orientation Variables plus Dummy for Nation (basis Germany)

	STEP 1	STEP 2	STEP 3	STEP 4
FEMALE	-.02	-.01	-.02	-.02
AGE	-.28***	-.26***	-.26***	-.24***
OCCMXEST		.09**	.09***	.09***
EDYEARS		.01	.01	.02
INCOME		.04	.04	.04
SESOSTAT		.08**	.07**	.04
APPEAR			.05*	.04
COMPASSN			.01	.04
POSTMAT			.01	.04
RELORT			.01	-.01
BELGIUM				.17***
FRANCE				.01
NETHERL				.19***
R^2	.08	.10	.10	.14

* $p < .05$ ** $p < .01$ *** $p < .001$

Table 6.1 presents the results of regression analysis for subjective health status that was conducted over four steps as indicated. Of course, health status is highly determined by age showing a Beta of -.28 (younger respondents evaluating their health significantly more positive than older ones). In the next step, stratification variables do not produce much greater explained variance, but as becomes apparent, OCCMXEST (occupational status) is significantly related to health status at the .01 level. SESOSTAT (Self-evaluation of social status) is initially significant and remains so after step 3; however, with the introduction of the nationality variables, SESOSTAT loses statistical significance. This result suggests that nationality has exceptional explanatory power in relation to self-perceived social

status. In this order, age, Dutch, Belgian nationality, and OCCMXEST explain health status or determine it, causally speaking.

A second set of questions explored the frequency of serious illness, chronic disease, handicap and injury. It also investigated the degree of disability through these incidents and subjected the variable 'DISABILITY' to the same system of regression analysis as before.

Table 6.2: Regression-Analysis (Beta-Coefficients) for Degree of Disability from Serious Sickness, Chronic Disease and Handicap in Last Year (DISABLTY) on Four Steps of Demographic. Stratification and Value Orientation Variables plus Dummy for Nation (basis Germany)

	STEP 1	STEP 2	STEP 3	STEP 4
FEMALE	-.06*	-.06*	-.07**	-.06*
AGE	.09***	.10***	.10***	.08**
OCCMXEST		-.05	-.05	-.06
EDYEARS		.06*	.06	.06*
INCOME		-.07*	-.06*	-.06*
SESOSTAT		-.01	-.01	-.01
APPEAR			-.02	.01
COMPASSN			.04	.02
POSTMAT			.03	-.00
RELORT			.03	.03
BELGIUM				-.19***
FRANCE				-.13***
NETHERL				-.14***
R^2	.01	.02	.02	.06

Table 6.2 shows that age is a determinant of disability because of disease or ailment. As ailments included chronic diseases and handicaps, which need not be age-specific, it is plausible that age would not show a high Beta. The four stratification variables do not significantly increase the value for R-square, although both family income (negative) and education (positive) are related to disability. While cultural indicators do not significantly enlarge the R-square, nationality again shows a strong impact with Belgium, the Netherlands and France all showing better values for disability than the Germans. To corroborate this result, adult Germans were found to score higher on serious illness, chronic disease and handicaps.

Social Stratification, Social Welfare and Health Care

As the means in Table 6.3 show, the evaluation of EQUITY in modern welfare society does not turn out to be positive; indeed, criticisms in Belgium and France in particular are very strong.

Table 6.3: Regression-Analysis (Beta-Coefficients) for Equity of Welfare Society (EQUITY) on Four Steps of Demographic, Stratification and Value Orientation Variables plus Dummy for Nation (basis Germany)

	STEP 1	STEP 2	STEP 3	STEP 4
FEMALE	-.09***	-.10***	-.12***	-.11***
AGE	.23***	.20***	.17***	.15***
OCCMXEST		.01	.03	.02
EDYEARS		-.12***	-.11***	-.10***
INCOME		-.01	.01	.01
SESOSTAT		.09***	.08**	.06*
APPEAR			.02	.06*
COMPASSN			-.07**	-.10***
POSTMAT			-.09***	-.12***
RELORT			.17***	.16***
BELGIUM				-.25***
FRANCE				-.22***
NETHERL				-.09***
R^2	.06	.08	.12	.19

As Table 6.3 in step 1 of the regressions indicates, older people are more positive, while females are significantly more critical than males in their evaluation of equity in modern welfare society. The inclusion of indicators of social stratification do not result in a major increase of explained variance and one may ask in what way the criticism of the welfare system is class-or stratification specific. Those with more education are highly critical, while those seeing themselves at a higher social status are more positive of the welfare system.

A major increase in explained variance occurs with the introduction of variables of culture and nationality. Indeed, the latter are particularly strong with the Belgians and the French producing high Betas, when measured against the Germans as the standard. Of cultural variables, religiosity is comparatively positive, while both Compassion and Postmaterialism are negative.

Table 6.4 shows a lesser explained variance for Health System Evaluation. Variables of stratification are slightly more important than for EQUITY, cultural variables show again some prominence, and nationality does not. Those who come from a higher occupational status are markedly negative about health systems. Potential reasons may be quite a few with the most likely that those in better occupational position feel that they do not get what they want. Overall, health

systems receive a fairly even and positive acclaim, in particular by those who are religious, who emphasize physical appearance, by those seeing themselves in a higher social status, and by the aged.

Table 6.4: Regression-Analysis (Beta-Coefficients) for Health System Evaluation (HSYSEVAL) on Four Steps of Selected Demographic, Stratification and Value Orientation Variables plus Dummy for Nation (basis Germany)

	STEP 1	STEP 2	STEP 3	STEP 4
FEMALE	.04	.04	-.01	-.01
AGE	.14***	.14***	.11***	.13***
OCCMXEST		-.10***	-.09**	-.09**
EDYEARS		-.01	.00	.01
INCOME		-.02	-.01	-.01
SESOSTAT		.13***	.11***	.08***
APPEAR			.10***	.10***
COMPASSN			.03	.05
POSTMAT			-.05*	-.03
RELORT			.13***	.11***
BELGIUM				.04
FRANCE				-.00
NETHERL				.12***
R^2	.02	.04	.08	.09

In terms of nationality, the Dutch are by far the most positive about their health care system. However, as the low variance in the means of Table 3.5 already indicated, the main result is rather that there is so little variance between nations. Or to put it in another way, satisfaction is by and large the same within national health care systems.

Of course, one has to be reminded here of Abel-Smith's contention (1985) that people have really no chance for an objective comparison as they don't know other systems. As serious as such criticism of structural equivalence of measurement in this case may be, in functional terms there is much less of a problem since system integration and national identity are based on levels of satisfaction and absence of strain. With regard to Health System Evaluation (HSYSEVAL) our variable indicates exactly that.

Table 6.5 shows the regression analysis for MAXDMAND (Maximum Demand) of health care services. A review of the table indicates that respondents with the lowest occupational status and less education have the greatest demand, along with those who score high for emphasis on appearance and compassion. Germans, in comparison to the French and Dutch, are more demanding of care.

The comparatively lowest demand for the Dutch reiterates what appeared already in the previous table and the higher satisfaction of the Dutch with their health system. Obviously, they have few desires left, while the Germans have quite a few.

Table 6.5: Regression-Analysis (Beta-Coefficients) for Maximum Demand (MAXDMAND) on Four Steps of Selected Demographic, Stratification and Value Orientation Variables plus Dummy for Nation (basis Germany)

	STEP 1	STEP 2	STEP 3	STEP 4
FEMALE	.05*	.03	.01	.02
AGE	.02	-.02	-.02	-.03
OCCMXEST		-.06*	-.06*	-.06*
EDYEARS		-.12***	-.11***	-.11***
INCOME		.02	.02	.02
SESOSTAT		.01	-.01	.01
APPEAR			.08***	.09***
COMPASSN			.08***	.07**
POSTMAT			.06*	.02
RELORT			-.01	-.00
BELGIUM				-.05
FRANCE				-.13***
NETHERL				-.19***
R^2	.00	.02	.04	.08

Problems with doctors in terms of communication and scheduling were explicitly introduced in order to check out to what degree people of lower status would receive inferior treatment.

Table 6.6: Regression-Analysis (Beta-Coefficients) for Communication Problems with Doctors (DOCCOM) on Four Steps of Selected Demographic, Stratification and Value Orientation Variables plus Dummy for Nation (basis Germany)

	STEP 1	STEP 2	STEP 3	STEP 4
FEMALE	.01	.01	.01	.02
AGE	-.14***	-.12***	-.10***	-.11***
OCCMXEST		-.03	-.04	-.04
EDYEARS		.10**	.09**	.10**
INCOME		-.03	-.04	-.04
SESOSTAT		-.07**	-.07**	-.06*
APPEAR			.01	.04
COMPASSN			.03	-.00
POSTMAT			.07**	.04
RELORT			-.06*	-.06*
BELGIUM				-.22***
FRANCE				-.08***
NETHERL				-.12***
R^2	.02	.03	.04	.08

As Tables 6.6 and 6.7 show, there is little evidence that there occurs any discrimination because of inferior social status. The aged report fewer incidents, and so do those who are more religious. Postmaterialists and those with more education report more discrimination which reflect as much on their higher expectations. The latter may also explain why Germans, over all other nationalities, would voice more complaints. Moreover, they voice to an even stronger degree complaints about timing. The conclusion with regard to differential treatment in ambulatory health care is based on the subjective perception of respondents, that people in the societies of Western Europe do not experience discrimination from their doctors because of inferior social status. If such experiences are reported at all, they are more likely related to higher expectations, nationality, and a type of progressive value orientation as expressed in postmaterialism.

Table 6.7: Regression-Analysis (Beta-Coefficient) for Timing Problems with Doctors (TIMING) on Four Steps of Demographic, Stratification and Value Orientation Variables plus Dummy for Nation (basis Germany)

	STEP 1	STEP 2	STEP 3	STEP 4
FEMALE	.03	.04	.05*	.06**
AGE	-.15***	-.12***	-.09***	-.13***
OCCMXEST		.04	.02	.02
EDYEARS		.08*	.06*	.06*
INCOME		.03	.02	.02
SESOSTAT		-.08**	-.07**	-.04
APPEAR			-.03	.00
COMPASSN			.06*	.01
POSTMAT			.14***	.08**
RELORT			-.07**	-.04
BELGIUM				-.27***
FRANCE				-.14***
NETHERL				-.29***
R^2	.02	.04	.06	.14

A suggestion that individual countries would show variances by way of stratification was tested for all regressions. These indicated, at best, slight variances via stratification variables. Rather, if there were differences, they occurred in dimensions of age or value orientations. Even the stronger complaints of Germans about doctor communication and timing were not related to stratification.

Finally, regressions for distress, as measured by the Langner-Scale in Table 6.8, show only a small impact and they are not particularly important as far as stratification variables are concerned. The final step shows the total explained variance is only .04. Females report significantly more distress and so do those with more education. Also the French show significantly more distress than the

Germans. Other variables are insignificant. Psychological distress turns out to be a matter of being female, well informed, and having a touch of French culture. It is not related to other variables.

Table 6.8: Regression-Analysis (Beta-Coefficient) for Psychological Distress (DISTRESS) on Four Steps of Demographic, Stratification and Value Orientation Variables plus Dummy for Nation (basis Germany)

	STEP 1	STEP 2	STEP 3	STEP 4
FEMALE	.11***	.12***	.12***	.11***
AGE	-.03	.01	.02	.01
OCCMXEST		-.01	-.02	-.01
EDYEARS		.12***	.12***	.11***
INCOME		.01	.01	.00
SESOSTAT		-.06*	-.06*	-.04
APPEAR			.04	.04
COMPASSN			.01	.00
POSTMAT			.04	.04
RELORT			-.02	-.01
BELGIUM				-.04
FRANCE				.07**
NETHERL				-.03
R^2	.01	.02	.03	.04

Summary

Individual life chances for better health are influenced to only a limited degree by variables of social status, the exception being occupational status. Degree of disability is influenced both ways with higher income related to less and higher education to more disability, when the latter is indicated by serious disease, chronic illness and handicaps. Finally, the slightly higher rate of distress by those having more education suggests that it is not so much a matter of detrimental life-chance but rather differential attitudes and lifestyles that produce higher rates among those being better off in terms of education.

In the whole range from EQUITY in welfare society to the evaluation of the health care system there is some status-specific impact as those of higher status and higher income give their society and health system better marks. The stronger criticism by those with higher education indicates again that they function as internal control agents, as Wilensky (1975) suggests. There is also a Marxian interpretation of some albeit limited relevance: The results would indicate some deprivation in more material and power aspects, while the criticism of the better educated would suggest that enlargement of class consciousness would reveal the

ally and objectively existing conditions of the capitalist system. Of course, in rms of social stratification Abel-Smith's remark concerning international system-erception (1985) could hold for social classes and systems of social stratification s well. Objectively there might be differences that subjectively are not perceived y lower classes or status groups. Of course, some notion of such difference is idicated by the criticism of those better educated.

Some kind of test of the reality in the system and the differential treatment by ıe most significant personnel, the doctors, in the system is the evaluation of ɔmmunication and scheduling in contacts with physicians. As the above results ıow, there is no discrimination being felt along lines of social stratification and atus variables; of course, with the repeated criticism of those better educated.

The final conclusion for social stratification in terms of status characteristics and fe-chances for health and health care remains that there is little deprivation along ifferential lines of social stratification. For a functional interpretation and with ference to theoretical dimensions raised in Chapter 1, this result may well idicate that welfare systems in these societies provide for considerable social tegration in this study. Obviously, this perception from the population in four ıtions pertains first and foremost to the health care system, while in countries like rance (and in this regard also Spain) equity of the modern welfare society with ɔecial references to stratification is not provided according to the perception of ıe population. Neither are the populations in the three remaining countries ithout criticism in this regard. Of course, the situation for Spain can only be eaned from some of the descriptive data in Chapter 4 and from the few analyses at are available from other sources. They indicate that Spain may have more oblems in terms of general equity and that of its health system than any of the her systems. At the same time, one need to be reminded that Spaniards have a fe-expectancy almost as high as that of the Dutch and better than that of the three her populations in the present study.

Overall, these data suggest that social stratification is not a major determining ctor in the perception and care of health among the living population. The latter ed to be stressed as such result would otherwise undoubtedly contradict the sults of mainly epidemiological research on life-expectancy and social class. One ıould also assume a differential and subjective perception along lines of social ratification. Moreover, these data suggest a convergence of health status and titudes toward the health care delivery system across social class boundaries or e disappearance of the latter. In a way these results reiterate the results of an ırlier study on health and stratification for Germany and the U.S. which at that me were hard to interpret (Lüschen, Cockerham, Kunz 1989). Self-evaluations of alth and the health delivery system appear influenced more by nationality and dicators of culture than by those of social class. The negligible impact of ıtionality on stratification variables suggests that within-nation stratification is, ɔntrary to what was suggested above, almost irrelevant What ultimately lies hind nationality and whether there may be major systemic differences of

inequality remains an open question. Of course, there is a slight notion of stratification impacts for doctor communication in the Netherlands.

In sum, rather than to attach health differentials to class and social stratification within each nation, one could seek explanations for the predictive power of nationality in dimensions of the polity and by traditions of health care and identities not detected by the four cultural variables.

In more theoretical terms, the results concerning health reflect the fact that modern societies show a system of social stratification and hierarchies that is more individually than system determined. Of course, there are differences in mortality (not measured here) and morbidity along lines of stratification. However, through the welfare provisions of health care, including a certain amount of financial redistribution through an insurance system based on solidarity, there seemingly appears a feeling throughout the system of stratification that there is some degree of equity and that social inequality is not a major determinant of health care in Western Europe. Such is the consequence of modern welfare society. Whether the absence of class and individual status distinctions for health and particularly health care in the life-chance dimension is also to be seen in the life-style dimension is the question to be pursued in the next chapter.

Chapter 7:
Health Life-Style and Social Stratification

by Günther Lüschen and Steffen Niemann

Introduction

The debate on life-style in the recent past has moved from a descriptive account of social behavior notably in leisure research to a more analytic and theory-inclined debate about the emergence of new social hierarchies. At a time when social classes and class identities seemed to lose their relevance authors like Hradil (1989) suggested that there was a move away from classes and social strata to *Lagen und Milieus (locations and milieus)*". Others have argued that life-style was not related to patterns of social stratification at all (Hörning and Michailow 1989). And others yet, like Goldthorpe and Marshall, insisted that, unlike life-style in social stratification, classes and the economic determinism of life-chances were still very much a reality in modern society (1992). On an international scale dependency-theory backed that up with historical as well as cross-national analyses (Wallerstein, Cardoso).

As the data in the foregoing chapter show, there is in the area of health care little to report as far as differential life-chances within the four or five nations in West Europe are concerned. Thus, the contentions of Goldthorpe and Marshall seem to have little support in our results. To be sure, Spain suggests a somewhat more discrepant situation as that in the other four nations. As far as health status is concerned, results from demographic and epidemiological analyses showing lower life-expectancies by those of lower social status can not be discarded. But the present analyses concerning such indicators as subjective health status or the degree of impairment because of sickness, chronic disease and handicap do not show an impact of status and stratification variables that would suggest a system of high inequity. To be sure, variables such as those of occupational prestige turn out to be significant, those with lower incomes have a higher degree of impairment; but much more important are nationality, at times cultural orientations and of course a demographic variable like age. Chronic illness and the degree of impairment from various sources is even higher among those better educated. Thus there is a notion that differential life-style structure may have an influence after all and beyond dimensions of life-chance. Education as an explanatory variable on the border between life-chance and life-style appears to be a major source to account for such impacts.

Education as a Variable and the Analysis of Life-Style

The results concerning social stratification and health status could easily lead to a conclusion that outcomes are contradictory. We do not think so. One can certainly conclude that the degree of equity in health care is high without being perfect. As far as health status is concerned stratification variables as introduced above do not exclusively measure life-chances. Where they do as in variables like income and occupation impacts are negative although not uniformly so. Where a variable like education implies not only life chances but also information and a higher conscience consequences are twofold: One may find a higher incident of sickness such as in chronic diseases since a respondent with better education is better informed about her/his own condition. What appears as a rash may be considered normal by someone of lower education, while a better educated person may promptly report this as a chronic condition. Higher sensitivity and expectation may be another reason why persons with higher education show a higher rate of sicknesses or chronic conditions. At the same time the better educated may show a more healthy attitude and behavior.

The latter interpretation suggests a line of reasoning that leads directly into life-style research. In terms of educational status it implies a linkage to both the life-chance and the life-style dimension. To whit, education and skill acquired through schooling directly qualifies for a specific occupational position and thus access to material needs, to influence and prestige. But education means also general enlargement of one's perspective on life and society; and for individual conduct and behavior it means familiarity with and training of a specific life-style. With regard to the latter, education is crucial for life-style analysis. With regard to a life-style that is important for health there are in a number of societies explicit subject areas like health education in school curricula. While that is not the case in countries like Germany, there are other means and those of the mass media in particular through which proper health-related life-style can be learned. Obviously, that is the case as numerous reports on matters of health in the media of mass communication show.

Life-style implies of course also a considerable amount of individual responsibility and freedom. The implication of authors like Hradil is of course that it is not totally individualistic but follows collective patterns and structures as suggested by Max Weber, when he talks about the "*ständische*" dimension in social stratification. Mostly translated into English as status, 'Stand' implies in the original sense a notion of collectivity, value-commitment and prestige that as expressed in behavior may well be circumscribed as life-style. Bourdieu (1979) takes note of such hierarchical structure of tastes and assumes that it is a matter of collective production. Unfortunately, there is no concern with health life-styles in Bourdieu's analysis; furthermore, his theoretical reasoning leads back from life-style as status related to concepts of class and the production of life-styles which stress the life-chance dimension again.

Some Methodological Observations

In data analysis the most recent developments for life-style stress a less theory-inclined approach which already started with Sobel's approach using factor and regression analysis (1981). Even the more recent correspondence analysis is, despite analytic predispositions, a method that is explorative in terms of a life-style theory (Dangschat and Blasius, 1994). Another method is cluster-analysis that will be employed here for the set of behavioral data potentially related to health.

In the above descriptive accounts of risk-behavior (alcohol, smoking, snacking) and behavior that may be considered advantageous (food habits, sport) or manipulative for health (vitamins, drugs) life-style is implied. Beyond the accounts of individual activity by and in itself the structural notion of life-style implies at least in theoretical terms a correspondence or a whole network of activities. In this sense life-style can be defined as "that pattern of behavior which for a specific group of people shows uniformity in behavior and orientation". The latter phrase implies of course that considerations of value and meaning may be included. For the following analysis that is not explicitly to be analyzed as respective data were not collected. That specific value orientations are implied in respective networks of activities goes without question.

An Empirical Test via Cluster-Analysis of Health-Related Life-Styles

Given a situation where theory and previous research are scarce on one hand and where there is a need for identification of the structure of life-style patterns the so-called cluster-analysis appears to be a viable method. In line with the above definition a set of health-related activities will outline the substance and dimensions of life-style in as much as it has relevance for health. Thus, the selection of activities that have implications for health is at this point a crucial task. Of a whole number of such activities a total of seven supposedly good or bad for health were identified. These were:

- Intensity of sport participation (SPORTINT)
- Healthy food habit (FOODHAB)
- Use of over-the-counter drugs (FREEDRUG)
- Vitamin intake (VITAMIN)
- Snacking in between meals (SNACKING)
- Smoking (SMOKING)
- Alcohol intake (ALCOHOL)

All items except smoking and alcohol were in their intensity originally scaled on 5-points. There is more than one method to perform cluster-analysis. In order to explore the patterned interdependencies for the present analysis the Squared

Euclidean Distance between all cases on the 7 Z-standardized items was calculated. Next a hierarchical agglomerative cluster-analysis via Ward's method was performed. The increase of the error-square-sum indicates the optimal number of clusters. For the above activities a five- or three-cluster-solution appeared to be best suited. The following analysis and interpretation opted for the three-cluster-solution across the four nations of Belgium, France, Germany and the Netherlands.

Figure 7.1: 3-Cluster Solution of Health-Lifestyles in West Europe

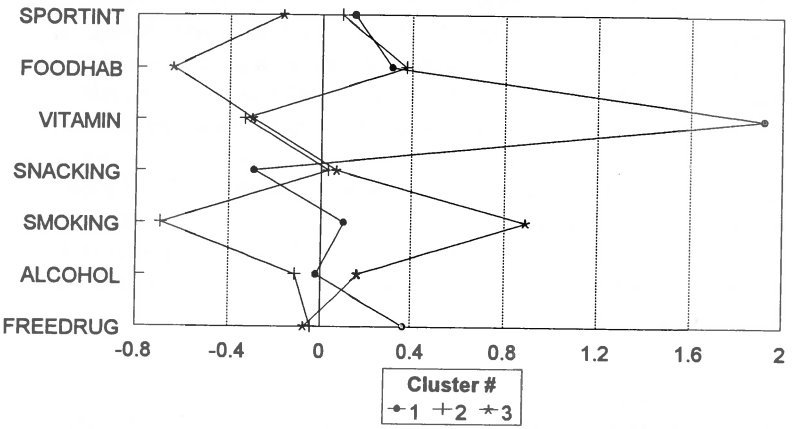


Figure 7.1 shows the three clusters which may be interpreted as follows: There is a cluster 1 of people who are distinguished by high vitamin intake and also frequent purchases of over-the-counter drugs. They are below-average snackers and above average in their engagement in sport. Overall, one would interpret such life-style as healthy with a rational and interventionist understanding (vitamins, drug intake to support the body). People in cluster 2 more or less abstain from smoking, have above average food-habits and are engaged in sport. This cluster is also displaying a healthy life-style albeit in a more natural way as cluster 1 does. Cluster 3 displays unhealthy food-habits, is below average in sport, shows above average alcohol intake and is distinguished by heavy smoking. This cluster is clearly unhealthy in its behavior.

Table 7.1: Cluster Composition According to Sex and Average Age

	Cluster 1	Cluster 2	Cluster 3
AGE (in years)	46.6	45.7	40.6
FEMALE (in %)	65.1	57.6	44.5
N=	258	923	679

The composition of the three clusters shows the latter to be younger in age and n the majority male, while the two others are older and in the majority female. Of nterest is certainly the markedly health-conscious cluster 1. It is the smallest of he three clusters and it is the oldest and most female dominated (cf. Abel and Kohlmann 1989).

Table 7.2: Distribution of Three Clusters of Life-Style Across four Nations of WESH

	BE	FR	GE	NE	Total
CLUSTER 1	13.1	14.8	13.6	14.4	13.9
CLUSTER 2	51.7	54.8	50.5	46.3	49.6
CLUSTER 3	35.1	30.3	35.9	39.4	36.5

The validity of this analysis in Table 7.1 is also displayed by the fact that the hree clusters as indicated in Table 7.2 show a relatively even distribution hroughout the four countries. In each country about every seventh adult belongs o the consciously healthy life-style cluster, and about every third person is part of he unhealthy cluster.

Life-Style Clusters and their Relevance for Health Status, Care and Policy

Beyond the mere fact that mathematically three clusters showed sufficient oherence to identify a relative wholeness for them and to suggest that they have ualities of *Gestalt* the clusters should of course prove useful as predictors for onsequences for the health system, they should also link up with patterns of their tructural embeddedness.

For the former a crucial link would be relations to identifiers of the health ystem. These could be related to all three analytic aspects of our system: health tatus, health care and health policy.

Health status and life-style clusters would at first sight have a clear causal elation. Healthy clusters should be related to better, unhealthy clusters to worse ealth status. Actually, the relationship is not that easy. Presently healthy life-style ıay rather be related to bad health status, the latter prompting more careful ehavior after bad health has been experienced. Moreover, it may not be so much ealth status but learning experiences over the life-course that result at later age in etter and more healthy life-style. Of the three cluster-patterns the interpretation ffered here seems to fit very well cluster 1, which was identified as a rational and ealth-conscious pattern, that may be called "*interventionists*". The two others can e designated as "*health practitioners*" (cluster 2) and "*health nihilists*" (cluster 3).

In comparison of the three clusters in Table 7.3 the naturally healthy cluster 2 is actually related to the best health status, while cluster 3 is significantly worse than cluster 2 but still better than cluster 1. Given the fact that this cluster is considerably younger than both cluster 1 and 2, its health status is worse than it appears in the results reflecting a seemingly causal effect of unhealthy life-style.

Table 7.3: Regression-Analysis (Beta Coefficients) of Health Status on Demographic Variables and Cluster 1 and 2 as Dummy (Cluster 3 as base)

FEMALE	-.02
AGE	-.28***
Cluster 2 of 3	.06*
Cluster 1 of 3	-.06*
R^2	.09

Exposing the three life-style clusters via health status to the same analysis as happened in Table 6.1 their inclusion results in a slightly better explained variance of R-square = .15 as compared to .14 above. That is not a major gain; it still suggests that the procedure employed is valid and modestly significant. It should be mentioned that impacts in specific sectors were ever so slight. There was no impact of inclusion of these clusters on demographic indicators, there was very little on stratification and on nationality; there was some in dimensions of appearance and postmaterialism.

Testing out the three life-style clusters on distress resulted in Betas of -.02 and .03 with practically no impact. It was even less for degree of restriction from sickness, chronic disease and handicaps. There was a significant and seemingly causal effect for the unhealthy life-style of cluster 3 and serious symptoms experienced in the last year, when cluster 2 in comparison to cluster 3 showed a highly significant Beta of -.08. The easy going unhealthy life-style of cluster 3 is also indicated in a significantly lower "worry to get sick". A similar tendency shows also, when cluster 3 shows significantly less concern for appearance than cluster 1, a group which demonstrates its consciousness for matters physical and health also at this point. The latter is significantly more worried to get sick. That cluster is also the one which identifies occurrence of light symptoms to a significantly higher degree than clusters 2 and 3. Overall, as was already suggested via their vitamin and drug intake, cluster 1 demonstrates its high sensitivity and conscience in matters of health.

Overall, the three-cluster solution shows clear impacts in health status and in symptoms. This is particularly so for the unhealthy cluster 3 which is distinguished by less health consciousness, worse health status and higher incidents of serious symptoms experienced in the last year. In each of these analyses it is also apparent that nationality is not a distinguishing variable, or better, that these clusters appear uniformly in all nations.

Beyond health status the life-style clusters showed no significant impact for HLC or for the type of medicine advocated. However, as far as such policy issues as special premiums for smokers were concerned clusters 2 (Beta .23) and 3 (Beta .10) were strong advocates for such controls. They showed no support for higher premiums assessed older, obese people or for those engaged in sports. Cluster 2 was also significantly more positive in the evaluation of welfare society.

The Structural Embeddedness of Life-Style Clusters

In order to get a preliminary understanding of their meaning and value-relevance the means of six attitudinal indicators were analyzed across the 3 clusters. Table 7.4 shows little variance for the internal HLC and the plea for free care. Also the value assigned health (HLTHVAL) shows little difference with cluster 3 having a lower regard. The difference for appearance in favor of cluster 1 is entirely to be explained by that cluster being more female.

Table 7.4: The Health-Related Attitudes of the Three Clusters (Means and SD)

	Cluster 1	Cluster 2	Cluster 3	Total
APPEAR	3.24	3.12	3.11	3.14
	.47	*.46*	*.48*	*.47*
HLCINT	3.04	2.98	3.00	3.00
	.44	*.44*	*.41*	*.43*
HLTHVAL	1.57	1.56	1.67	1.60
	.61	*.62*	*.62*	*.62*
SICKWOR	2.83	2.61	2.52	2.61
	1.25	*1.19*	*1.22*	*1.21*
RELORT	3.19	3.30	2.99	3.17
	1.30	*1.16*	*1.24*	*1.22*
FREECARE	2.39	2.44	2.47	2.45
	.82	*.77*	*.80*	*.79*

Thus, only sickworry with the strongest for the *interventionists* of cluster 1 and the lowest for the *health nihilists* of cluster 3 plus the stronger religious orientation for the health practitioners of cluster 2 are noteworthy. In other words, patterns of health life-style are to be found in a context with religiosity and concern to get sick, while they do not discriminate much in other health related attitudes.

A major issue in the subsequent structural analysis of life-style clusters pertains to its structural composition or embeddedeness. At this point it is also to be asked whether life-style clusters show any relationship to standard indicators of social stratification. As became obvious above, there was rather little connection to indicators of stratification. Maybe, there is more when one interprets causality the other way around, i.e. that clusters become new hierarchical identities.

Regression-analyses pitted all three clusters individually against the standard set of variables and proceeded in a step-wise fashion where each cluster was introduced in a dichotomous fashion as 1 or O (e.g. the total of the two other patterns).*

Table 7.5: Regression-Analysis (Beta-Coefficients) for Three Clusters over Demographic, Stratification, Cultural Variables and Nationality as Dummy (Basis Germany)

	Cluster 1 *(interventionists)*	Cluster 2 *(health practitioners)*	Cluster 3 *(health nihilists)*
AGE	.07**	.10***	-.17***
FEMALE	.08**	.08**	-.13***
OCCMXEST	.02	.02	-.04
INCOME	-.01	-.01	.02
EDYEARS	.04	.02	-.05
SESOSTAT	.01	.05	-.06*
RELORT	-.02	.09***	-.09***
APPEAR	.08**	-.04	-.02
COMPASSN	-.01	.00	.01
POSTMAT	-.04	.04	-.01
BELGIUM	-.02	.02	-.02
FRANCE	-.00	.04	-.04
NETHERL	-.00	-.04	.05
R^2	.02	.03	.07

Overall, as Table 7.5 shows, with the exception of the *health nihilists* of cluster 3 there is not much explained variance, i.e. the variables introduced do not explain much of the composition and social structure of life-style clusters 1 and 2. There is little relevance of stratification variables; thus, there is no obvious relationship of these life-style clusters to traditional variables of stratification. A partial exception is the variable SESOSTAT, i.e. the self-evaluation of one's social status; and that holds only for cluster 3. There is some stronger relationship to variables signifying culture and value orientations. It suggests that life-style as identified in the three-cluster-solution of health-related activities is rather related to patterns of culture than to those of stratification and nationality. Of course, the relationship to age and sex/gender is overwhelming. The patterns identified are clearly and strongly related to sex and age. It is probably correct to relate it at this time to the natural

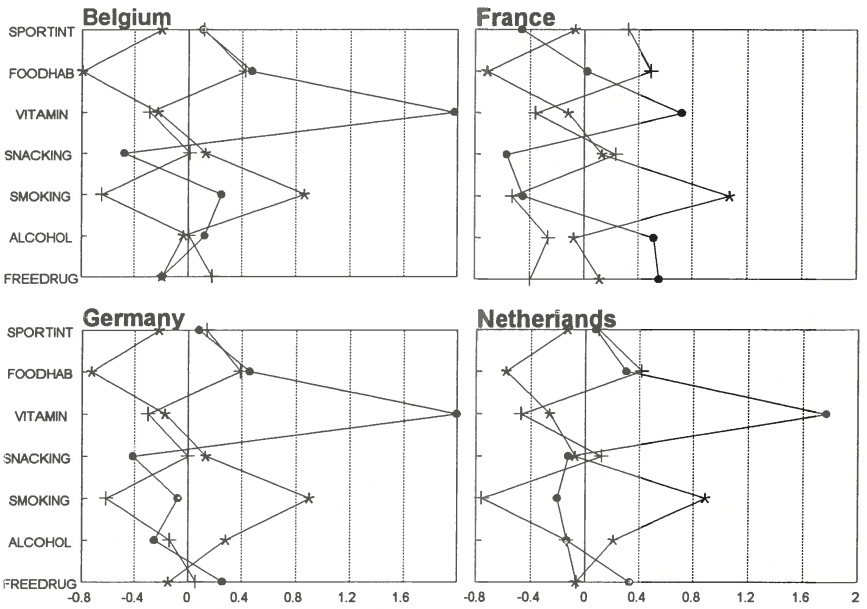
* Independent dichotomous variables are generally perceived in regression analyses as unacceptable in the case of extreme distributions. Cleary and Angel (1984) argue that within a margin of .25 to .75 such distribution causes no problems. Yet, they admit that with larger samples also more skewed distributions are o.k. Cohen and Cohen (1983, 241) for all practical purposes seem to disregard the problem altogether. In our case and in order to secure proper significance logistic regression analysis was used as well for the test and produced the same results for significance of variables.

condition of sex rather than to the socio-culturally determined pattern of gender as it is foremost the higher sensitivity of females in matters of health that prompt the stark distinction.

The Clusters by Nation

While the statistical analyses showed already the low significance of nationality, it did not answer the question how clusters of life-style were shaped in individual nations. After all low or no significance of the variable nation might be due to a rather diffuse solution within each country. The individual results indicate otherwise: The three-cluster-solutions in Figure 7.2 shows as closely as one could expect the same shape for each country.

Figure 7.2: The 3-Cluster Solutions in Four Countries of WESH



To reiterate, the German and the Dutch cluster-solutions are practically identical, and the Belgian is very close. The French cluster-solution is somewhat different with regard to the variable alcohol which for the generally healthy cluster 1 shows the highest alcohol consumption among the three French clusters. The best interpretation one can advance is on the background of the national specificity

of French alcohol culture. Alcohol obviously within this cluster is not perceived to be problematic for health.

The demographic composition of the clusters is similar across nations, it is certainly not identical. However, the variances are within ranges not contradicting the general pattern that naturally and rationally healthy clusters are more female and unhealthy ones are more male and younger.

Conclusions on Life-Style - Empirical Evidence, Theoretical Relevance and Some Methodological Reflections

For the time being one has to conclude that the life-style clusters identified in the foregoing analysis have little structural interdependence with conventional indicators of social stratification. Of course, such life-style patterns may well generate new social hierarchies. For the time being one should, however, cast a note of caution as far as hierarchical patterns of life-style are concerned. This is not the final verdict. More refined measures and analyses may well disclose what was not apparent in the foregoing analysis. And the albeit weak significance for an interdependence with SESOSTAT may well indicate that on a level of projective understanding of individual existence there appears a new hierarchy not yet identified in theory and research. Moreover, to allude to the terminology of Bourdieu, it may well be in the spheres of health and health conduct were such hierarchies and identities will produce themselves through the actions of the people.

The relevance of the life-style discussion and analysis is of course overwhelming. As the Alameda County Study in the U.S. demonstrated, future advances in health status and cost containment can be reaped mainly by better and more conscious life-style and improved personal conduct. To be sure, environmental controls are important. For a better and more healthy life, control of smoking and alcohol on one hand and a more active health promotion through proper eating habits and exercise on the other might be more crucial.

As suggested in the introduction there is since the turn of this century an increased awareness of matters physical. There is since the last century an enhanced philosophical understanding of the unity of mind and body (Bunge 1980). The enormous advances in medicine since some 150 years indicate that mankind and society have tried to meet the challenge of allowing the body and the physical existence of the human being to extend to the fullest. Environmental improvements from nature to the work place are underway. While there is ample evidence that also behavior has changed, there still appears to be much room for improvement in individual and collective life-style. This is not an easy task as controls in a democracy can not be imposed but have to come from inside as patterns of social control and enlightenment. In order to promote proper life-style

n particular for health better insights have to be developed from both the iological and the social sciences.

In the social sciences and sociology in particular theoretical systems have almost xcluded the biological and physical as relevant for understanding society and the uman as a social being. Triumphantly Talcott Parsons declared Herbert Spencer o be dead. Of course, with figures like Spencer, Tönnies, Znaniecki social cientists had been silenced that were intimately aware of the relevance of the hysical and the body. There is now without much conscience of their real eaning in broader theoretical contexts some activity around matters physical (B. urner 1983, Bette 1988). It signalizes a potential for change.

Most important and in summary of many lose ends of discussion Serge oscovici (1968) has stated that the issue of nature composes the central question f the 20th Century, arguing that it was society in the 19th and the state in the 8th Century. Within that context human control over nature may also be onsidered highly relevant for the health system. There is little evidence that this hallenge has been met in the social science of health and medicine. Indeed, with gard to the latter there is a major leap forward in a mechanistic understanding of ealth care. There is comparatively too little in terms of health promotion or the levance of life-style and health conduct. It is probably not so much a limit in ffort as it is the absence of a thorough and contextual understanding of what life-yle and related conduct is all about. Consequently, an advanced theory of life-yle is of the essence. Here advanced statistical methods like cluster-analysis are efinitely helpful as well. Zablocki and Kanter (1976) had already made such ggestion quite a while ago. Moreover, the recent developments in rrespondence analysis may bear fruit for life-style analysis also (Blasius and angschat 1994, Abel and Rütten 1994). Our own attempts with correspondence alysis, using only the German data for WESH and explaining behavioral patterns a education, age and sex, confirmed the three cluster-design with this method. In way it enlarges the credence of the cluster-result (Niemann 1994).

Analyses like the foregoing do provide preliminary leads. Still, they are most portant as good theory is not at hand, and major experiences with proper dicators and research strategies are not available yet either. Research activities ke the foregoing will also increase the sensitivity for a problem like life-style. In way for the life-style approach one has to assume a type of contextual behavior at is free from many traditional determinants and still follows regularities that ve to be discovered on a different plein. In theory of science terms it may in the d mean a non-statement approach to theory as Stegmüller has called this (1980), ly to rename it later as 'structural theory'. This will mean a high level of straction through both theory and research. And that in turn may have enormous eaning for practical usage. After all, in Lewin´s words, nothing is as practical as good theory.

So far there is like in the work of Giddens (1991), Gerhardt (1992) and others a nceptual discourse in light of high abstraction and complexity. Among scursive theorists there is obviously the belief that the high demands of

'structural theory' can not be met by sociology, and Balzer and Sneed (1990) state exactly that. It is our contention that life-style research shows for reasons of the very topic and of advances in social science methods good prospects to live up to such challenges. The rather simple solutions resulting from fairly complex approaches of method we have developed above should indicate in what direction life-style research in the context of 'structural theory' should move. The above solutions are a beginning and there are only few that have tried to meet such challenge (Sobel 1981).

That much can be stated from the cluster-analysis of health behaviors: the reality one faces goes beyond national borders and traditional constructs of social structure. Whether the latter may mean also new social hierarchies, remains an open question at this time. As important as that issue may be in theoretical terms and on the background of much of sociological tradition, leads for health care policy are equally important. Even in the absence of proper theory of life-style descriptive solutions in data analysis can help to shape policy. They definitely improve rationality in action.

Chapter 8:
Public and Private Responsibility for Health: A Comparative Analysis of Attitudes towards Financing and the Right for Health Care

by Thomas Abel and Jouke van der Zee

Introduction

The recent changes in political and economical structures in Western Europe will profoundly affect the health care systems in most European nations, particularly in the EU member states (Graig 1993). The introduction of a common European market leads to an increase of interdependencies among the nations. In the near future health insurance funds might operate on an inter-nation basis, highly specialized health care services might be coordinated and offered on a European rather than a national basis etc. However, while we can assure a strengthening of the trends towards convergence, there is still considerable diversification among European health care systems (see for example Alber and Bernardi-Schenkluhn 1992). As Field (1989) has argued, modern health systems move towards greater internal differentiation and complexity but are also shaped by universalistic aspects of medical knowledge and medical technology. Thus, particularistic aspects of nations' health systems are superimposed by universal underpinnings of modern medicine and by common political and economical problems (e.g. cost crisis). Such forces promote changes towards growing exchange and convergence trends across European nations. Yet, health care reforms are today still basically planned and implemented on the national level, according to the specific needs and value structures of each society.

The success or failure of national health care reforms depend on a number of actors, exerting their influence either directly or indirectly. Individuals and groups, each holding particular interests, compete or co-operate to pursue their specific goals in an overall functioning system of health care. State officials, physicians, the pharmaceutical industry and health insurance companies are the most visible and powerful actors in most European health care systems. While the role of these interest groups has been extensively discussed (e.g. Rosewitz and Wepper 1990, Alber and Bernardi-Schenkluhn 1992, Stone 1980), the group of consumers - or potential patients - has yet been given very little attention. There seems to be a remarkable lack of understanding the influence of people on the health system. Theories on consumerism in medicine cannot fill this gap because

such studies typically focus on individual attitudes and behaviors, and their effects on changing patterns of patient-provider relationships (see for example Haug and Lavin 1983).

The question thus arises whether a significant role of the people for stability or changeability of health care systems does not exist or is simply overlooked. If it exists, however, we would need to know whether it is restricted to a passive role of accepting the given structures of the system, including the utilization of services offered. There might, however, be a more active part on the side of the population that goes beyond electing political representatives who advocate different features of health care. These particular issues call for studies that shift the focus from individuals to the larger society and choose distinct subgroups as the unit of analyses.

In a recent article, Kirkman-Liff (1991) has drawn attention to the role of basic value systems for the maintenance or reform of health care systems. His main thesis is that success of health care reforms depend, among other factors, on a congruence between national value systems and the values underlying particular attempts for those reforms. From a different perspective, Cockerham et al. (1988b) have examined the relationships between nation specific health value systems and patterns of health behaviors. Their study indicates that a strong sense of state responsibility - which can be seen as a typical value in many European welfare systems - does not undermine an individual's responsibility for his or her own health.

While those studies emphasize the significance of basic value structures for issues of health care, to date there is little empirical knowledge on national values that pertain to health. However, in Germany, two large scale surveys have reported on a number of questions concerning issues of responsibility for health and a sense of social and personal security in case of illness. There was little difference between the perceived and the preferred role of the state in securing health care. For most Germans (77%) it is the state that carries the main obligation to secure health care for all. Only 15% saw other social groups or institutions in that role and only 7% saw health care in private responsibility. Almost the same percentages were yielded when asked about who should be responsible for providing health care indicating a rather high level of satisfaction among Germans with their health care system. However, with respect to a preferred role of the state the group of the younger, better educated and those with higher scores on a postmaterialism scale were less likely to advocate a dominate role of the state (Zapf et al. 1987). Another survey found that 95/99% of East/West Germans agreed that the state should be responsible for health care for those who are ill. When asked about a total number of social and economic policy issues for which the state may take obligation, there were again different trends across distinct population groups. Women, younger people and the less educated reported a larger number of welfare policy tasks (including health care) for which the state should be responsible (Statistisches Bundesamt 1992a).

As in Germany, in the Netherlands "Good health care is considered a civil right, ınd the government has to give the citizens the opportunity to realize it" (Schröder 992 p.238). However, as Kirkman-Liff (1991) explains, in Germany and the Netherlands "rights" in the health sector are rather understood, discussed and lebated in forms of "obligations". Although the structure of health care is in many espects different in both countries (e.g. health insurance patterns, the role of the general practitioners as "gatekeepers" etc.), both systems share the same basis of ınderlying values. Within it, a set of mutual obligations plays the key role.

Behind such obligations one may with health economists like Gäfgen (1989, 990) detect a corporate structure as the major controlling force in Germany. Jnder a form of detached control the government tries to steer corporate interest groups such as the physicians, health care institutions and patient representatives owards a consensus within the given law. This form of political control will not ›e pursued at this time any further. Moreover, the power of politicians is rather veak in this network of control. Rather, mutual obligations of the corporate or ndividual participants seem to determine what happens in health care.

This system of obligations includes for the main parties involved, obligations by he providers to offer medical care to all patients, obligations by patients to pay for nedical services (via health insurance or directly) and obligations by the mployers to provide sick-pay and to assist their employees in purchasing health nsurance. Although different in focus and form of application this system of eciprocal obligations provides a common value basis for the health system in both ıations. Within this structure of mutual obligations the concept of solidarity can perate without a contradiction of social/state against individual responsibility. So, n the Netherlands and Germany alike, solidarity serves as a "mechanism to romote cohesiveness within and between the disparate groups of participants vithin the health insurance system" (Kirkman-Liff 1991 p.2497).

Are such similarities in the value systems reflected in similar rates of satisfaction vith the health system? In a comparative study, Blendon et al. (1990) found a enerally high degree of satisfaction with a nation's health care system in Germany nd the Netherlands, with more than 40% of the populations reporting relative atisfaction. However, based on the data from the Blendon et al. study, Starfield 1991) investigated the degree of satisfaction with a health system in relation to its verall costs in 7 nations. According to her results the satisfaction-expense ratio vas highest in the Netherlands, yet among the lowest in Germany. Another cross- ational survey by Pescosolido et al. (1985) examined public evaluations of overnment performance in the medical sector. This study found a rather high egree of consensus in Germany and the Netherlands. Yet, distinct sub-groups valuated government performance in medical care organization differently. mong Germans the higher-education groups were more likely to give negative valuations and among the Dutch affiliation with the major right party and higher ccupational prestige was correlated with more negative evaluations of overnmental health care organization.

Social Differentiation and Responsibility for Health

The present study focuses on values that directly relate to issues of health care. It will observe specific patterns of health values and compare their distribution across selected social groups within and across four European nations. Studying these issues, we expect new insights into European welfare integration and diversification.

First, we explore two issues of who should be called upon, when it comes to financing and to providing care and cure services. Second, we study responses to the question on whether free health care should be a right for everybody or the responsibility of every individual. And third, we examine people's attitudes on private responsibility explicitly with respect to higher financial burdens for those with health risk behavior.

On each of these issues our primary interest is on intra-nation differentiation or convergence. To what degree will attitudes on these three issues of responsibility vary by demographic and stratification characteristics in each nation? Answers to the overall 15 sub-questions will provide us with a picture of how the people in Germany, the Netherlands, Belgium, and France, generally evaluate issues of responsibility for health care, specifically when it comes to matters of public- versus private responsibility.

Is every citizen entitled to free health care and, who is to provide and or to pay for medical cure and care? These are raised in questions 23 and 25a. Categories for "private" responsibility include those who are personally involved or affected (e.g. families with individual members in need of long lasting care) and those personally at higher - self induced - risk (e.g. smokers). The "public" categories range from rather abstract target groups such as "the state", over particular societal interest groups (e.g. "the employers"), to the local communities. Measures to be taken to secure the functioning of the health system also emphasize either "public" (e.g. to increase taxes, to advance medical technical equipment) or "private" actions (e.g. to encourage health protective behaviors, to improve family care, to increase insurance premiums for smokers).

With respect to social-structural differentiation in each country, we limit our analysis to five indicators of demographic and social stratification: gender, age, education, health insurance membership, and health status. These indicators have been chosen for substantive as well as methodological reasons. Beyond their descriptive use as demographic characteristics these categories can enhance our understanding of the links between social differentiation and health care evaluations.

In that respect, we suppose that associations between particular perceptions/attitudes on responsibility for health care and socio-demographic characteristics are at least partly due to three co-factors, namely patterns of need, frequency of utilization, and patters of discriminative use of services. More precisely, we suppose that individuals with higher need of care and cure tend to

:mphasize public responsibility to finance and provide medical services. This is)ecause those who carry heavier burdens will have a vital interest to distribute the veight of such burdens on as many shoulders as possible. This is particularly true n health matters as the financial and emotional burdens of illness may ultimately :xceed individual resources and coping capacities. Similarly, those with higher ıtilization rates most often cannot afford the services they need without the upport of a larger solidarity group, be it an insurance plan or a state supported nedical program. With respect to discriminative utilization, those who use medical ervices according to their own judgement and rational choice will tend to :mphasize individual responsibility for health matters in general. Such patterns of ieed, utilization and discriminative use of services can be linked to the ociodemographic factors listed above. In particular, we might expect women to ıore strongly emphasize solidarity and social responsibility. Earlier studies have hown women to have on average higher medical need and consequently show igher utilization rates (Verbrugge 1985). Also, women make more use of reventive services (Dean 1989). And it is women who carry the heaviest burden f caring for the elderly, the sick and dependent family members in general. Therefore we would expect women to more strongly emphasize public esponsibility for health care.

Similarly, higher need and utilization of medical services among the lower class would lead them to support public over private responsibility for health care. Also, ıe lower educated are more likely to use medical services indiscriminantly which an be seen as a co-factor affecting their evaluation of who is in charge when it omes to health matters.

If our general assumption of an association between distinct patterns of higher eed/use and an emphasis on responsibility by "Others" applies, than we would lso expect older people to express a focus on public responsibility and invest due) their increased need and higher utilization (Hulka and Wheat 1985, Cockerham 991).

For parallel reasons we expect those with lower health status to emphasize ublic responsibility.

In contrast, people with private health insurance status will be more likely to ıow higher scores on private responsibility as they show on average lower tilization rates and more discriminative use of services (Hulka and Wheat 1985, Vysong and Abel 1991). Also, the privately insured have either opted out of the ırge solidarity group of publicly insured or are not part of it due to state :gulations (e.g. in the Netherlands).

In summary, we hypothesize a stronger emphasis of private over public :sponsibility for men over women, younger over older people, higher over lower ocial class, private over public insured, and those with better over those with ıwer health status. We expect such associations generally to hold in all four ations under investigation but will also explore intra-nation differences in their rength.

Measures and Methods

Our first measure is a composite variable that indicates respondents general attitude on financing health services. Respondents were asked "*Who should pay more for health care and the health system*"? Out of 6 items (see Appendix question 25a) four focused on the public sector i.e. formal institutions or interest groups: "*the government*", "*the employers*", "*the community*". Two regarded individuals ("*each individual*" and "*the insured*"). Answers to each question were coded with highest scores (5) indicating full agreement that additional financing should be provided by the public sectors and lowest scores (1) for strong disagreement. An index (PUBFIN) was computed as the sum score of all 6 items, two of them with reverse coding. Thus PUBFIN has a minimum score of 6 and a maximum of 30.*

Our second measure concerns structural efforts to improve the quality and functioning of the health care system. Respondents were asked in what sectors of the health care system the government, public administrations and other respective offices should increase their efforts (see Appendix question 24). Four items indicated policies to develop curative medicine sectors, as "*more emphasis on medical technology and equipment*", "*rehabilitation treatment and care for the sick*", "*medical professional training*" and "*medical research*". Four items stressed increased efforts for prevention: "*more emphasis on health education*", "*home care*", "*programs for physical activity and sports*" and "*healthy nutrition*". Answers to each question were coded with highest scores (3) for a focus on prevention and lowest scores (1) for increased efforts for curative medicine. The resulting variable PREVENT was computed by summing the scores on all 8 questions, yielding a minimum score of 8 and a maximum of 32.

A third measure is on the issue of health care as a "right" or "privilege" and is called FREECARE. Respondents who agreed that "*adequate and free health care is a right for everybody who need it*" scored 3, those who agreed that "*everybody is responsible for their own health care*" scored 1, those who could not decide between the two were assigned a score of 2.

Finally, two questions raised the issue of higher insurance premiums for those with behavior-related risk factors (question 25b). Respondents were asked whether smokers or obese people should be charged higher fees for health insurance. Those answering "*much more*" were assigned a score of 3, those "*more*" a score of 2. Answers "*same*", "*less*" or "*much less*" were scored 1 for the respective variables SMOKEFEE and OBESEFEE.

The following explanatory variables were used to examine social structural and demographic effects on the dependent variables: AGE, FEMALE, EDYEARS, subjective Health Status (HLTHSTAT), Health Insurance (INSUR) with "public"

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* The Variable PUBFIN is a combination of INSTFIN and SELFFIN (reversed coding) as defined earlier on p. 63. Unlike the sum of scales in PUBFIN they were composed of average scores.

or "public-private mix" scoring 1 and "private" scoring 2. No discriminant information on health insurance is available for the French sample as all respondents are public insured in the *Mutuelles*. When examining variations in peoples' attitudes on higher insurance premiums for smokers and obese people, regular smoking and two BMI (Body Mass Index) measures were used as control-variables. BMI was computed by weight (kg)/height(m)^2. Basic information on the distribution of measures are provided in Table 8.1.

Table 8.1: List of Health System, Behavioral and Attitude Variables (Means and SD)

	GE	NE	BE	FR
INSUR (%private)	.11	.37	.34	–
	.31	*.48*	*.47*	–
SMOKER (regular)	.39	.43	.39	.29
	.49	*.49*	*.49*	*.46*
BMI	24.31	23.76	24.01	23.74
	3.65	*4.17*	*3.80*	*3.40*
PUBFIN	20.5	19.8	20.0	20.4
	3.5	*3.0*	*2.8*	*3.0*
PREVENT	15.6	16.1	15.9	16.1
	2.0	*2.0*	*1.7*	*1.8*
SMOKEFEE	1.9	1.6	1.6	1.9
	.7	*.7*	*.7*	*.7*
OBESEFEE	1.6	1.2	1.2	1.2
	.6	*.4*	*.4*	*.5*
n =	663	599	360	149

Statistical methods estimated effects of social stratification and demographic variables on health policy attitudes by Ordinary Least Squares Regression analyses. The primary interest here was on intra-nation variations in such attitudes. We tested the same set of correlates in each sample with only one exemption: data on health insurance membership were not available for the French sample. A subsequent task were comparisons across nations. Such comparisons are made at a more general level by examining differences between the sets of significant estimates for each nation. Given the exploratory character of the study, R^2 estimates are not used here for direct comparisons of national samples. Rather, they are reported only for the sake of completeness.

Results

The financing of health care: public versus private responsibility

Our composite variable PUBFIN measures peoples attitude on who should pay more for health services. High scores on PUBFIN (minimum score=6, maximum score=30) indicate an emphasis on higher financial responsibility to be taken by public or formal institutions like "the government", or "the employers". As was shown in Table 8.1, mean scores were above a the midpoint of equally shared responsibility (18.0), indicating a somewhat stronger emphasis on public responsibility for financing health care in all four nations under investigation.

However, Table 8.2 displays considerable intra-nation differences. Among Germans, there are significant effects of age, gender, education, health status and type of health insurance. Younger people, males, the lower educated, those in poorer health and the public insured are more likely to demand public institutions and the group of employers to pay more for the health care system. Among the Dutch the same differentiation effects are observed, except for a non-significance of the insurance membership variable. In France, also, it is the younger and the less educated who more strongly emphasize public financing. For the Belgium sample we find no significant variation by any of those five predictor variables.

Table 8.2: Beta-Coefficients of Regressions for Emphasis on Public Financing of Health Care (PUBFIN) on 5 Explanatory Variables

	GE	NE	BE	FR
AGE	-.26***	-.18***	-.03	-.31***
FEMALE	.14***	.14***	.10	-.02
EDYEARS	-.22***	-.19***	-.10	-.33***
HLTHSTAT	-.09*	-.02	-.04	-.02
INSUR	-.11*	-.09*	-.09	-
R^2	.14	.10	.03	.15

Stressing prevention instead of curative medicine

Toward what sectors of the society should policies for improving health be directed: to improve prevention or to stress curative medicine? The composite variable PREVENT measures people's emphasis on policies for prevention over curative medicine. Scores for PREVENT range from 8 to 27 with an equal balance score of 16.5. Table 8.1 shows mean scores for PREVENT to vary closely around that midpoint in all four nations.

Table 8.3 displays a strong and consistent effect of education in all nations, howing the higher educated more inclined to increase efforts for the curative nedicine and technology. There is a small significant effect of gender in Germany, indicating that German women are more likely than German men to mphasize such policy.

able 8.3: Beta-Coefficients of Regressions for Increased Prevention Orientation in Health Care (PREVENT) on 5 Explanatory Variables

	GE	NE	BE	FR
AGE	-.01	.03	.10	-.04
FEMALE	.10*	-.00	.08	.07
EDYEARS	-.29***	-.23***	-.18**	-.28**
HLTHSTAT	-.06	-.01	-.03	.01
INSUR	-.01	.09	.06	-
R^2	.10	.05	.07	.08

Health care as a right versus a privilege.

Our third dependent variable is based on answers to the question whether adequate ealth care is to be considered a right for every citizen or a privilege. A high score n FREECARE indicates a focus on public responsibility for health care. Table .1 shows an emphasis on public over private responsibility in all four nations as ndicated by mean scores of 2.4 or 2.5 (midpoint 2.0).

able 8.4: Beta-Coefficients of Regressions for Health Care as a Right (FREECARE) on 5 Explanatory Variables

	GE	NE	BE	FR
AGE	-.26***	-.17***	-.08	-.14
FEMALE	.03	-.00	.03	.05
EDYEARS	-.05	-.03	.07	-.08
HLTHSTAT	-.12**	-.06	-.11*	-.05
INSUR	-.08	-.14**	.00	-
R^2	.07	.05	.02	.02

here seems to be a rather high consensus on this issue across the four nations. owever, within each country considerable variation can be observed as seen in able 8.4. Age appears negatively correlated with FREECARE among Germans nd in the Netherlands. In Germany and Belgium, poorer health is correlated with focus on public responsibility. The private insured in the Netherlands also tend o emphasize private responsibility for health care. Among the French, only age isplays a considerable although statistically non-significant effect.

Financing health care for those with behavior-related risks: solidarity versus individualization.

Should smokers or obese people pay higher health insurance premiums? For each of the respective variables higher scores indicate respondents inclination to demand higher contribution rates for specific risk groups. With respect to smoking, Table 8.1 shows average higher mean scores in Germany and France when compared to the Netherlands and Belgium. With a range of 1 for no higher premiums, 2 for higher premiums and 3 for much higher premiums a mean value of 1.9 indicates a stronger support for increased payment in Germany and France when compared to the Netherlands and Belgium (both 1.6). With respect to social determinants there is a considerable variation within the German and the Dutch sample (see Table 8.5).

Table 8.5: Beta-Coefficients of Regressions for Higher Premiums for Smokers (SMOKEFEE) on 5 Explanatory Variables

	GE	NE	BE	FR
AGE	.01	-.02	.02	-.03
FEMALE	-.03	-.10**	-.01	-.01
EDYEARS	.02	.18***	.08	.06
HLTHSTAT	.03	.04	.05	-.02
INSUR	.05	.23	.04	-
SMOKER (regular)	-.39***	-.31***	-.24	-.14
R^2	.15	.15	.07	.02

As was expected, smokers are less likely to support higher premiums. Yet, it appears surprising to find this effect statistically non-significant in Belgium and France. The later finding can only partly be explained by the smaller sample size and a respective higher standard error as regression coefficients (standardized and unstandardized) were considerably lower for the SMOKEFEE variable in Belgium and France. In fact, non of our predictors yields statistical significance in these two national samples. This indicates that on issues of higher insurance premiums for smokers there is less diversification among the Belgians and French. Among the Dutch, the group of active smokers, those with a lower educational background and women, are less likely to support higher fees by smokers.

With respect to increasing premiums for obese people, there is in general, even less support. Mean scores are 1.6 in Germany and 1.2 in the other three national samples (see Table 8.1). There are only slight variations on this issue within each nation (see Table 8.6). Support seems to increase with age in Germany and the Netherlands and appears higher among the private insured in Germany and Belgium. Women in Belgium and Dutch respondents in better health are more likely to demand higher fees by the obese. Respondents' own body weight (BMI

or severe obesity status) did not yield any significant effect in either nation (numbers are not shown).

Table 8.6: Beta-Coefficients of Regressions for Higher Premiums for Obese People (OBESEFEE) on 5 Explanatory Variables

	GE	NE	BE	FR
AGE	.13**	.12*	.03	-.01
FEMALE	.03	.01	.11*	-.02
EDYEARS	.01	.08	.02	-.05
HLTHSTAT	.02	.10*	.09	-.14
INSUR	.10*	.03	.13*	-
BMI	-.07	.04	.04	-.16
R^2	.03	.03	.04	.03

Summary and Discussion

The aim of this study was to examine attitudes concerning policies for selected health care issues with a special focus on public versus individual responsibilities for financing and providing health care and a focus on prevention versus curative medicine. Regression analyses were employed to test our general assumption that members of particular social groups tend to emphasize public or institutional responsibility over individual or private responsibility. Our basic assumption was that groups with higher need and higher subjective and/or objective burdens would be more likely to support increased efforts in the public sector. We expected these associations to hold in all four nations under investigation.

Overall, five attitude measures and a set of five predictor variables (plus two variables on smoking and obesity status) were used to study the general distribution and specific variations across selected groups in each of the four nations. Table 8.7 presents an overview of the findings.

There were considerable intra-nation variations in attitudes on financing health care (PUBFIN) in Germany, the Netherlands, and France, but not in Belgium. In the German sample all five predictor variables showed a significant effect. In the Netherlands four out of five and in France two out of four predictors were found significant.

The effect of education appeared most consistent, supporting our hypothesis that members of higher social status are more likely to support private financing. Also, we expected women and the public insured to favor public financing. This hypothesis was supported in the German and in the Dutch sample. An association between better health status and favoring private financing was found significant among Germans only. Age was also a strong predictor but did so consistently in

the opposite direction of our hypotheses. Contrary to our assumption it is the older people who show a relatively stronger support for private over public financing. This result is found in Germany, the Netherlands, and France.

Table 8.7: Summary of Statistical Results

(for each nation "+" indicates statistical support for the hypothesized effects of explanatory variables on each dependent variable; "0" indicates no sig. effect; "-" indicates statistical rejection of expected relationship)

Dep. Var.	Expl. Var.	GE	NE	BE	FR
PUBFIN	FEMALE	+	+	0	0
	AGE	-	-	0	-
	EDYEARS	+	+	0	+
	INSUR	+	+	0	n.a.
	HLTHSTAT	+	0	0	0
PREVENT	FEMALE	+	0	0	0
	AGE	0	0	0	0
	EDYEARS	-	-	-	-
	INSUR	0	0	0	n.a.
	HLTHSTAT	0	0	0	0
FREECARE	FEMALE	0	0	0	0
	AGE	-	-	0	0
	EDYEARS	0	0	0	0
	INSUR	0	+	0	n.a.
	HLTHSTAT	0	+	0	+
SMOKEFEE	FEMALE	0	+	0	0
	AGE	0	0	0	0
	EDYEARS	0	+	0	0
	INSUR	0	0	0	n.a.
	HLTHSTAT	0	0	0	0
	SMOKER	+	+	0	0
OBESEFEE	FEMALE	0	0	-	0
	AGE	-	-	0	0
	EDYEARS	0	0	0	0
	INSUR	+	0	+	n.a.
	HLTHSTAT	0	+	0	0
	BMI	0	0	0	0

Should governmental efforts be intensified in the private or the public sectors of health care? Compared to financing, there was considerable less variation on this issue as only education and gender showed significant effects. There was some support for our gender hypothesis as only among Germans women were more likely to favor public efforts. Most interesting, however, was the strong and cross-nationally consistent effect of education. In opposition to our hypothesis it were

he better educated who showed stronger support of an increase in curative over preventive efforts for health. This finding holds in Germany, the Netherlands, Belgium, and France alike.

Is health care to be considered a public right or an individual responsibility? Overall, statistical support for our respective hypotheses was only weak. As predicted, those in poorer health were more likely to emphasize public responsibility for adequate care in Germany and Belgium. Private health insurance was positively correlated with "health care as an individual responsibility" attitude only in the Netherlands. Reverse to our hypothesis it was the group of the younger who showed a stronger emphasis on FREECARE or "health care as a right". This holds in all four nations, but respective associations reached statistical significance only in the German and in the Dutch sample.

There was some support for raising insurance premiums for smokers. Yet, intra-nation variations were less than expected. Table 7 shows the hypothesized effect of gender only in the Netherlands as Dutch men are more likely than Dutch women to support higher contribution rates for smokers. As expected, active smokers tend to oppose higher premiums. Yet, this association was statistically not significant in Belgium and France.

There was very little support to draw higher premiums from those who are obese. With respect to our hypotheses on intra-nation variation we find some partial support as in Germany and Belgium those with private health insurance were more likely to favor higher premiums for obese people. Among the Dutch there is a positive association between health status and approving higher premiums by the obese. Yet, contrary to our hypothesis we find older people more likely than the younger to support increased premiums of the obese (statistically significant in the Netherlands and Germany). Also, women in Belgium show higher approval rates than their male counterparts.

Overall, we have observed considerable intra-nation variation on specific issues of financing and providing health care services. There were significant differences by social stratification (as measured by education and insurance membership), gender, and age. These effects appear more pronounced than cross-national differences among these four European countries. Our basic assumption on a stronger emphasis on public responsibility among those groups whose members are on average in higher need or carry higher burdens in the health care sector was supported in some cases and on various sub-issues. However, this thesis should not be generalized and needs further differentiation. In two cases the present findings even suggest to reverse this assumption. Higher age - which is on average associated with higher need - was linked to a stronger emphasis on private responsibility in the sector of financing health care and with respect to the basic value of health care as a "privilege". This result is in line with earlier findings from Germany that showed younger people to be less satisfied with the state in general and to ask for more state responsibilities (Statistisches Bundesamt 1992a). One explanation here might be, that the younger generations in Western European nations tend to take the welfare state, or better, its benefits, for granted while the

older generations had in their earlier life course to manage without extensive welfare services and social security systems. Older people might therefore tend to perceive welfare services, including health care, as a good not only to be consumed but also to be produced by individuals. In more structural terms, they might be less individualistic with some indication that this would be due to a cohort effect. These are interpretations that can not be answered from our data.

With respect to priorities for improving the quality of health care it were the higher educated who showed a stronger emphasis on curative medicine over prevention policies. Obviously, their trust in the medical profession and high technology overrides the benefits expected from better nutrition, sports, domestic care and health education.

Chapter 9:
From Utilization to Evaluation

by Jouke van der Zee and Thomas Abel

Introduction

Utilization

arly studies into medical consumption and health service utilization, like the ndersen studies dating back to the sixties and seventies (Andersen and Aday, 978), were mostly concerned with equity questions and economic or social arriers to equal access.

The famous Andersen analytic model (Andersen, Kravits and Anderson, 1975) at explains health care utilization as a function of three sets of variables -"need" ctors, "enabling" factors and "predisposing" factors- is in fact constructed in rder to detect whether factors other than "need" indicators influence utilization. If is was the case, especially if "enabling" factors, like the degree to which one's sts of illness are covered by health insurance, determined to a certain extend alth care utilization, the system lacked equity and was a candidate for change.

As most industrialized countries extended the coverage of their public health surance to practically the whole population in the sixties and seventies (OECD, 993, VII) and even in the USA created public programs for the elderly and the digent (Medicare and Medicaid), one might expect that in modern utilization udies the influence of factors other than those representing "need" or "health atus" will be neglectable.

This does, of course, not imply that illness is distributed randomly among tizens of modern welfare states. There are still considerable differences in health atus among socio-economic strata of society (Townsend, Davidson, 1982; rombie,1984; Gunning-Schepers, Spruit and Krijnen, 1989), but, differences in ilization are predictable and neglectable with the exception of the use of reventive services, that are more popular among the better educated.

It does not imply either, that there will be no differences in the type of services ople use. Health care systems differentiate in the way they design and regulate e "package" of services available for their members. The "morphology" of a alth care system is not uniform, not even among countries with a comparable gree of economic development. An "invisible hand" (or is it Jan Pierre Poullier mself) seems to govern the relationship between "health and wealth", that is

between health care expenditures and a country's national or domestic product (OECD, 1993). There are no internationally accepted "norms" for health spending, but most countries seem to allow the growth of health expenditures within a certain macro-economic framework. So there are considerable differences in health care provision, utilization and spending between countries in different macro-economic wealth categories and within countries in different time-periods. These differences are taken for granted here. Beside these there are also remarkable differences between economically comparable countries. Differences in regulation and morphology rather than differences in insurance-coverage determine utilization of a specific mix of health care provisions given a certain health problem or a certain pattern of consumer preferences.

In general however, we think that these differences will be limited. If someone is seriously ill, hospital treatment will be the rule and not the exception. In the pre- and post-hospital traject, however, there may be different routings, but even hospital admissions rates vary, according to OECD-statistics, from approximately 100 per 1000 population in the Netherlands to the double (210 per 1000) in France (OECD, 1960-91,185).

So, in comparative studies on health care utilization among countries that have realized universal insurance coverage, differences in utilization of health services will be determined by "need" factors (especially within health care systems), while differences in regulations and the morphology of health care supply will lead to differences in the utilization of specific services.

Evaluation

A more promising line of thought, that is, more promising than studying utilization differences in universal coverage health care systems, is how patients, clients and customers evaluate the quality of the services they receive.

The most widely spread definition of quality is: the quality of a product (or a service) is good, if it complies with the expectations of their user. Even in health care, where client-evaluation is generally reduced to satisfaction studies or even distorted to patient compliance with doctor's orders and a professional, peer oriented attitude towards quality prevails, clients are being taken more seriously not only by health care administrators but also by the health care professions themselves.

"Personal doctor" systems replace bureaucratic health centers in Scandinavia, i.e. the Swedish and Norwegian health care reforms (Saltman, von Otter, 1992) and in Eastern Europe (Evans, 1994); waiting lists, although to a certain extent viewed as a condition for efficient resource allocation by health economists (v.d.Zwan, van Dijk, 1993), are increasingly considered as an insult to the public. In Sweden waiting lists disappeared, when people were allowed to seek private care, if they could not be helped in the public system in due time (OECD 1993,38). In the British National Health Service, notorious for its waiting lists, the provider dominance is being challenged from two sides. Regional health

uthorities were transformed from administrative agencies into purchasers of ealth care and general practitioners into budget holders for none-acute outpatient nd inpatient care. The division of power is, certainly in the case of GP-undholding, not equal at all. A 600-bed acute care hospital has a catchment area f approx. 175,000 inhabitants*, a GP fundholding practice 5,000-15,000 clients nd its quite usual that there is more than one hospital in the area. However, hallenged from two sides, British (and other countries) hospitals will have to ecome more client oriented than ever before.

According to Fleming (1993; 1992,56), who performed an internationally omparative study of referrals from GPs to medical specialists, health care ystems, where specialists receive a fee-for-service remuneration instead of being alaried employees, waiting time between referral and treatment is lowest.

Discontent with a country's health care system is a major political topic, owadays, as the last presidential elections in the USA show. People can tolerate uite some hassles, if they believe these are incidental, or relate to a specific epartment or health care professional. As soon as discontent becomes general in haracter, it will turn into a "hot" political issue.

The famous multination opinion survey by Robert Blendon and associates Blendon et al., 1990,185-92; Blendon et al., 1991, 216-28) showed that citizens f the USA were very negative about their health care system; comparable only to ıe Italians (resp 10 and 12% satisfied). Canadians were the most positive (as were ıe Americans about the Canadian system).** For the WESH-study the rates for ermany, France, Belgium, Spain and the Netherlands are relevant. The ercentage of persons satisfied by the existing health care system were (in 989/1990): Germany (40%), France (40%), Netherlands (47%), Spain (21%), elgium was not included in the survey. Pescolido et al. (1985) did a similar study few years earlier: they come with much more positive figures about Italy.

Utilization and Evaluation in the WESH-Study; Expectations

he WESH-study contains both elements of utilization and evaluation, the perationalization of which discussed in a separate section (pp 60-62). In this ction the general statements in the first sections will be transformed into more ecific expectations.

It will be a rather crude analysis aiming, with regard to utilization, at a sort of ıecking whether we expect and find factors influencing utilization other than

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The calculation goes as follows. If we accept an average occupancy rate of 80% (which is ther high, according to Table 5.2.11 (page 188-899) of OECD, 1993), a 600 bed hospital has 0x(.8x365)=175,200 bed days available. In the UK the admission rates for acurate care are 986, OECD, 1993,185) 12.9 per 100 population and the average length of stay is 7.8 days. So e catchment population is (175,200/7.8)x(100/12.9)=174,080 approx. 175,000.

In a comment on the Blendon paper, Jajich-Toth and Roper state the questions in the rvey were suggestive, because, added to the preference question about the Canadian health care stem, there was a remark "which is cheaper than the American system anyway".

(determinants of) health status preferably to be derived from characteristics of the countries' health care system.

There are two sets of characteristics, other than demand factors, relevant here: the first regarding health insurance and remuneration, the second set regarding the morphology of the health care system: the quantity and quality of the supply of health care facilities.

Health Insurance

The social security system of the four countries studied can be subdivided into two "families": the truly "Bismarckian" social security systems in Germany and Holland* and the French family consisting of France and Belgium. Both are social security systems which implies that they are employment-oriented. Both started as an insurance for workers, were quite soon extended to their dependents, and later to ex-workers (unemployed, disabled, retired) and finally to the self-employed and the never-employed. The difference between the two families is that the original Bismarckian system has a "paternalistic" trait; mandatory and public insurance is intended only for the lower income strata. If somebody's income is above a certain ceiling, one is supposed to be sensible enough to insure oneself. So in Germany and in the Netherlands, the upper income strata have private insurance against costs of illness. In Germany it is less than the upper 10 percent; in the Netherlands it is almost 40 percent (38 to be exact). More information about the origins of social security in Europe and the USA is to be found in de Swaan's analysis (1988).

A crucial element in this private insurance is that the insured have several options in their policy to include or exclude certain services and/or to opt for deductibles of varying size. There is a wealth of studies (v.d.Ven, 1983; v.d.Ven and van Praag, 1981; v.d.Zee, 1982) analyzing the relationship between insurance coverage and health care utilization. Its a tricky relationship, because it is blurred by factors like education, social status and status related better health, but it has been shown (in the Netherlands) that persons with private health insurance without including GP-services and/or a high deductible do consume less services than private patients with GP-services that included a low deductible. So for Germany and Holland we expect a lower consumption of GP- and outpatient services for privately insured persons.

In Belgium a comparable discussion took place about the question whether medical care without co-payment would increase utilization. In Belgium (as in France) there is no income ceiling for health insurance, but a general principle of co-payment by consumers (usually 25% by partial reimbursement). In Belgium some deprived and low-income groups (in French VIPO, *Veuves* (widows),

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* It is no coincidence that the health insurance systems of Germany and Holland are so alike. In December 1991 a discreet ceremony took place in the Hague: without publicity the 50th anniversary of the Dutch public health insurance was celebrated, introduced in 1941 during the German occupation.

Invalides (disabled), *Pensionnaires* (old age pensioners), *Orphelins* (orphans) receive full reimbursement (Vuylsteek et al., 1985) and consume more services.

In contrast to this group the self-employed (the "independent") usually have only their inpatient care covered, unless additionally insured. So, in Belgium, the lack of utilization barriers for the underprivileged might be balanced by the limited coverage for the self-employed; net result zero.

Remuneration of providers

It has been shown in several studies (Glaser, 1970; Hemenway et al., 1990; Krasnik et al., 1990; Delnoy, 1994) that a Fee-For-Service remuneration for health care providers stimulates the number of services provided. It has also been shown that it is not the first contact in an episode of illness that is influenced by financial incentives on the provider's side, but rather the repeat contacts. So, total utilization will be influenced, but the chance of meeting a provider will not.

Fee-For-Service payment is the most common way of physician remuneration in Belgium, the Netherlands, Germany and France. There are some exceptions: the Netherlands GPs receive a capitation payment (flat fee) for their publicly insured patients (average 62%) and in Germany hospital based physicians are generally employed and paid by the hospitals.

So the only physicians that have no financial incentives to produce services are the Dutch GPs and the German hospital-based physicians - although the latter can charge their private patients. This may influence the total number of GP-contacts in the Netherlands but not the number of patient-initiated contacts, and it might also influence the type and number of hospital services produced in Germany. For the rest the situation is more or less similar in the four countries.

Morphology of services: access regulation

Most health care systems have some services with restricted access, usually by referral only. An anaesthetician generally is not freely accessible, although there are exceptions to this exception in Belgium some anaesthetician have outpatients clinics for patients suffering from pain. Other countries have secluded a much larger part of the health care domain; in the UK, the Netherlands and Denmark the general practitioner acts as a gate-keeper for inpatient and outpatient medical specialists (Crombie, v.d.Zee and Backer, 1990). One needs a referral for a specialist; otherwise costs will not be reimbursed.

In Germany services of GPs and (independent) outpatient specialists are accessible without referral, but inpatient care is not. In Belgium and France all health care is directly accessible, although access to inpatient care will often be filtered through medical intervention.

If GPs, as gate-keepers, act as perfect agents to their clients,* access regulations would not make a difference; patients would be referred if a condition is too serious for treatment by the GP. One would expect that in countries where

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* The concept of "agency" stems (for the application in health care studies) from Martin Feldstein and has been used in many studies afterwards (Feldstein, 1974).

outpatient specialists are directly accessible, factors other than health status will influence utilization, because one might expect in this situation (without the GP's filter) a certain over-utilization of specialists' services.

In Germany this effect will be the strongest, because with the ambulatory specialists directly accessible and inpatient care on referral only, there will be a strong pull into the direction of ambulatory specialistic care, as a comparative study showed on regional variations in hospital admission rates in Belgium, France, Germany and the Netherlands (Noordt, v.d.Zee and Groenewegen, 1992).

Morphology of services: density of services and service mix

From OECD figures presented in Chapter 2 we can derive that countries do vary in service mix; some countries are typically hospital dominated like France and Germany; in the Netherlands long term care is dominant and Belgium has high densities of independent health care providers like GPs and specialists.

In Table 9.1 a summary of the findings in Chapter 2 will be recapitulated. Figures for (1) the number of acute care beds, (2) all beds minus acute care beds, (3) the number of general practitioners and (4) the number of specialists will be presented. This is a limited selection from the total service mix patterns, but it represents essential services.

Table 9.1: Number of Acute Care Beds, all Beds minus Acute Care Beds, GPs and Specialists per 1000 Pop (1990) in Belgium, France, Germany and the Netherlands

	Acute Beds [1]	Other Beds [1] (mostly longterm)	GP Density [1]	Specialist Density [2]
BE ('89)	5.6 ‰	4.2 ‰	1.67	1.4
FR	5.2 ‰	4.5 ‰	0.95	1.3
GE	7.5 ‰	2.9 ‰	0.50	1.7 ('89)
NL	4.3 ‰	7.1 ‰	0.43	0.7

(Source:
1 Boerma WGW, FAJM de Jong, PH Mulder, Health Care and General Practice Across Europe, Nivel/Dutch College of General Practitioners, 1993
2 OECD, 1993, Table 5.15)

As we already discussed in Chapter 2, we find differences in GP-density (high in Belgium and France and lower in Germany and the Netherlands); a rather low specialists-density in the Netherlands; a high number of acute care beds in Germany and a relatively high number of long-term beds in the Netherlands. When we combine these density factors with information on accessibility and physician-remuneration, we come to the following expectations:

Belgium: High density of GP's and specialists; Fee-For-Service payment, direct access to specialists care, moderate density of hospital beds, some service-inducing and some service containing elements in the insurance system; high chance of being under medical treatment, especially of ambulatory care.

France: same picture as in Belgium; more "pull" from the hospitals.

Germany: low density of GP-care, parallel access to ambulatory specialists' care, sort of lump sum payment for GPs, fee for service payment for ambulatory specialists' care and salaries for hospital specialists, small number of private patients, high number of acute hospital beds, low number of long-term beds; quite a chance to be under (ambulatory) specialist treatment, less chance to be under GP-treatment.

Netherlands: low GP density, low specialist density, low acute bed density, high long-term bed density, no direct access to specialists, capitation fee payment for GPs, fee for service payment for specialists, considerable group of privately insured patients: a Dutch person has the lowest chance of receiving medical treatment of the four countries and the highest chance of receiving long-term (institutional) care.

The low number of countries prevents specification of the effects of conflicting or contradicting relationships; the general conclusion is that in Belgium and France the "pull"-factors from the health care system are strong; in Germany the "pull" from GP-care is weak but from specialistic care it is strong; in the Netherlands there will be little service induced demand because of low provider densities and financial disincentives in provider remuneration and access regulation.

This all is valid within the general notion that health service utilization is predominantly determined by need-factors; all statements about the influence of provision - and regulation characteristics are expected to have marginal influence only.

Method

In the WESH study there are two ways to illustrate this question:

Firstly there is a list of medical problems (mostly severe problems but also some minor ones) about which the following questions have been asked:

- *do you think one should see a doctor with these complaints*
- *did you experience these complaints in the last 12 month*
- *if so, did you see a doctor?*

The answers to the first question were used (especially regarding the minor symptoms) as an indicator for a culturally determined inclination to seek medical care. If one takes into account the last two questions about actual experience and utilization, the answers can be used to illustrate the expectations formulated above.

In that case we expect not many international differences in the utilization of services for serious medical problems and more for minor complaints. One has to

take into account that some can have more than one medical problem and receive treatment for none, some or all of them.*

Utilization was divided into three categories: given a certain (number of) health problem(s) one can have a low, moderate or high rate of treatment. Comparing these between the countries controls automatically for possibly unequal distribution of health problems between the countries.

The second way of answering this research question is to assess to what degree need-factors or their determinants influence the utilization of specific health services, the first method being too general for that.

The proportion of utilization variance explained by need-factors can be considered as a rough estimation of the degree factors other than need influence utilization. As in the WESH study figures about the actual local health care provision were not collected in the interview, no analysis within the countries at individual level can be produced. In this case, too, only crude indicators will be shown.

Results

In Table 9.2 the general figures of patients receiving medical treatment are shown.

When someone reports that she or he has a serious or chronic illness, treatment is a rule with few exceptions. For those with injuries or disabilities, France and Germany have treatment rates similar to chronic or serious illness and Belgium and the Netherlands report more cases not under medical treatment.

In the index constructed around 8 serious and 4 minor medical problems (the lower part of the table) the French have the highest treatment rates and the Dutch the lowest for serious illness. For minor complaints the rates are understandably lower, but here too the Dutch have the lowest rates and the French the highest, while in this case the German rates are comparable to the Dutch and the Belgian rates in between.

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* The list contains 8 serious health problems and 4 minor symptoms: 42.7% of the WESH population do not report a serious problem and 32.6% do not report a minor problem. Of those with a serious problem, more than 50% report more than one problem (max is 7).
An algorithm was constructed for each number of problems, determining the degree of actual receipt of medical treatment. Three categories were possible: (1) no treatment or a low degree, given one or more health problem, (2) an intermediate categorie (3) a high degree.
1 problem (539 cases): treatment (3), no treatment (1)
2 problems (319 cases): 2 treatments (3), 1 treatment (2), no treatment (1)
3 problems (138 cases): 2 or 3 treatments (3), 0 or 1 treatment (1)
4 problems (57 cases): 3 or 4 treatments (3), 2 treatments (2), 0 or 1 treatment (1)
5 problems (17 cases): 4 or 5 treatments (3), 2 or 3 treatments (2), 0 or 1 treatment (1)
6 problems (9 cases): 4,5 or 6 treatments (3), 3 treatments (2), 0,1 or 2 treatments (1)
7 problems (3 cases): 5,6 or 7 treatments (3), 3,4 treatments (2), 0,1,2 treatments (1)
Minor problems: the same scoring system as with serious problems. The number of cases are: 1 problem (633 cases), 2 problems (421 cases), 3 problems (176 cases), 4 problems (42 cases),

Table 9.2: Utilization of Medical Services for Serious Illness, Chronic Illness, Disability and Minor Symptoms in Belgium, France, Germany and the Netherlands

% under medical treatment		BE	FR	GE	NL	Total
General serious Illness		100	89	85	85	87
Chronic illness		88	80	90	82	87
Seriously wounded		75	88	83	67	76
Disability		69	87	89	73	83
Serious illness under	low*	39	37	37	37	37
	middle	38	29	37	44	39
	high	23	34	26	19	24
Minor illness under	low	63	55	70	73	69
	middle	27	32	26	23	25
	high	9	13	5	4	6

* low, middle, high refers to receiving medical treatment given a major or minor health problem

The proportion of utilization figures explained by need-factors is shown in Table .3. In the WESH files there are two utilization rates: visit to a GP-service or to a pecialist in the last 12 months. The degree to which these rates are explained by eed-factors can be considered as an indicator of the efficacy of a health care ystem. The relationship should approach unity in case health care utilization is a unction of health status and health problems only. This presupposes a perfect perationalization both of dependent and independent variables; theoretically owever there is nothing wrong with the assumption.

Table 9.3: Percentage Variance in Utilization of GP- and Specialist Services Explained by Health Status Variables (Subjective Health Status, Serious or Chronic Illness, Injury or Disability, Age and Sex) in Belgium, France, Germany and the Netherlands. Multiple Regression Analysis (OLS)

	BE	FR	GE	NL
GP Services	8.5	18.1	9.2	13.0
Specialists	7.7	10.7	9.3	17.4

Well, unity is still far away. The percentage of variance explained varies from .7% (specialist care Belgium) to 18.1% (GP care France). Apparently there is oth in the operationalization (a dichotomous dependent variable and no "curve-itting" for the relationship between age and utilization, for example) and in real ife a lot of error in the equation. This approach is obviously too crude. Moreover, s Table 4.6 shows actual utilization is highest among Germans for GPs as well as pecialists.

Discussion

Between France and the Netherlands there are clear cut differences in the degree of medical control both of serious and minor illness. Whether this implies under-utilization in the Netherlands or over-utilization in France remains unclear.

The low density of health services in the Netherlands might be interpreted as causing under-utilization in the Netherlands, but in case even the modest Dutch provision figures are more than sufficient, there can be over-utilization in all countries, because the data also show that treatment for serious and chronic illness is the rule and not the exception.

All variables are crudely operationalized and presented as dichotomous, which does not favor explanation.

Expressing the influence of health status variables as percentages of explained variance does not help further explanation. As the reasoning behind this approach is not revoked by the results we leave them for further discussion.

Chapter 10: Euregional Health Culture: An Exploration

by Joseph P.M. Diederiks and Fred C.J. Stevens

Introduction

Nations are the obvious and commonly used units of analysis in international comparative research on health care. This seems appropriate as long as the comparison of health care systems is the focus of analysis. It is also obvious, however, that nations constitute, to a certain extent, arbitrary defined domains. Depending on age and history of nations, cultural homogeneity within nations will vary. In this respect adjacent regions of different nations offer an interesting opportunity for comparative research. In addition to a possible common historical background, there may be actual diffusion of lifestyles and opinions across borders.

The Euregion Rhine-Maas can be considered as such a cultural "experimental situation". This Euregion consists of Belgium Limburg and a part of Dutch Limburg, a German region around Aachen, and the Belgium province of Liège. Several a priori similarities can be noted in the Euregion: language and a common recent history (Belgium and Dutch Limburg), common historical roots for the whole region and religion (Catholicism mainly). Actual cultural diffusion can be expected on the basis of border crossing for reasons of shopping, leisure activities and, especially, labor. On the other hand, the coexistence and interaction between different regions within one nation, produce certain emergent properties such as a collective self-definition to those regions (Oommen, 1989). For instance, people from Dutch Limburg see themselves as quite different, e.g. taking things more easily, from those in the West of Holland. It is uncertain than whether this self-definition is just a reaction to the people "in the west" or is rooted in common euregional" characteristics.

The question to be addressed in this chapter is whether there may be Euregional homogeneity with respect to health culture. This is an interesting question not only for cultural scientists, but also for health care policy officials. After all, as health care systems acquire more free market features, markets across borders come into view. The possibilities for a Euregional cultural identity with respect to health are, however, limited for a number of reasons. The most important of them is of structural nature. The health care systems of the national regions in the Euregion are obviously national. This applies most prominently to health care regulations,

accessibility and health insurance. Differences in medical consumption may be expected mainly on the basis of health care dissimilarities (Graig, 1993). Furthermore, the mechanism leading to a certain extent of general cultural identity, as outlined above, are rather weak in nature and aspecific with regard to health. What can one expect then from an exploration in similarities in health culture in the Euregion? The short and easy answer is: not too much. The more complex, possibly more correct, answer is that a rather mixed picture will appear, similarities as well as dissimilarities depending on what factor the comparisons will be based. For an exploration like the present one it seems appropriate to include a broad range of health-related factors. We will use health status, medical consumption, health-related lifestyles and health-related attitudes and values as the basis for the Euregional comparative study. Being classical topics in comparative research on health, health status and medical consumption need no further justification. Concerning lifestyles and health-related attitudes/values the focus will be on the prevailing trends in modern western nations: healthy behavior and self-responsibility for health as opposed to reliance upon modern technological medicine as safeguard for health and illness (Cockerham, 1995) and how do these behaviors and beliefs differ or overlap in a supposedly unified area that has had much of a common history.

Methods

The study population (n=779) consists of subsamples from the WESH-study in the Euregional areas (Table 10.1). In order to generate the necessary number of cases for the following analyses these areas were oversampled, i.e. for Aachen by 2:1 (cf. p. 55)

Table 10.1: Distribution of Gender for Subsamples of the Euregional Area (18-65 years)

Euregional area	male	female	N
Dutch Limburg	46	54	325
Belgian Limburg	51	49	219
Province of Liège	37	63	133
Aachen-Region	58	42	102

Women are somewhat overrepresented, especially in the Liège area. In the Aachen area women are underrepresented. There are also differences as to age and education. Therefore, in the analyses gender, age and education will be controlled for.

he health status and physician utilization variables to be used are:

- Perceived health: one item (five-point scale), 5=very good (HLTHSTAT).
- Health concern: one item (five-point scale), 5=very much worried (SICKWOR).
- Psychological distress: a modified Langner-scale, six items (four-point scale), max-score=24 (DISTRESS).
- Physician Utilization: yes or no items concerning visits to general practitioner or medical specialist in the past 12 months (DOCUTIL).

ealth-related lifestyle variables:

- Smoking: yes or no item on regular smoking.
- Drinking alcohol: yes or no item on using alcoholic beverages in the past six months.
- Sports: yes or no item on regular sports activities.

ealth-related attitudes:

- Consultation minor complaints: four minor complaints (Should you see a doctor for.., yes or no ?).
- Consultation major complaints: four major complaints (Should you see a doctor for .., yes or no ?).

ealth Locus of Control:

- HLC-physician: three items (four-point scale), max-score=12. High scores indicate trust in physicians for control over health and illness.
- HLC-internal: three items (four-point scale), max-score=12. High scores indicate the belief of self-control over health and illness.
- Curative-orientation: three items (four-point scale) on the government and other institutions doing less or more on medical technology, medical research and training of medical specialists. Max-score=12.
- Physical appearance: four items (three-point scale) on the importance of a healthy complexion, good posture, attractiveness to opposite sex. Max-score=12.

s social position variables age (in years), gender and education (years of formal ucation arranged in nation-specific quintiles) are included.

First, results will be presented on variable-level. This will provide detailed sight into the profiles of the subregions and the Euregion. Next, a Principal mponent Analysis will be applied to the variables to get a more summarizing ew on similarities an dissimilarities. The analytic tool will be Multiple assification Analysis, a type of ANOVA, from which the means of the spective regions adjusted for gender, education and age are presented. The level r statistical significance will be $\alpha=.05$. For the overall comparison of the gions, profile analysis will be performed. In this analysis parallelism and flatness profiles is tested (Tabachnick and Fidell, 1989).

Results

The first cluster of variables, perceived health status, sickworry for health concern and psychological distress, refer to subjective health status. From Table 10.2 it appears that perceived health varies with age, education and region; distress with gender, education and region. Health concern is related to region only.

Table 10.2: Adjusted Means for Subjective Health Status, Sickworry and Psychological Distress by Region plus Significant Effects of Social Position Variables

Euregional area	HLTHSTAT	SICKWOR	DISTRESS
Dutch Limburg	4.0	2.4	13.9
Belgian Limburg	4.0	2.7	13.8
Province of Liège	3.7	2.2	14.7
Aachen-Region	3.9	2.9	15.2
Significant Effects:	Age (+) Education (-) Region	Region	Female Education (+) Region

Especially noteworthy is the position of the Aachen-region with relatively high levels of health concern and distress. Belgium and Dutch Limburg show about equal levels of subjective health.

Physician utilization data (Table 10.3) show again the similarity of Belgium and Dutch Limburg, despite the difference in health care systems.

Table 10.3: Percentages for Medical Consumptions in last 12 Month by Region plus Significant Effects of Social Position Variables

Euregional area	General Practitioner	Medical Specialist
Dutch Limburg	60	27
Belgian Limburg	58	33
Province of Liège	28	29
Aachen-Region	75	55
Significant Effects:	Region	Female Region Age (+)

In agreement with the subjective health data are the high percentages of people consulting either a general practitioner or a medical specialist in the Aachen-region. The two Belgian regions are especially dissimilar for the consultation of general practitioners. This finding contrasts with the fact that the same health care system applies to these regions.

The overall impression from the data so far is the similarity of Belgium and Dutch Limburg and the distinct, unfavorable position of the Aachen-region. The egion of Liège can be typified by low levels of health concern and physician tilization.

Health-related lifestyles are predominantly related to social position variables. The percentages of frequent smoking do not vary significantly over the regions, while the Aachen-region ranks highest for alcohol consumption and regular articipation in sports (Table 10.4).

It is noteworthy that as far as the typical "lifestyle"-factors are concerned, uregional heterogeneity is rather small.

able 10.4: Percentages for Health-Related Risk-Behavior (Regular Smoking, Alcohol in last 6 Month and Sport Participation) by Region plus Significant Effects of Social Position Variables

Euregional area	Regular Smoking	Drinking Alcohol	Regular Sport Participation
Dutch Limburg	32	79	58
Belgian Limburg	29	70	53
Province of Liège	37	65	48
Aachen-Region	24	87	68
Significant Effects:	Male	Male Region Education (-)	Education (+) Age (-) Region

At this point it is interesting to look at the health-related attitudes and values as ey represent the core of the health culture concept. In comparing curative-rientation, the orientation to the self as locus of control and the importance of hysical appearance, it is quite clear that the province of Liège ranks as highest ere, especially as compared to Dutch Limburg (Table 10.5).

able 10.5: Adjusted Means for Health Attitudes/Orientations (I) by Region plus Significant Effects of Social Position Variables

Euregional area	Cure Orientation	HLC-Internal	Physical Appearance
Dutch Limburg	7.9	6.4	8.6
Belgian Limburg	8.1	7.3	8.8
Province of Liège	8.9	9.6	9.2
Aachen-Region	8.1	9.2	8.7
Significant Effects:	Region Education (-)	Region	Female Region

At first it seems paradoxical that a high orientation to curative medicine oincides with a high levels of internal locus of control and the importance of

physical appearance as is the case in the province of Liège. This combination can however be regarded as typical for an instrumental attitude given the importance of ones own body. The logical next step is the analysis of regional variations in the reliance on the physician both in general terms as for the inclination to consult the physician for specific symptoms (Table 10.6).

Table 10.6: Adjusted Means for Health Attitudes/Orientations (II) by Region plus Significant Effects of Social Position Variables

Euregional area	HLC-Physician	Consulting for Minor Complaints	Consulting for Major Complaints
Dutch Limburg	6.4	0.8	3.3
Belgian Limburg	7.3	1.7	3.5
Province of Liège	7.4	1.5	3.2
Aachen-Region	7.1	1.3	3.6
Significant Effects:	Region Education (-)	Region Education (-)	Region

The main finding of this analysis is that Dutch Limburg displays a low profile in this matter: low general physician orientation and by far the lowest number of minor complaints perceived as needing medical advise. For major complaints there is, as is to be expected, more agreement. The significant effect for region is here due to the difference between the Aachen-region and the province of Liège.

To summarize the data given above, a Principal Component Analysis was carried out on the variables where region-effects were apparent. PCA resulted in four components accounting for 42% of the variance. Factor scores were calculated by the regression method. They have, by definition, a zero mean and a unity s.d. After rotation the components were as follows:

The first component is comprised of the health status and physician utilization variables. High scores on this dimension indicate an unfavorably perceived health and high consumption levels. It is called Health perception/medical consumption.

The second component combines alcohol consumption, regular sports activities and, negatively, physician-orientation. High scores indicate the involvement in both drinking and sports and a low inclination to view the physician as the main safeguard of health. The label Risk Behavior is a possibility for this dimension.

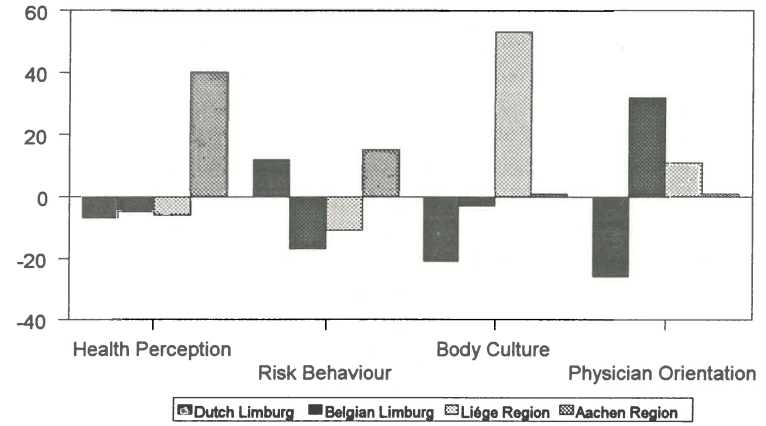
On the third component physical appearance, internal locus of control and curative orientation were the variables with high loadings. High scores indicate the importance of physical appearance, the trust in the self as in control over health, but also placing a high value on modern, technological medicine. This dimension seems to represent aspects of Body Culture. The integrity of the body is a matter of self-control, but should eventually be preserved by modern technological means.

The last component is entirely related to the reliance on the physician for matters of health and illness. High scores indicate a high level of physician orientation, and a strong inclination to consult a doctor for both major and minor complaints. Physician orientation seems the appropriate label here.

Now that we are in the possession of these dimension, a more comprehensive approach to the regional differences is possible. The statistics displayed in Figure 1 are the mean factor scores for the respective regions. As the grand mean is zero, the figures are in fact deviations from zero.

On the dimension Health perception/physician utilization the Aachen-region is clearly different from the other regions, high levels of an unfavorable health perception as well as a high attendance of doctors (Figure 10.1).

Figure 10.1: Euregion on Four Dimensions (Mean Factorscores * 100)



Risk taking behavior is mainly found in the young and higher educated. There is in this case an opposition between Dutch Limburg and the Aachen-region on the one hand, and both Belgium regions on the other. Body culture is most prominent in the Province of Liège, while Dutch Limburg is on the lower side of the scale. Belgium Limburg and the Aachen-region show about average levels. With respect to the dimension Physician orientation, Belgium Limburg scores high as opposed to the Dutch neighbor region.

In the profile analysis the parallelism hypothesis is rejected ($p < .01$), so the test for flatness is irrelevant. The overall conclusion is that the four regions show different profiles on the factors analyzed.

It is at this point relevant to give some attention to one of the mechanisms mentioned in the introduction, possibly contributing to homogeneity, namely bordercrossing behavior. In the survey respondents were asked how many times per week they crossed respective borders, both in general and for attending health care facilities in the other regions. Frequent bordercrossing (at least one time a week) occur between the regions in some 12% of the respondents, somewhat

higher between Belgium and Dutch Limburg (17% in both directions) and substantially lower between Belgium Limburg and the Aachen region (4%). Attending health care facilities in other regions often is considerably lower (< 1%), with the Dutch Limburgers as an exception (2% attend facilities in Belgium Limburg and 1% in the Aachen-region often). So it seems that regular bordercrossing is a quite retracted phenomenon.

Discussion and Conclusions

At first sight the picture emerging from the analyses is more one of dissimilarities than of similarities. One conclusion seems, however, inescapable: there is no such thing as a Euregional homogeneity on health culture. Every region seems to have its own profile. Dutch Limburg stands out for low levels on body culture and physician orientation. Belgium Limburg can be noticed for its high physician orientation combined with an average level of perceived health and medical consumption. The province of Liège is recognizable by its high levels for body culture and physician orientation. The Aachen-region combines high levels for an unfavorable health status with risky health behavior. Now that the heterogeneity of the Euregion is established, the question is justified whether the regions show more agreement with the respective national characteristics than with each other. When the characteristics of the Dutch and German regions are also in agreement with their respective national characteristics, which from other analyses we know they are, then the conclusion is warranted that national differences dominate the picture. We also know from these analyses that with regard to body culture Liège shows a striking similarity to the French region of Lorraine. This suggests a touch of French hedonism is also present in the province of Liège. So, the *conclusion would be that the Euregional areas are in harmony more with their respective national characteristics than with each other*, with cultural variations in Belgium.

Some reservations on the conclusions should be made. First, there is the small size of the samples, especially in the Aachen-region and the province of Liège. This may have led to unstable results. The only remedy for this is to replicate the study. A more important drawback are some specific characteristics of the regions. For instance Belgium Limburg is mainly rural in nature as opposed to the other areas. Next, the province of Liège is one in social-economical decline. This specific circumstances may have influenced the results. In which way and to what extent we have no way of knowing. We do know however that the province of Liège is in agreement with Belgium Limburg on three of the dimensions and on body culture with northern France. We also know that the Dutch and German areas move in concert with the data from the rest of the Netherlands and Northrhine-Westphalia.

The overall conclusion that national, cultural as well as health care system factors, dominate the picture can thus be maintained as a working hypothesis.

Chapter 11:
Summary and Conclusion

What is suggested by the results of the WESH project? First, there appears to be a relatively positive overall level of health and satisfaction with care, when Spain is excluded. Germans, however, show somewhat higher rates of illness and greater concerns about becoming sick. Second, health as a value ranks very high in all nations. Next to the family, health is of major importance in the lives of people when they are asked to rank its value in relation to family, work, and property. In the Netherlands, health is ranked even in importance with family. Third, the utilization of physicians as primary representatives of the health care system, as expected, is widespread, while satisfaction with doctors is relatively high -- though the Germans and Spanish rank somewhat lower in this regard. Fourth, evaluations of national health care delivery systems is reasonably high, with the Dutch showing the most satisfaction. Fifth, there is a widely held belief throughout four nations (excluding Spain), that there is right to free care. This is corroborated by a strong public tendency to let employers and the state pay for health care. And finally, sixth, there is a considerable variety of health-related behavior, with sufficient public awareness about good and bad health habits.

Two results stand out rather strongly from the survey of adults that, for advanced statistical analysis, could be performed in only four of the five countries. The first pertains to the even distribution of three health life-style patterns across European borders. There are 1 out of 7 who belong to the group of *health interventionists* in respective activities. There are 1 out of 2 who are observers of a pattern, we call *health practitioners*. That leaves 1 out of 3 who belong to the group of *health nihilists*. The second result almost as clearly contradicts uniformity across borders. There is a considerable variety in patterns of health culture. In one dimension the French and the Spaniards are favoring an invasive, technological curative medicine, while the Dutch and Germans rather opt for a care orientation. In another, the French are very critical towards the justice of their system while the Germans are much more in favor. Finally, in yet another dimension, Dutch and Germans follow a charity orientation but the Belgians and French do not.

The destination of health culture in value orientations, as well as practices, shows in the results of people in the Euregion. They live by their national entities and are involved in only very few exchanges across the border. Euregion as a test for an integrated "Little Europe" does not exist.

It is theoretically an interesting question what the discrepancy between differences in values, subjective and symbolic elements of culture and uniform behavioral patterns in life-style actually mean. We can assume that on these two levels of culture and social structure the results represent something real that is equally rational, or willingly irrational for that matter. The variance on one hand

and the uniform pattern on the other, may indicate that the controls exerted from value and normative principles is not as high as action theory wants us to believe. Such conclusion may be valid for such matters of health and health related behavior as were investigated in this analysis. For health and related behavior it may also be suggested that a few structural factors, such as being young or old, being female and being sick or healthy may overpower images, values and beliefs that for less determined behaviors may well be relevant.

Culture, Stratification and Nationality

On a level of national health culture and related value components one has to look for differences in emphasize on rationality and causal thought, such as France and the pointedly mystic tradition of Germany, which may well underlie the expressed concern about worry over getting sick (Lüschen, Cockerham and Kunz 1986). For Lorraine, (d'Houtaud 1976) and for the whole of France, d'Houtaud and Field (1989) have investigated the concept of health in the French nation, including the image of health by social class (d'Houtaud and Field 1984). The lower classes have a rather instrumental concept of health, as a means to work, while the French middle and upper class see health more as a matter for realization of self. It is an important question whether this is specific for France; or whether such distinctions would show up for respective classes across nations. As the variable for class identity turned out to be somewhat weak across all four nations, we may well have a result of class distinction that is strong in France. If the evaluation of equity in welfare society is an indication, then one would expect similar distinctions for Spain as well.

For the Netherlands, the charity orientation is typically reflected in the high number of nurses, when compared to the number of doctors, the high number of homes for the elderly, and a strong expression of solidarity with the disadvantaged. Hofstede (1991) has referred to such beliefs and structural components as an expression of a "feminine character of Dutch society". Germany likewise shows high investments in hospitals as indicated by traditionally a high number of hospital beds and major investments across the nation, within communities and among religious groups to provide charity and reduce uncertainty, the latter being a pattern that Hofstede (1991) identifies as typical for the German population and culture. Others for Germany have pointed to a definite tendency for pessimism (Laqueur 1985; Townsend 1987; Payer 1989), and the German *Angst* is legendary among outside observers. On a more positive note, the Germans together with the French in the present analysis have the highest value for compassion and they are the most postmaterialistic. The latter corroborates such orientations like the worry to get sick and pessimism in connection with health, but it also suggests that the Germans in particular are rather demanding on

ıeir health care system and on their doctors, the latter being pushed by the ounger generation in particular.

For the issue of social stratification, health and health care that we considered of aramount importance for modern welfare society there is an easy conclusion: lealth and health care are not strongly influenced by differential life-chances and onditions of inequality. Rather, in terms of social stratification and the indicators ıtroduced, neither a person's occupational status, nor income and self-identity long class and status discriminate to any significant degree for behavior patterns, ccess to, or satisfaction with health care. Only educational status shows rather rong differences, both in terms of a better and healthier life-style, as well as in ıe evaluation of the quality of health care delivery and problems in access. Quite bviously with regard to the latter, what is indicated is not so much a matter of ifferences in life-chances and health-care delivery as it demonstrates the function f critical guardian to the system by those that are better informed and demand a etter life-style. Moreover, differentiation via education indicates that culture ıther than social stratification is a determinant of health and health behavior.

Nationality is a major predictor of health, health behaviors and respective value rientations and attitudes. It might result in and thus explain differential (causal) nsequences for health status by nation. As impressive as the variable nation/ ıtionality might be in statistical terms, in beta-values and levels of significance, ıtionality can mean a number of things in the health-system context. In a very eneral way it indicates diversity of the systems across borders. But the question mains: in what way? To be sure all nations have their political identity and form eir own political system. In terms of health and health care there are also ıtional traditions. The Germans have their history in medical science and welfare ovisions from notables like Virchow to Forsmann. So have the French from asteur to Curie and the interventionist or curative tradition that can be traced ck to Descartes. The smaller nations like Belgium with Christian de Duve and e Netherlands with Willem Einthoven have their Nobel-laureates and traditions, ıd take pride in welfare provisions and a differentiated care for the aged. Finally, ıtionality may just measure that portion of culture that was not covered by the ılture variables introduced. Consequently, as much as nation/nationality may scriminate and as much as it may be useful for policymaking, there is a strong ed for further theoretical consideration and analysis in future studies.

Curiosity was behind this study; curiosity about health determinants, health havior and conflicting tendencies in European health policy options. On the one ınd there was a growing sense of convergence, especially valid for the member ıtes of the European Communities, as they were called when we started the study 1990, resulting in a specific 'public Health' article in the Maastricht Treaty. On e other hand there were and are still obvious and clearly visible differences in alth care provision and financing between neighboring countries, that generally oken, are all part of the so-called Rhineland model of social security. That is hy we, as part of our study, focused on the Rhine-Meuse border area, where ermany, the Netherlands and French- and Dutch-speaking Belgium actually

meet, while France is only 100 miles away. In this area common cultural and historical roots point into the direction of converging views on health and health care, while actual and palpable differences in health care provisions and financing within nations lead to diverging conclusions.*

Conceptual Interpretation

Convergence and Similarities

1. The most remarkable convergence was to be found in the official statistics of Chapter 2. Substantial differences in birth rates, infant mortality, death rates and life expectancy, that distinguished the countries explicitly in the sixties and seventies, narrowed substantially even to the extent that differences seem to loose their significance for health policy.

2. Health, or rather, good health as a value ranks high in all nations. Compared to family, work and property, it is higher than work or property in all countries, next to family in Belgium, France and Germany and equal to family in the Netherlands.

3. In all countries the majority of the respondents are in favor of government or employer responsibility for health care financing; a minority (predominantly the older and better educated part of the participants) stressed greater individual

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* The notion of a "Rhinelandish model" is not so bad after all. To be sure, it was Bismarck who eventually in 1881 promised and then through a hostile *Reichstag* introduced the social security model of social welfare that included health care for the poor. But the idea of this policy was actually born out in the heads of two Rhinelanders. The one, Theodor Lohmann born and raised in the Rhineland, was a civil servant in the Ministry of Economics who twice sent his Ministers with respective welfare programs to Bismarck. The first was actually fired for such boldness. The second Minister, however, prevailed as a second Rhinelander, an industrialist from Bochum, entered the picture and probably a the right time, informing Bismarck of the problems around occupational health hazards for the workers. So, when the ailing Kaiser was unable to deliver the message, Bismarck delivered the social security proposals to the Reichstag which eventually became synonymous with his name (Tennstedt and Winter 1993). It was not intended as a social reform measure. Rather, for him it was a strategy of avoiding conflict as he freely admitted (Wehler 1985, 312-17). One should add, the benefits of Bismarck's social policy were meager and developed for the better at only a slow pace long after Bismarck had fallen from power.
The French are only a little off in terms of distance; actually, Bismarck stated in defense of his law that he from his time as an attaché in the Embassy at Paris knew quite well how important such welfare benefits were for the control of the people. Thus, the French through the social policy of the Bonapartistic Regime of Napoleon III had some influence on this model as well (Wehler 1985, 314).
Enter the Spanish; their relationship to the social security program is not as close if existant at all. But in historical terms their political influence extended for more than a hundred years into Belgium and the South of the Netherlands as well as into the Lower-Rhine area. They have certainly left their imprint in Catholicism, and among others in their hostile and at times accomodating encounters with the Calvinism of this area.

esponsibility. Whether that is a change over time or a cohort effect due to age, ill have to be seen in later analysis.

4. From chapter 7 on health life-style can be derived that in each country there a small group of very health conscious persons (1 out of 7), a considerable roportion of moderately health conscious persons (almost one half) and about ne-third that does not care at all about healthy behavior. The varied composition nd size of these three groups is more or less similar in all nations.

What is behind these tendencies of convergence is not easy to detect. The econd and fourth item mentioned could be interpreted as a result of rather basic ontrols or de-controls that have their origin in the high value attached to health r survival from death) with potential controls that are related to the physical and iological dimension.

Item 3 could also be connected to the high value given health. As there is no bsolute and enduring health, and individuals can not control health to any large nd final degree, with a process of secularization the public and the state instead of eligious institutions are settled with the costs and responsibility. It is also in line ith a generally higher responsibility transferred to the modern state or other orporate arrangements, the "social net" in Germany. Whether that occurs in terms f welfare provisions or otherwise is beyond the point.

The convergence found in the aggregate data of key national indicators points deed to an overall convergent health culture and health system. Such process ay well be directly related to an emergent modern system of care and a populace at is increasingly health conscious regardless of nationality. For the whole area f care and medical technology it is certainly related to an overall diffusion of chnology that is accompanied by a diffusion of uniform standards.

Diversity and Differences

n the other hand typical cultural differences could be traced between the nations, oth in chapter 5 (about health culture) and in chapter 10 that deals with the hine-Meuse border area of the so-called Euregion.

1. The inhabitants of the border area appeared to have more in common with eir fellow-countrymen than with their neighbors on the other side of the border. hile bureaucratic limits within their health funds might still forbid to seek health rvices across national borders, explanations for the differences definitely go eyond such obstacles.

2. When asked to which part of health care government should allocate more oney, the French and, to a lesser extent the Belgians, clearly preferred high tech edical and specialistic (that is hospital-) services, the Dutch and Germans, owever, opted for more care for the elderly and needy.

3. The Germans tended to worry most about their health; the French appeared to tach the highest significance to physical appearance and showed the lowest trust government of the four countries, while the Dutch were most inclined to prefer re-for-everybody on a collectivistic-base.

So, all prejudices about the neighbors appeared to be true. But, regarding the things that really matter in health, like health-conscious behavior and healthy life-styles, differences appeared to be remarkably small to non-existent. This coincides with the narrowing gap between the countries' official vital statistics; there are still differences in the way and why people die (i.e. relatively high cardiovascular death rates in Germany), but not or hardly in the average life expectancy.

System Integration

Beyond the issues of diversity, structural differences and the issue of convergence in changes over time which can all be answered quite well from individual responses, social indicators and aggregate data, the question whether integration prevails or not is more difficult to answer. It has to be interpreted in more theoretical terms on the system level. As the issue was originally raised for modern welfare society, this is mainly to be answered in terms of social stratification. In that dimension the result is fairly clear: There are only marginal differences by social status or class as far as health status and the provisions of health care are concerned. To reiterate, these results reflect mainly the subjective responses of the people, they reflect less the objective indications of life-expectancy and sickness that differ along lines of social stratification and work situation (Siegrist 1989).

However, what counts for system integration is first and foremost subjective evaluation, satisfaction and identification of people in the system. There are some differences by nation. Overall, however, the result prevails that health care and its provision find high agreement in the four key countries of WESH and some lesser support in Spain. One should also add that such signs of integration for the health system are not found to the same degree in the measured responses to ones society and its welfare provisions. We interpret this along our assumption stated in the first chapter that health care contributes substantially to integration of modern societies in the EU.

It makes also some contribution to decommodification in income by providing essentially equal services in hospitals and an income-related fee for health insurance. It is perhaps the one best indicator for the removal of class conflict. Whether F. Parkin's contention also holds that class conflict is being replaced by status competition (1979) is a thought for future research. So far life-style structures related to health do not indicate this to be a matter of new hierarchies. But the fight for having the strongest body and best appearance in the fitness-culture (Bette 1988) may well indicate that such developments are not far off.

The major question for this study concerning whether unity or diversity are the prevailing patterns of the health system in the nations of the EU, and for the people involved, is much more difficult to answer. There is probably no genuine feeling of unity for a European or West European health system, although as a policy concern for the EU there appears to be some agreement that the EU should get involved. Such superficial agreement implies a concern for health, but it does

not mean deep insight into European affairs in general or health affairs in particular. With regard to the results of the foregoing analysis it is safe to say that they provide information for both the unity and the diversity position. The former can be concluded from behavioral patterns of health life-style; all nations indeed seem to deliver a reasonable amount of health care provisions with the function, if not intention, to provide unity and integration to the overall societal system. Diversity, on the other hand, shows in cultural patterns and in distinctive differences to many features of health care organization and policy as well as a certain amount of cultural diversity.

Some Theoretical Reflections on the Results

There are three issues deserving some continued discussion and theoretical reflection:

--- The frailty and supposed irrelevance of health culture and health milieus on the background of distinct behavioral life-style patterns.

--- The demands put upon the system in terms of financial responsibility and the delivery of a high-class medicine in either curative or care distinction.

--- The irrelevance of politics in individual notions and responses as well as the limits of political and governmental control of the system.

Health Culture and Milieus

Not only are there differential meanings attached to matters of health and health policies, national traditions seem to sustain distinctions of culture and milieus as well. Thus, with caution, a conclusion may be drawn that there are diversities in health culture beyond the borders of the nations involved and even in the adjacent areas of the Euregion. Still, in the basic behavior patterns, such culture has little consequence. The codes of behavior, to use a Luhmann term, seem to be rather strict, rationally reflected (or willingly not); and, in this case, it is not the cultural sub-system of such action system that is in control. Contrary, to the brilliant notion of cybernetic control and conditioning suggested by Talcott Parsons (1960), it is at best the social system and its codes that exert the controls. Maybe, it is even the behavioral organism that sets the tone. Why the latter? It is the ultimacy of life and death and the consistent reminder of human destiny that govern the behavior of members in the system and the compliance extended to those that serve the system for everybody's benefit.

The milieus that can be observed and are also expressed in health culture are probably rather fragile productions around health and the physical. They seem to be open to change over time and age periods. They are also open to the attachment of meanings that can be either useful or damaging to the future of health

promotion. The rationality observed in basic behavior patterns does probably not extend to the health milieus suggested here, the meaning of which is probably as much determined by narcisstic as by strictly rational principles.

The Demands on the System

It is probably an outcome of compliance with the system and its personnel that demands on the system are so high. Reflecting the irrelevance of factors of inequality in health care delivery, the members inside of the system want their share regardless of status and personal means. They probably are rational enough and know that the modern welfare society is not a system of perfect equality. In health care they probably know that they got as much of it as anywhere. Consequently, they assess high prestige to those who deliver for them - the doctors. And for their personal benefit they want compensation as much as possible for their allegiance. It is the implied mechanism of welfare society that de Swaan predicts, that opponents of such systems, notably in health economics, condemn and yet, for a number of reasons should accept.

Welfare and political ideologies have little to gain. Society and the existing order benefit through stronger integration and the absence of social strain in the system. Indeed, the fairly free delivery of services up to the end of life will often mean consolation for and at times frustrations and mishaps for a life-time of a person. Under the circumstances any serious moves for rationing of health services would be a major threat to such expectations and the delivery of health care regardless of individual identity and risk.

The Irrelevance of Politics

The demands on the system, the emergence of corporate control, and the prestige assessed health-care personnel, suggest that health-care politics is not controlled by those in power, but rather by those manning the system or being the system clientele. In a way, they take the system away from the power and control of the likes of Bismarck. Of course, the politicians and society are amply reimbursed. Health care and the expressed concern for health as the individual's most important good secure identity with and loyalty to the system. Thus, the divisions of social stratification are small as much as the latter for a multiplicity of reasons may still show differential rates of death and life-chances. As for Germany, a corporate form of organization allows some control for the government. But as the self-interests of corporate groups in the system show, such power is limited.

Consequently, these tendencies give little support to conceptions of the welfare state, such as by Esping-Andersen, that analyze the system in traditional terms of liberal, conservative and socialist politics and like many other welfare discussions start and end with interpretations of power and ideology. To be sure such political structures are not irrelevant, but on the political or quasi-political level they have

been replaced by what Wilensky (1981) called "*democratic corporatism*" that finds its most explicit expression in German health care corporatism (Gäfgen and Oberender 1989). In the very end, however, one finds an extraordinary individualism and self-interest of the people determining health system policy. Zijderveld sees this only in terms of corrupting tendencies for welfare expenditures. Yet, it holds also in strong tendencies of narcissism (Lasch 1979) that may well be employed in future preventive and more self-centered health programs.

What is indicated here in health systems is a type of pressure from within that moves the system as Elias observes for systems in the process of civilization (1976, II). One may also describe this as a typical case of social control. In this connection Janowitz (1976) suggests "*The welfare state in my terms is more than a prescribed level of welfare expenditures. Moral and political issues are involved*". Among others "*the growth of the welfare state has been accompanied by the emergence of weak political regimes*" (XIII). He goes on to argue that "*the study of the modern nation-state requires a focus on welfare institutions*" as marketplace economics could not account for the social order (XII). Thus, the present analysis s also considered to be a study in the social order of modern society,- as much as t is an analysis of health behavior and health systems.

On this background, social welfare and health care in particular account for limensions of major importance in modern society. In a way, the fight over control and cost containment is probably as much an outgrowth of fiscal concerns s it is a claim for control by politicians and the government versus health clientele nd health system personnel and agencies. What modern governments can do bout this is probably not much. Rather, government and official health policy can erhaps influence the direction of health behavior toward a more preventive and ctive health life-style. The people are probably well intended in this regard with he growing belief and value attached to the physical and the body (Turner 1983). Of course, there is the high economic interest of the health care personnel and espective agents, such as hospitals or the pharmaceutical industry, that will make ttempts to control the situation for their benefit, thus leading the system away rom preventive and active health promotion. One can only trust that also in the orporate sector the traditionally high professionalism of physicians will prevail to romote the system of the future towards a salutory orientation that provides the est of care and intervention only when needed.

Such policy will assure a potentially more vigorous and longer life with cost-avings in the traditional medical practice. It will still require major expenditures or curative medicine and intervention. After all, the overwhelming belief in olidarity, equity and equality of chance will continue to push for extension; yet, it an not allow everything medical technology may provide. That, of course, resents a dilemma that politics can probably not resolve. It is a matter of social nd medical ethics that will have to be answered via a value consensus in the orporate system or by a change in the value system that neither medical nilosophy nor the people have really addressed. In running away from religious

beliefs and demanding more than the system can deliver, the health care system is bound for major conflicts in which politics and the government will at best play a role of mediator. Of course, this is a view far into the future, and at a time when the system, in terms of cost, has not reached the breaking point, whatever public declarations may suggest. However, the high agreement with FREECARE, a tendency to withdraw solidarity from those that take high risks and a slighter notion to take provisions away from those that are higher risks for the system (the aged) signal that there are value conflicts and those of group interest in the making.

Consequences for Policy

1. From chapter 8 we can conclude that there is popular support if not demand for a publicly financed health care system. However, particularly better educated people opt for a stronger emphasis on individual responsibility.

The Bismarckian social security based system (like the ones functioning in Germany and the Netherlands), with a strict regime for the lower income groups and some degree of freedom for the highest income groups, might fit this preference. The popularity of a serious alternative: a genuine National Health Service, that is, a taxation based and publicly provided health care system,-- has dwindled since the fall of the Berlin Wall. Even in the UK and in Sweden, the prime examples of a National Health Service, the link between public financing (by taxation) and public provision has been problematic, albeit in a different way.

One should keep in mind the words of the Dutch social economist, Abram de Swaan, cited in our introduction, who said the following about the Bismarckian social security system: "(Bismarck's) scheme became the model for other countries and in its broad outlines has survived two World Wars, National Socialism and foreign occupation as the foundation of the German welfare state". It is a tough model, that by combining access, coverage and security for most of a society and leaving some options for those who can afford it, by earmarking a fixed budget for health and social security and by leaving health care provision to professional organizations, might form a good compromise between collective and individual responsibility at the moment the European Union is about to formulate a common social security policy, including that for health care.

2. The first announcement of the European Union's action with health matters: Article 129 of the Maastricht Treaty, is in fact, and according to the results of this study, right to the point. Article 129 states that prevention of the "scourges" that threaten the citizens of the EU-member states is the primary target of EU health policy.

3. In all four countries, belonging to the oldest EU-members, there is one third of the population that does not care at all about issues of health promotion. The group consists predominantly of younger males without religious orientation.

Admittedly this is not a group very approachable for salutary health messages, but a clear target group for healthy life-style improvement by methods adapted to the specific interests of these groups. A challenge for the healthy life-style movement, one should admit.

4. In the area where the borders meet, the Rhine-Meuse Euregion, there is hardly any cross-border health utilization. Insurance regulations and language barriers might cause this on the one hand. On the other hand, however, the inhabitants of the border region do differ from their fellow-countrymen regarding their attitudes on health, health care and health policy. They do differ from their neighbors on the other side of the border.

This might be a blow to regional separatism or to a feeling of regional uniqueness, which is not uncommon in peripheral areas, but it is also a sign that the existing barriers are not to be demolished for the sake of convergence and harmonization only. Even if cross-border access to health care facilities would be simplified, the increase of utilization is expected to be slow and gradual. This creates room for functional cross-border experiments without the danger of cost explosion; i.e. it would be entirely possible to open borders to seek services in the other country and provide payments from national health insurance funds.

5. As much as there is a distinction, diversity in the culture, and national organization of health and health care patterns, as much integration there is in general policy concerns for health care and its financing: Health care throughout West Europe is considered to be a matter of public, not individual responsibility. This is the statement that prevails on the policy level. Individual behavior is actually mainly internally/individually controlled. It appears that despite displacement of responsibility toward the public and the state there is much to be gained in terms of active individual responsibility. Behavior is already highly in compliance with the exception of a distinct group of dissenters; but even these may be won over by better health education, health promotion and active programs that extend beyond the rationality of modern man in his use of medicine and medical intervention. Such programs and policies can also count on a considerable amount of formal rationality that is apparent in matters of health behavior (Cockerham et al. 1994).

6. The expectation of financial displacement in costs of care to the public and the employers finds its limitations in the desire to assess higher insurance fees to those engaging in risky behavior. As the effects of smoking and obesity, as well as the high costs of specific sports, become public knowledge, the acceptance of individual responsibility is likely to rise. Thus, there will be increased pressure to assess higher fees for risk-behavior. Such a trend will also mean a direct assault on the principle of solidarity that, for health care and the health system, has been paramount in West Europe. It is no surprise that the executives of the social-security based health care funds have rejected any notion of differential fees for risk behavior; it would open up other challenges to the system that so far knows of only one differential assessment: Fees in the public systems are collected on the

basis of an individual's income. It is one of the few patterns of redistribution of income beyond progressive taxation that European societies know.

7. Regardless of the fact for support for a policy of public displacement of future costs and the vast array of benefits, the health care systems in four nations seem not to be abused to the degree that Zijderveld (1985) wants us to believe in contradistinction to a supposedly higher morality in the United States. It would be negating obvious tendencies, if one would not acknowledge that the system of comprehensive care and elaborate sick-pay is expensive. Yet, the members in all four systems as a rule pay a considerable health-tax shared by their employers. The systems in Belgium, France, Germany, the Netherlands, and in part also Spain are not to any major degree financed out of public funds like in Great Britain; they are sustained by members' and by employers' contributions. The latter is a critical point that may need resolution on the EU level. Standardization of such employers' fee, according to respective employers' organizations across the EU, is of the essence to secure equal chance in a competitive market. This is a thorny issue that will have to be faced in other context but health care. At this time there appears to be little agreement on such issues of the highest political level of the EU with among others the UK opposing EU regulations for problems of social and welfare policy.

Whether there is also a need for standardization of physician fees or hospitalization and other costs is a different matter. These have to be delivered on the national, regional or local level with different standards of living and expenses across the EU. Thus, there appears to be no need for a joint action as long as the health care market is so clearly distinguished as it is today. As long as quality of health care is not being compromised, there is no need to interfere with national and even regional health care markets.

8. Of course, as the present results show, there is not only the controlling force of the market, there is a distinct health system organization to be identified by nation. As the population is overall quite content with its national and potentially local health care and health system, there is no suggestion or need for a drastic revision. As the survey of Blendon et al. (1990) indicates the people in such health care systems as Belgium, France, Germany and the Netherlands do not suggest major reforms, while quite a few in the U.S., Italy and also the U.K. do in that respective study. The results of four West European nations in WESH clearly corroborate this result which accounts for considerable diversity as a prevailing feature of West European Health Systems.

9. Is there room for integration on the level of the European Union? It is probably good policy, if the EU suggests binding principles of care and if the EU pushes for health promotion and preventive programs. Indeed, the EU headquarters may have a special task cut out for themselves which would need gentle suggestion and persuasion as the health and health consciousness of the people rank fairly high.

10. The way and policy to run their national or finally local health systems is for the day-to-day operations and practical matters of policy probably best left to the

national authorities, corporate arrangements or even community groups at the lowest level. Health care organization is very much run that way and the more than 1,000 sickness funds in Belgium or Germany attest to that. Moreover, there is in the present results and from public notions no sense of genuine dissatisfaction among the population with the service that these systems deliver. Beyond responses to the system, and in particular at the local level, there is a high compliance with doctor's services and their behavior. So, people are probably not inclined to demand major changes in the four nations of the EU; Spain in this regard again being a certain exception.

Post Scriptum

We started the study with questions like: what influences health more; social class, culture or administrative rules about health care provision and financing? Is there a common ground for a European health policy? Do national differences determine health behavior or is it classical determinants like age, sex, social class and employment status. The answers tended to be confusing on the one hand and remarkably clear on the other. National, cultural and social class differences do exist in this order, but they are more or less independent from healthy or unhealthy life-styles which might be a reason why differences in vital statistics between the countries narrowed substantially in the last two decades.

It was a project the participants enjoyed; it was carried out with more enthusiasm than budget. It allowed each of the participants to test his assumptions in this common international database. The enthusiasm shows in the chapters and sometimes in the differential use of professional jargon and variable-language. The authors tried to cut down on such style, whenever possible, and formulate common sense conclusions. They did not completely succeed but tried to clarify statistical procedures to a degree that it should in most cases be accessible to a lay-person of statistical reasoning as well. After all and to justify the design of the book and analysis sociological reasoning for its very subject is complex and in statistical procedure goes beyond plain percentages. The benefit, we hope, will be better insight and policy in this important sector of modern life.

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Appendix

- List of Variables, Their Definition, and Location in Interview Schedule

- Copy of Interviewer Schedule (Questionnaire) English Version

List of Variables, Their Definition and Location in Interview Schedule

Name of Variable	No of Items	Question/Item	Question No.
ALCOHOL	2	Consumption of alcoholic beverages	36a/b
APPEAR	5	Appearance	
		To have a good appearance	7. (1)
		To look attractive to other sex	7. (2)
		To have a healthy complexion	7. (3)
		To have a good posture	7. (4)
		To fix up yourself	7. (5)
COMPASSN	6	Compassion	
		To engage for environmental problems	27. (1)
		To fulfill duty	27. (3)
		To be considerate for other people	27. (4)
		To enjoy secret moments	27. (5)
		To do something for the community	27. (7)
		To live consciously	27.(10)
CURATMED	1	Preference in Curative Medicine	32.
DENTUTIL	1	Utilization of Dentists	3. (2)
DISTRESS	6	Modified Langner Scale	
		Irritable feeling	34.(1)
		Wondering if anything is worthwhile	34.(2)
		Restless feeling	34.(3)
		Trouble remembering things	34.(4)
		Trouble going back to sleep	34.(5)
		Feeling, that things never turn out right	34.(6)
DOCCOM	3	Communication Problems with Doctors	
		Doctor does not recognize health problem	20.(1)
		Doctor does not understand health problem	20.(2)
		Patient does not understand the doctor	20.(3)
DOCUTIL	2	Utilization of General Practitioners and Specialists	
		Seen general practitioner in last 12 month	3. (1)
		Seen specialist in last 12 month	3. (3)
EQUITY	6	Equity of Welfare Society	
		Adequate living standard	29. (1)
		Everyone is treated equally	29. (2)
		Adequate health care for everyone	29. (3)
		Social differences are just	29. (4)
		Just distribution of economic profits	29. (5)
		One can live very well in country	29. (6)
FOODHAB	2	Consumption of Breakfast, Fruits and Vegetables	
		Eating breakfast	5.(2)
		Eating raw fruits and vegetables	5.(5)
FREECARE	1	Legal Right Free Care	23.
HLCCHA	3	Health Locus of Control- Chance Orientation	
		Health is question of good genes and luck	18. (1)
		Recovering is a matter of luck	18. (3)
		Staying healthy is question of luck	18. (8)

Name of Variable	No of Items	Question/Item	Question No.
HLCDOC	3	Health Locus of Control- Doctor Orientation	
		I can only do what the doctor tells	18. (2)
		Health is determined by doctors	18. (5)
		Consulting doctors avoids illness	18. (7)
HLCINT	3	Health Locus of Control- Internal Orientation	18. (4)
		Health is determined by ones doing	18. (6)
		I hold health in my hand	18. (9)
		Recovering is matter of ones own doing	
HLTHSTAT	1	Subjective Health Status	1.
HSYSEVAL	2	Health System Evaluation	
		Access to first rate hospitals	33b. (2)
		Same right as anybody in health care system	33b. (3)
INSTFIN	4	Favor Institutional Financing	
		Employers should pay more in case of illness	25a. (1)
		Government should pay more	25a. (2)
		Raising employer's share for health insurance	25a. (4)
		Communities should pay more	25a. (5)
POSTMAT	1	Modified Inglehart Postmaterialism-Scale	31
RELORT	1	Religious Orientation	40b
SELFFIN	2	Favor on Self-Financing	
		Citizen should pay higher fees	25a. (3)
		Raising contribution of sick persons	25a. (6)
SESOSTAT	1	Selfevaluation of Social Status	45
SMOKING	1	Smoking Status	C33
SNACKING	2	Consumption of Sweets or Chips	
		Eating sweets, chocolate, cookies	5. (3)
		Eating chips and french fries	5. (4)
SPORTINT	1	Intensity of Sport Participation	4a/b
TIMING	3	Timing Problems with Doctors	
		Waiting unduly long at doctor	19. (1)
		Sitting to long in waiting room	19. (3)
VITAMIN	1	Consumption of Vitamins	5. (1)

Interviewer Schedule (Questionnaire) English Version

Technische Hochschule Aachen, University of Düsseldorf
University of Antwerp, University of South Limburg, Maastricht,
University of Nancy, University of Valencia

My name is _____ and I'm calling from the University of Düsseldorf. We are doing a study of health care and people's experiences with their health in a number of West European countries.

(The interview began at _____ o'clock)

1. In general, would you say that your health is...

Very good,	5	
good,	4	
satisfactory,	3	
not so good, or	2	
bad?	1	
don't know	8	[A02]

2. Do you have a doctor that you and your family usually go to?

yes	no	
1	2	[A03]

3. In the past 12 month, have you seen a...

	Yes	No	
(1) General practitioner	1	2	[A04]
(2) Dentist	1	2	[A05]
(3) Specialist	1	2	[A06]
(4) Psychotherapist, psychologist	1	2	[A07]
(5) Physiotherapist (masseur, health gymnastic)	1	2	[A08]
(6) Natural healer (or other alternative)	1	2	[A09]

Now I'd like to ask about activities that may contribute to your health.

4.a. Do you participate in any kind of physical activities, exercise, or sports?

Yes	No	*(Skip to Q.4c.)*
1	2	[A10]

b. Overall, do you do (this activity/these activities)...

vigorously	5	
somewhat vigorously	4	
not very vigorously	2	
not at all vigorously	1	
(don't know)	8	[A11]

c. Are you currently a member of a sports club, a private fitness club or studio, or of another group that is active in exercise?

Sports club	1	
Fitness-club or studio	2	
Other group	3	
In no club, group	4	[A12]

5. How often do you...

	daily	often	some-times	seldom	never	(n.a.)	(d.k.)	
(1) Take vitamins? Would you say...	5	4	3	2	1	7	8	[A13]
(2) Eat breakfast?	5	4	3	2	1	7	8	[A14]
(3) Eat between meals sweets, chocolate or cookies?	5	4	3	2	1	7	8	[A15]
(4) Eat between meals chips or French fries?	5	4	3	2	1	7	8	[A16]
(5) How often do you eat raw fruits and vegetables?	5	4	3	2	1	7	8	[A17]
(6) Eat in between popcorn?	5	4	3	2	1	7	8	[A18]
(7) Eat in between peanuts?	5	4	3	2	1	7	8	[A19]

6. According to your opinion, how healthy do you think are food products that one eats at times in between meals. Please tell me whether raw fruits are very healthy, healthy, unhealthy or very unhealthy. Now, how is it with...

	very healthy	healthy	un-healthy	very unhealthy	(n.a.)	(d.k.)	
(1) Raw fruits. Are they...	5	4	2	1	7	8	[A20]
(2) French fries. Are they...	5	4	2	1	7	8	[A21]
(3) Popcorn. Is it...	5	4	2	1	7	8	[A22]
(4) Sweets. Are they...	5	4	2	1	7	8	[A23]
(5) Peanuts. Are they...	5	4	2	1	7	8	[A24]

7. How important is it to you...

	very important	important	less important	not at all important	(n.a.)	(d.k.)	
(1) To have a good appearance? Is it...	5	4	2	1	7	8	[A25]
(2) To look attractive to the opposite sex? Is it...	5	4	2	1	7	8	[A26]
(3) To have a healthy complexion?	5	4	2	1	7	8	[A27]
(4) To have a good posture?...	5	4	2	1	7	8	[A28]
(5) To fix yourself up so that you like yourself?...	5	4	2	1	7	8	[A29]

8. Now I would like to ask you some questions about health problems which people sometimes experiences.

	a.Do you think a person your age should see a doctor if they have...		b. During the past 12 month did you have...		c. Did you see a doctor about it?		
	Yes	No	Yes	No	Yes	No	
(1) A cough at any time during the day or night lasting for three weeks or more	1	2	1	2	1	2	[A30-32]
(2) Sudden feelings of weakness or faintness?	1	2	1	2	1	2	[A33-35]
(3) Diarrhoea (Loose bowel movement) for 4 or 5 days	1	2	1	2	1	2	[A36-38]
(4) Shortness of breath after doing even light work?	1	2	1	2	1	2	[A39-41]
(5) Repeated indigestion or upset stomach?	1	2	1	2	1	2	[A42-44]
(6) Loss of Weight for no apparent reason of 10 lbs or more?	1	2	1	2	1	2	[A45-47]
(7) Aching or score muscles that last 2 or 3 days?	1	2	1	2	1	2	[A48-50]
(8) Repeated vomiting for one day or more?	1	2	1	2	1	2	[A51-53]
(9) Pains or swelling in any joint during the day?	1	2	1	2	1	2	[A54-56]
(10) Occasional trouble sleeping at night?	1	2	1	2	1	2	[A57-59]
(11) Sore throat or a cold with fever of more than 100?	1	2	1	2	1	2	[A60-62]
(12) Occasional heartburn after a heavy meal?	1	2	1	2	1	2	[A63-65]

9. Now I would like to learn something about serious sicknesses and injuries

	a. In the last 12 month did you have a serious sickness, a chronic disease, injury ore were you handicapped?		b. Are you or were you because of this sickness or handicap under regular control or treatment by a physician?		
	Yes	No	Yes	No	
(1) serious sickness	1	2	1	2	[A66-67]
(2) chronic disease	1	2	1	2	[A68-69]
(3) Injury	1	2	1	2	[A70-71]
(4) Handicap	1	2	1	2	[A72-73]

(if none of the above, go to question 10)

c. How much are you/were you being hindered because of it?

very much	5	
somewhat	4	
little	2	
not at all	1	[A74]

10. Now I'd like to ask you about the last serious illness or treatment that you have had which kept you from doing your normal activities. In this situation, how helpful was...

	very helpful	helpful	not very helpful	not at all helpful	(n.a.)	(d.k.)	
(1) The doctor? Was the doctor...	5	4	2	1	7	8	[A75]
(2) The nurse? Was the nurse...	5	4	2	1	7	8	[A76]
(3) Your family?...	5	4	2	1	7	8	[A77]
(4) Something you yourself did?...	5	4	2	1	7	8	[A78]
(5) Your close friends?...	5	4	2	1	7	8	[A79]
(6) The people you work with?...	5	4	2	1	7	8	[A80]
(7) Your clergyman?	5	4	2	1	7	8	[B01]
was not sick	9						[B02]

(Interviewer: Ask hypothetically, who and to what degree would have been helpful in case of illness)

11. Now we have some questions concerning your life habits and specifically sleeping. Please tell me how often the following problems occur. Is it very often, often, sometimes, seldom or never? How often ...

	very often	often	some-times	seldom	never	(n.a.)	(d.k.)	
(1) Are you tired during the day? Is that...	5	4	3	2	1	7	8	[B03]
(2) Are you fall asleep during the day?	5	4	3	2	1	7	8	[B04]
(3) Do you have trouble falling asleep at night? Is that...	5	4	3	2	1	7	8	[B05]
(4) Do you wake up in the middle of the night?	5	4	3	2	1	7	8	[B06]
(5) Does it occur that you wake up earlier than normal and have trouble to get asleep again? Is that...	5	4	3	2	1	7	8	[B07]

12. *(if often/very often in 11 4-5. Otherwise skip to Q.14)* **You have said that you often/ very often suffer from sleeping problems. Which of the following reasons could, according to your judgment, be responsible for it? Please tell me whether these reasons are definitely, perhaps or not at all responsible for your sleeping problems. How is...**

	defi-nitely	per-haps	not at all	(n.a.)	(d.k.)	
(1) Physical ailments. Are they...	3	2	1	7	8	[B08]
(2) Sounds and noise	3	2	1	7	8	[B09]
(3) Shift or night work	3	2	1	7	8	[B10]
(4) Problems at work	3	2	1	7	8	[B11]
(5) Irritation, worry, nervousness	3	2	1	7	8	[B12]
(6) Family, marriage problems	3	2	1	7	8	[B13]
(7) What other reason is there? _____						[B14]

13. *(if under question 12 more than one reason mentioned with 'definitely' including 'other')* **Which of these reasons is the one most important to explain your sleeping problems?**

_____ [B15]

14. How often did someone notice stoppage of breath while you were asleep?

very often	5	
often	4	
sometimes	3	
seldom	2	
never	1	
(n.a., sleep alone)	7	
(d.k.)	8	[B16]

15. How often does it occur that you snore so loudly and irregularly that you or your partner wake up because of it?

very often	5	
often	4	
sometimes	3	
seldom	2	
never	1	
(n.a., sleep alone)	7	
(d.k.)	8	[B17]

16.a. How often do you take sleeping pills?

very often	5	
often	4	
sometimes	3	
seldom	2	
never	1	
(n.a.)	7	
(d.k.)	8	[B18]

b. Which sleeping pills do you take? I mean what is the name of these pills?
(please exact name, probe)

_____

(n.a.)	7	
(d.k.)	8	[B19-20]

17. How many hours of sleep do you get per day, I mean during work days?

_____ hours (average) [B21-22]

18. Now I'm going to read you some statements on how people feel about their health. Please tell me whether you strongly agree, agree, whether you disagree, or strongly disagree.

	strongly agree	agree	disagree	strongly disagree	(n.a.)	(d.k.)	
(1) My health is mainly a question of good genes and luck. Do you...	5	4	2	1	7	8	[B23]
(2) With regard to my health. I can only do what the doctor tells me to do. Do you...	5	4	2	1	7	8	[B24]
(3) How fast I recover after an illness is mainly a matter of good luck.	5	4	2	1	7	8	[B25]
(4) My health is mainly determined by what I do myself.	5	4	2	1	7	8	[B26]
(5) Doctors determine my health.	5	4	2	1	7	8	[B27]
(6) I hold my health in my own hands. Do you...	5	4	2	1	7	8	[B28]
(7) To avoid illness, it is appropriate to consult the family doctor regularly.	5	4	2	1	7	8	[B29]
(8) Whether I stay healthy is a question of plain luck.	5	4	2	1	7	8	[B30]
(9) It is mainly my own doing how fast in case of illness I get well again. Do you...	5	4	2	1	7	8	[B31]

19. In the contacts for your personal health care have you experienced such problems as I shall now read to you? How often has it occurred that...

	often	some-times	seldom	never	(n.a.)	(d.k.)	
(1) You had to wait unduly long before you were even given an appointment at your doctor. Was that...	4	3	2	1	7	8	[B32]
(2) Your doctor didn't take time enough for you?	4	3	2	1	7	8	[B33]
(3) You had to sit too long in the waiting room?	4	3	2	1	7	8	[B34]
(4) Your doctor did behave impersonally and unfriendly?	4	3	2	1	7	8	[B35]
(5) Nurses and other treatment personnel in the hospital did behave impersonally or unfriendly. Was that...	4	3	2	1	7	8	[B36]
(6) You had any problems in the hospital or with your health care?	4	3	2	1	7	8	[B37]

20. How often according to your opinion and experiences does it happen that...

	often	some-times	seldom	never	(n.a.)	(d.k.)	
(1) Your doctor does not recognize what really your health problem is? Is that...	4	3	2	1	7	8	[B38]
(2) Your doctor doesn't even understand when you want to present your case?	4	3	2	1	7	8	[B39]
(3) You in turn do not understand your doctor with regard to what he says and recommends?	4	3	2	1	7	8	[B40]

21.a. Thinking of the last time a doctor prescribed medicine for you, did you follow the prescription...

very closely	5	
closely	4	
not very closely, or	2	
not at all closely	1	
(n.a.)	7	
(d.k.)	8	[B41]

b. How often do you take nonprescription or over-the-counter medicine...

very often	5	
often	4	
sometimes	3	
seldom, or	2	
never	1	
(n.a.)	7	
(d.k.)	8	[B42]

Now I want to read you some questions with regard to security in case of sickness and at old age, and furthermore about the people and offices that deal with such issues

22. What kind of health insurance coverage do you have (on yourself)? Please include any supplementary insurance and fringe benefits.

(none --> *skip to Q.23*)	0	
(AOK)	1	
(Ersatzkasse/Barmer)	2	
(Betriebskrankenkasse)	3	
(Privatversicherung)	4	
(Arbeitgeber, Beihilfe/Erstattung)	5	
(Knappschaft, Innung, Seemannskasse)	6	
(Other Specify)		
_____	7	
(d.k.)	8	[B43-44]

23. Some people say that everyone should have the right to adequate and free health care. Others say that everyone is responsible for taking care of their own health. Which of these positions comes closest to your own view?

Adequate and free health care is a right	1	
Everybody is responsible for their own health care	2	
(Both)	3	
(d.k.)	8	[B45]

24. If one thinks of the many policies in health and health care. Where according to your opinion, should the government, administrations and other respective offices do much more, do more, where should they do less or much less. How is this with regard to...

	much more	more	*(same)*	less	much less	(n.a.)	(d.k.)	
(1) Medical technology and modern equipment? Should they do...	5	4	3	2	1	7	8	[B46]
(2) Rehabilitation and care for the sick and those recovering. Should they do...	5	4	3	2	1	7	8	[B47]
(3) Health promotion and health education?	5	4	3	2	1	7	8	[B48]
(4) Generally for home care?	5	4	3	2	1	7	8	[B49]
(5) Improvement of programs for exercises and sport?	5	4	3	2	1	7	8	[B50]
(6) Education and training of medical specialists?	5	4	3	2	1	7	8	[B51]
(7) Health care of older people? Should they do...	5	4	3	2	1	7	8	[B52]
(8) Policies for healthy nutrition?	5	4	3	2	1	7	8	[B53]
(9) Medico-scientific research? Should they do...	5	4	3	2	1	7	8	[B54]

25.a. For health care and the whole health system there are ever higher costs. Who in the future should pay more for these costs? Please tell me with regard to the following ways whether you strongly agree, agree or whether you disagree or strongly disagree with the prospective ways to cover health care costs?

	strongly agree	agree	*(same)*	disagree	strongly disagree	(n.a.)	(d.k.)	
(1) Employers should pay more for continued wages in case of illness. Do you...	5	4	3	2	1	7	8	[B55]
(2) The Federal Government should pay more than now out of existing taxes.	5	4	3	2	1	7	8	[B56]
(3) The individual citizen should pay higher insurance fees. Do you...	5	4	3	2	1	7	8	[B57]
(4) The employer's share for health insurance should be raised. Do you...	5	4	3	2	1	7	8	[B58]
(5) Cities and communities should pay more than now out of existing taxes.	5	4	3	2	1	7	8	[B59]
(6) In case of sickness the contribution of the person being sick (deductible) should be raised more. Do you...	5	4	3	2	1	7	8	[B60]

25.b. One could also imagine that specific groups that cause higher costs, should pay more for health insurance. Which of the following groups should, according to your opinion, pay much more, more, which group should pay less or much less or much less for their health insurance?

	much more	more	*(same)*	less	much less	(n.a.)	(d.k.)	
(1) Smokers. Should they pay...	5	4	3	2	1	7	8	[B61]
(2) Obese or fat people.	5	4	3	2	1	7	8	[B62]
(3) Old people. Should they pay...	5	4	3	2	1	7	8	[B63]
(4) Those active in sports.	5	4	3	2	1	7	8	[B64]

26. Overall, how worried are you about losing your Job? Would you say...

not at all,	1	
very little,	2	
a little,	3	
somewhat,	4	
quite a bit, or	5	
very much	6	
(does not work, n.a.)	7	
(d.k.)	8	[B65]

27. I would now like to read you some statements that you in your life may have experienced to be important or unimportant. Please, tell me whether they are very important, important for you or whether they are unimportant or very unimportant for you. How important is it for you...

	very important	important	un-important	very un-important	(n.a.)	(d.k.)	
(1) To engage oneself for environmental problems?	5	4	2	1	7	8	[B66]
(2) To enjoy a good life?	5	4	2	1	7	8	[B67]
(3) To fulfill one's duty	5	4	2	1	7	8	[B68]
(4) To be considerate for other people? Is that...	5	4	2	1	7	8	[B69]
(5) To fully enjoy secret moments? Is that...	5	4	2	1	7	8	[B70]
(6) To get ahead in life?	5	4	2	1	7	8	[B71]
(7) To do something for the community of people?	5	4	2	1	7	8	[B72]
(8) To promote more equality in society? Is that...	5	4	2	1	7	8	[B73]
(9) To engage in the do's and don'ts as one pleases?	5	4	2	1	7	8	[B74]
(10) To live as consciously as possible? Is that...	5	4	2	1	7	8	[B75]

28.a. Which one of the following is most important to you? Your property, your family, your health, or your work?

(1) Property (2) Family (3) Health (4) Work	(Most important # ____)	[B76]
(all equally important)	5	
b. Which one is least important?	(Least important # ____)	[B77]
c. Between the remaining two which one is more important?	_____ or _____,	
	(More important # ____)	[B78]
	(Less important # ____)	[B79]

29. Here are some statements about the German society.

	strongly agree	agree	disagree	strongly disagree	(n.a.)	(d.k.)	
(1) There is an adequate standard of living for everyone. Do you...	5	4	2	1	7	8	[B80]
(2) In this country and society everyone is treated equally.	5	4	2	1	7	8	[C02]
(3) Adequate health care is available to everyone who needs it. Do you...	5	4	2	1	7	8	[C03]
(4) The social differences are by and large just.	5	4	2	1	7	8	[C04]
(5) Economic profits are distributed in this country in a just manner.	5	4	2	1	7	8	[C05]
(6) Everything considered, one can live very well in a country like Germany	5	4	2	1	7	8	[C06]

30.a. How strongly are you interested in politics and the unification of Europe?

very strongly	5	
strongly	4	
somewhat	3	
less strongly	2	
not at all	1	
(n.a.)	7	
(d.k.)	8	[C07]

30.b. If you consider the different tasks for the European Community and what the EC should do according to your opinion. How important is it that the European Community engages itself in...

	very important	important	un-important	very unimportant	(n.a.)	(d.k.)	
(1) Foreign policy? Is the EC...	5	4	2	1	7	8	[C08]
(2) Agricultural and farm policy?	5	4	2	1	7	8	[C09]
(3) A European health care system? Is the EC...	5	4	2	1	7	8	[C10]
(4) Relations to America?	5	4	2	1	7	8	[C11]
(5) Introduction of a European currency? Is the EC...	5	4	2	1	7	8	[C12]
(6) Better environmental protection?	5	4	2	1	7	8	[C13]

31.a. There is a lot of talk these days about what the aims of this country should be for the next 10 years. If you had to choose, which one of the following four things would you say is most important?

(1) Maintaining order in the nation
(2) Giving the people more say in important governmental decisions
(3) Fighting rising prices
(4) Protection freedom of speech

(Most important #) _____ [C14]

(all equally important) 5

b. Which one is least important?

(least important #)_____ [C15]

c. Between the remaining two which one is more important?

_____ or_____,

(More important #)_____ [C16]

(Less important #)_____ [C17]

32. I'll now present you with four policies in health care for which there is much interest in public. Please tell me which of the four things would you say is most important?

(1) Care for the chronically ill
(2) Purchase of the newest medical equipment
(3) Accommodation of the psychic sick
(4) Organ transplant

(all equally important) 5

Regardless of the fact that these policies are all important which do you consider to be most important?

(Most important #) ____ [C18]

b. Which one is least important?

(Least important #)_____ [C19]

c. Between the remaining two which one is more important?

_____ and _____,

(More important #) _____ [C20]

(Less important #) _____ [C21]

33.a. In general, how much do you worry about getting sick? Would you say...

Very much,	5	
Quite a lot,	4	
Somewhat,	3	
Not very much, or	2	
Not at all?	1	
(n.a.)	7	
(d.k.)	8	[C22]

b. Here are some statements that could describe your own health situation. Please tell me whether you strongly agree, agree, whether you disagree, or strongly disagree.

	strongly agree	agree	disagree	strongly disagree	(n.a.)	(d.k.)	
(1) As far as health care is concerned, I am entitled to what I need regardless of the costs. Do you...	5	4	2	1	7	8	[C23]
(2) I have access to first-rate hospitals and doctors.	5	4	2	1	7	8	[C24]
(3) In our health care system I have the same rights as anybody else. Do you...	5	4	2	1	7	8	[C25]

c. If in a case of serious illness the decision in between death or continued life has to be made and you can no longer decide by yourself, who in your case should then have the last word?

(1) My doctor	1	
(2) A commission of doctors	2	
(3) My relatives	3	
(4) I myself through a living will	4	
(Interviewer: multiple answers are possible)		
(n.a.)	7	
(d.k.)	8	[C26]

34. During the last 12 month, how often have you...

	often	sometimes	seldom	never	(n.a.)	(d.k.)	
(1) Felt irritable, fidgety, or tense? Would you say...	4	3	2	1	7	8	[C27]
(2) Wondered if anything is worthwhile?	4	3	2	1	7	8	[C28]
(3) Felt restless?	4	3	2	1	7	8	[C29]
(4) Had trouble remembering things. Would you say...	4	3	2	1	7	8	[C30]
(5) Had trouble with waking up in the night and not being able to get back to sleep?	4	3	2	1	7	8	[C31]
(6) Felt that things never turn out right? Would you say...	4	3	2	1	7	8	[C32]

35.a. Do you smoke regularly, only sometimes or not at all?

Yes, regularly	0	*(Skip to Q.36)*
Yes, only sometimes	1	
No, not at all	2	[C33]

b. Did you ever regularly smoke in the past?

Yes	1	
No	2	[C34]

36.a. During the last 6 month did you drink alcoholic beverages like beer or wine?

No	0	*(Skip to Q.36c)*
Yes	1	[C35]

b. If you think of the last week. How many glasses or drinks did you drink from Friday to Sunday, how many from Monday to Thursday?

Friday to Sunday	_____ Glasses	[C36]
Monday to Thursday	_____ Glasses	[C38]

c. How often do you drink the following alcoholic beverages? Please tell me whether that is daily, often, sometimes, seldom, or never.

	daily	often	some-times	seldom	never	(n.a.)	(d.k.)	
(1) Spanish red wine...	5	4	3	2	1	7	8	[C40]
(2) German white wine.	5	4	3	2	1	7	8	[C41]
(3) French champagne.	5	4	3	2	1	7	8	[C42]
(4) Kentucky Bourbon Whiskey. (American Whiskey)	5	4	3	2	1	7	8	[C43]
(5) Dutch Geneva.	5	4	3	2	1	7	8	[C44]
(6) Belgian beer.	5	4	3	2	1	7	8	[C45]

d. According to your opinion, how healthy are these beverages? Do you consider them to be very healthy, healthy, unhealthy or very unhealthy? Do you consider...

	very healthy	healthy	unhealthy	very unhealthy	(n.a.)	(d.k.)	
(1) Spanish red wine...	5	4	2	1	7	8	[C46]
(2) German white wine	5	4	2	1	7	8	[C47]
(3) French champagne	5	4	2	1	7	8	[C48]
(4) Kentucky Bourbon Whiskey	5	4	2	1	7	8	[C49]
(5) Dutch Geneva	5	4	2	1	7	8	[C50]
(6) Belgian beer	5	4	2	1	7	8	[C51]

37. How many glasses of beer, wine and other alcoholic beverages can one, according to your opinion, drink per day without any adverse effects on one's health?

_____ Glasses
none at all 0
(d.k.) 8 [C52]

Now, I'd like to ask you some background questions to help us analyze the data.

38.	In what year were you born?	19___	[C54]
39.a.	What is your height without shoes on?	____feet	[C58]
b.	What is your weight without clothing ?	____Pfd	[C59]

40.a. Is your religious preference...

Protestant	1	
Catholic	2	
Jewish	3	
Some other religion (specify_____)	4	
No religion *(Skip to Q.41)*	5	[C62]

b. As a *(preference named in Q.40 a)* would you call yourself

very strong	5	
strong	4	
somewhat strong	3	
not very strong, or	2	
not strong at all	1	
(d.k.)	8	[C63]

c. How often do you go to church? Is that ...

daily	5	
weekly	4	
sometimes	3	
seldom	2	
never	1	[C64]

41.a. What is the highest grade or year in school that you have completed and got credit for?

None 0

Elementary
05 06 07 08 09 10 11 12 Years

Gymnasium, Realschule o. ä.
05 06 07 08 09 10 11 12 13 Years

Fachoberschule, Ingenieurschule, Fachhochschule o. ä.
09 10 11 12 13 14 Years

Universität, Wissenschaftliche Hochschule (PH, TH)
13 14 15 16 17 18 19 20 21 22 Years [C65-66]

b. What is your highest completed degree (certificate)?

_____ [C67-68]

42.a. Are you currently...

Employed full time	0
Employed part time	1
(Retired)	2
(Temporarily unemployed, or)	3
(Not Employed and not looking for work?)	4
(Housewife)	5
(Student)	6

[C69]

b. What is/was your job title?

_____ [C70]

c. What is/was your occupation, that is, what kind of work do/did you do; what are/were your duties on the job??

_____

_____ [C72]

d. Are you employed in...?

Public service	1
Private business/industry	2
Self-employed?	3

[C74]

e. What is the exact job and job title of your _____
(spouse, head of household, father etc.)

_____

_____ [C75]

(Interviewer: exact information about job title and work conducted)

Respondent is head of household 00

43.a. Are you presently...

married	1	*(Skip to Q.43c.)*
widowed	2	
divorced	3	
separated	4	
never married	5	

[C77]

b. *(if 2,3,4,5)* **Do you permanently live together with a partner or companion?**

Yes	1
No	2

[C78]

43.c. How many children do you have?

_____ children
none 0 [C79]

43.d. How many persons currently live in your household?

_____Persons [C80]
(of these needing special care_____) [D02]

44. What is your nationality?

German	0	
_____	1	
(other)		[D03]

45. In our society there are groups of people that are located rather high and others that are rather low. If you consider an order of ranks from 1 to 10, where 1 is all the way down and 10 is all the way up. Where from 1 (low) to 10 (high) would you rank yourself?

Totally low	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
Totally high	10	[D04]

46. In this connection there is also much talk about different social classes. Which class do you yourself consider to be part of: Lower class, working class, middle class, upper middle class or upper class?

Lower class	0	
Working class	1	
Middle class	2	
Upper middle class	3	
Upper class	4	
(none of these)	5	
(refused to rank)	6	
(d.k.)	8	[D06]

47. During 1989, was your total household income before taxes...
(We are not the Internal Revenue: but could you estimate approximately)

less than 40.000,- DM Yes *(skip to 48)*	W	
more than 40.000,- DM Yes *(skip to 49)*	M	
(exactly 40.000,- DM) *(skip to 52)*	20	
(d.k. --> *skip to 52*)	98	
(refused) *(Skip to 52)*	99	

48. Was it...

less than 30.000,- DM? No *(skip to 52)*	18	
less than 20.000,- DM? No *(skip to 52)*	13	
less than 10.000,- DM? No *(skip to 52)*	08	
less than 5.000,- DM? No *(skip to 52)*	04	
Yes *(skip to 52)*	03	
(d.k. --> *skip to 52*)	98	
(refused) *(Skip to 52)*	99	

49. Was it...

less than 80.000,- DM? Yes *(skip to 50)*	W	
more than 80.000,- DM? Yes *(skip to 51)*	M	
(exact 80.000,- DM) *(skip to 52)*	40	
(d.k. --> *skip to 52*)	98	
(refused) *(skip to 52)*	99	

50. Was it...

less than 60.000,- DM No (skip to 52)	35	
less than 50.000,- DM No (skip to 52)	28	
Yes (skip to 52)	23	
(d.k. --> *skip to 52*)	98	
(refused) *(skip to 52)*	99	

51. Was it...

more than 100.000,- DM? No.	45	
more than 120.000,- DM? No.	55	
more than 150.000,- DM? No.	68	
more than 200.000,- DM? No.	88	
Yes.	95	
(d.k.)	98	
(refused)	99	[D07]

52. *(Interviewer: Circle -but do not ask- sex of respondent)*

Male	1	
Female	2	[D09]

Thank you for your cooperation!

Time interview ended _____

Euregion-Questions

Finally I´d like to ask you a few questions that concern specifically the border area and the so-called EUREGION *(that is the counties in the border region of Belgium, Holland and Germany).*

61. How often do you pass over the border towards Belgium or Holland. Is that daily, often, sometimes, seldom or never?

	daily (6 x weekly)	often (1-5 x weekly.)	sometimes (1-3xmonthly.)	seldom	never	n.a.	d.k.	
Belgium	1	2	3	4	5	7	8	[D10]
Holland	1	2	3	4	5	7	8	[D11]

62. How often do you visit institutions of persons in Holland or Belgium in order to do something for your health? Is that...

	very often	often	sometimes	seldom	never	n.a.	d.k.	
Belgium	1	2	3	4	5	7	8	[D12]
Holland	1	2	3	4	5	7	8	[D13]

(If both never, continue with question 64)

63. What are the things for your health that you make use of in Belgium or Holland. How is it with...

	a. Belgium		b. Holland		
	Yes	No	Yes	No	
(1) Physicians...	1	2	3	4	[D14-15]
(2) Hospitals or clinics	1	2	3	4	[D16-17]
(3) Physiotherapists and other health personnel	1	2	3	4	[D18-19]
(4) Medication and other therapeutic means	1	2	3	4	[D20-21]

64. Concerning Belgium, Holland and Germany, where are, according to your opinion, medical institutions, physicians, care for the aged and health insurances, the best, where are they the worst? Please tell me from 1 (best) to 3 (worst) how you comparatively estimate hospitals or clinics in Belgium, Holland or Germany. Thus, how is it with...

	Belgium	Holland	Germany	(equally)	n.a.	d.k.	
(1) Hospitals or clinics	____	____	____	5	7	8	[D22-23]
(2) Physicians	____	____	____	5	7	8	[D24-25]
(3) Care for the aged	____	____	____	5	7	8	[D26-27]
(4) Health insurance	____	____	____	5	7	8	[D28-29]

65. If in case of illness you can not be treated in your home-town, would you very much agree, agree, would you reject, very much reject treatment in Belgium or Holland? How is it in case of treatment in ...

	agree very much	agree	reject	reject very much	n.a.	d.k.	
Belgium	1	2	3	4	7	8	[D30]
Holland	1	2	3	4	7	8	[D31]

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