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Public trust in health care: A comparison of Germany, The Netherlands, and England and Wales

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ABSTRACT

This article describes public trust in health care in three European countries. Public trust is a generalised attitude, influenced by people's experiences in contacts with representatives of institutions, in its turn influencing how people enter these contacts. In general, people in Germany have less trust in health care, while people in England and Wales have the highest trust levels. Cultural differences between the three countries could be an important source of differences. That makes public trust a less straightforward candidate for use as indicator of the future oriented dimension of user views in an international, comparative performance framework.

1. INTRODUCTION

Performance of health care has objective, outcome oriented dimensions as well as subjective dimensions of user evaluation. User evaluations might be conceptualised in three dimensions. The first consists of actual experiences in contact with health care [1], as measured e.g. by instruments such as CAHPS [2] and [3]. The second is an evaluative dimension, as measured e.g. by the value users attach to aspects of health care [4]. Finally, a future expectations oriented dimension can be distinguished, measured by public trust in health care [5]. Actual experiences and evaluations are increasingly used in international comparisons [6], [7], [8] and [9]. The first international comparison of public trust in health care is reported in this article. We compare three Western European countries: England and Wales, Germany and The Netherlands. In this article we briefly introduce the concept of public trust in health care and its relation to interpersonal trust. We relate the way public trust is built to differences between health care systems. Having only three health care systems in our study precludes systematic hypothesis testing. Therefore the emphasis in this study is on describing the differences between countries. However, in an explorative analysis an important issue is whether differences in public trust reflect differences in the health care systems studied. When it is found that actual differences of the health care systems are reflected, public trust could be used as an indicator of the future oriented dimension of user views in a performance framework. Alternatively, when differences in public trust foremost reflect cultural differences in placing trust, measures of public trust are less useful as an element of comparison of performance of health care systems.

2. PUBLIC TRUST, INTERPERSONAL TRUST AND HEALTH CARE SYSTEM DIFFERENCES

Trust is essential for the smooth functioning of society. As Fukuyama [10] stated “Trust is the grease that keeps the wheels of society moving”. Literature identifies two distinct forms of trust: interpersonal trust and public trust. Interpersonal trust is trust placed by one person in another. The future expectations aspect of trust is especially clear from Sztompka's [11] definition of trust as: “A bet about the future contingent actions of others”. Public trust is trust placed by a group or a person in a societal institution or system. There is much more literature on interpersonal trust in health care than on public trust [5]. Both types of trust are related at least in the long run [12]. Public trust is the generalised attitude, in part influenced by people's experiences in contacts with representatives of institutions or systems and in part influenced by media images [13]. Public trust in its turn influences how people enter contacts with health care providers. Consequently, there is a complex and mutual relationship between interpersonal and public trust. Fig. 1 gives a model of these and other relations and the way the health care system influences public trust. Not all relations shown in this model are explained, while not all of them are of importance for this article

[FIGURE 1]

The health care system supposedly influences public trust in two ways: through institutional guarantees and through the actual availability of good quality health care. *Institutional guarantees* relate, on the one hand, to basic conditions, such as government regulation of education of health care providers, protection of patients' rights and independent inspectorates of health care quality. On the other hand, institutional guarantees exist in the way the agency relation between health care providers and patients is organised. For example, the way in which the agency relation between physicians and patients is organised in managed care systems in the US might have led to a decline of trust in health care [12], [14] and [15]. Patients in a capitated managed care system, with physicians having a direct financial stake in restrictive treatment policy, trust their physician less than patients in a traditional fee-for-service system [16]. The fee-for-service system aligns the interest of physicians and the expectations of patients [17]. However, disclosure of information about physician payment and incentive did not affect health plan subscribers' level of trust in the predicted direction [18]. Another institution influencing public trust is the opportunity to maintain longer relationships with physicians. Research showed that patients with a longer relationship had higher levels of trust in their physician and also that sufficient choice of physicians leads to trusting behaviour [16].

The second way in which the health care system might influence public trust is through the actual *availability of good quality care* [5]. In an international comparative perspective, a restricted supply of health care facilities, long waiting lists and other forms of rationing, will be mirrored in lower levels of public trust in health care.

According to the model in Fig. 1, public trust in health care is also influenced by *media images*. Positive experiences may increase trust in health care providers over time. On a personal level one serious failure, however, can lead to a breakdown in trust at any time, even after many years [14]. In international comparisons of public trust in health care, but also in over time comparisons within health care systems, the results may be strongly influenced by incidental media ‘scares’ during the months before the survey or a scandal at the time of the survey.

Finally, levels of public trust in health care may also be influenced by *cultural differences* between countries. People in different countries may differ in their general predisposition to trust institutions and persons [10] and [19]. If cultural differences play an overarching role, measurements of public trust are less relevant in comparing health care performance internationally.

2.1. Aim

The aim of our study is three-fold:

1. To identify similarities and differences in public trust in health care between three countries (Germany, The Netherlands, and England and Wales).
2. To suggest possible explanations for differences in public trust.
3. To evaluate the relevance of measurements of public trust in comparing health system performance.

3. DATA SOURCES AND METHODS

We collected data on public trust in health care in three countries: The Netherlands, Germany and England and Wales, using a postal questionnaire.

3.1. Questionnaire

The questionnaire originated in The Netherlands. An identical version of the questionnaire was translated into German for utilisation in Germany and in English for utilisation in England and Wales, using the double forward backward method [20]. Topics covered in the questionnaire included trust in the health care system as a whole, trust in health care professionals, such as family physicians, specialists and complementary and alternative therapists, and trust in health institutions, such as hospitals, home care services and nursing homes. Single-item questions were used to measure trust in health professions and institutions. Questions regarding public trust in health care came from a validated scale [21]. Notable is that some questions on the public-trust-in-health-care-scale are formulated in an extreme manner, using words as 'always' and 'everything'. This is done to prevent too much clustering of answers in one category. Respondents could indicate their level of trust on a four-point Likert scale, ranging from (very) low to (very) high trust. Respondents were also able to state that they had "no opinion".

3.2. Sample size

In The Netherlands, data was gathered, using the Dutch Health Care Consumer Panel. This panel is a cross-section of the Dutch population. It has been used to record consumers' views of current health care policy issues every 3 months. Every 2 years, one-third of the Consumer Panel is renewed. This renewal ensures that the panel remains a cross-section of the population, that panel members do not develop specific knowledge of and attention for health care issues and no "questionnaire-fatigue" occurs. In December 2002 'trust in health care' was the subject of research in this panel. By that time, the panel consisted of 1944 members. Of these 1944 members, 1421 returned the questionnaire, a response rate of 73%. In Germany, we used the Gesundheitsmonitor (Health Care Monitor). Every 6 months a cross-section of the German population, sampled from a national Access Panel, is surveyed on experiences with ambulatory care and expectations concerning health policy [22]. Every survey comprises around 1500 subjects. In the spring of 2002 'trust in health care' was one of the subjects. The response rate was 71%. In England and Wales, the survey was carried out between October 2002 and February 2003. Data was collected in a random sample of people aged 18 and above, based on the electoral register of 2000. A sample of 2777 was selected. This sample was reduced to 2489 as 288 had died or moved away. The response rate was 48% (1187).

3.3. Analysis

The items on the validated public-trust-in-health-care-scale were summarised in six dimensions [21]:

- patient-centred focus of health care providers,
- macro-level policies concerning health care,
- professional expertise of health care providers,
- quality of care,
- communication and provision of information, and
- quality of cooperation between health care providers.

A complete list of the 28 items of the scale is shown in Appendix A, displaying the percentages of 'a lot' and 'quite a lot of trust' per item. However, the average scores on the dimensions were used for further analysis. The dimensions of the scale and the individual trust items on health care professionals and institutes were compared, using ANCOVA. In this ANCOVA, both age and gender were used as covariates while the datasets diverged on these variables (see Table 1). The datasets differed significantly on age, the English respondents are significantly older than the Germans and the Dutch ($F = 35.3$, $df = 2$, $p < 0.001$). By placing both age and gender as covariates in the ANCOVA, the testing could not be influenced by both background variables. Except for the ANCOVA, also post hoc tests (Bonferroni) were performed. In this study, tests of significance were based on the 0.05 level. SPSS 10 was used for analysis.

[TABLE 1]

4.1. Public trust in health care, the six dimensions

Trust-judgements of inhabitants of England and Wales, The Netherlands and Germany on the dimension 'patient focus of providers' differ significantly ($F = 46.9$, $df = 4$, $p < 0.001$) (Fig. 2 and Appendix A). The

Dutch respondents are more trusting regarding this dimension, compared to the respondents from England and Wales and Germany. The Germans place significantly less confidence in the 'patient focus of providers'.

[FIGURE 2]

Dimension 2 reports on confidence that macro-level policies do not have negative consequences for patients. In all three countries, public trust in this dimension is low. Differences between countries are not significant.

Trust in 'health care provider's professional expertise' is summarised in dimension 3. More than three quarters of the respondents in The Netherlands and England and Wales trust that the education and training of doctors in their country is one of the world's best. In contrast, only half of the German respondents rely on that. Also, Germans less strongly believe that doctors can do everything and that they know all about all sorts of diseases. Analysing this dimension as a whole, there are significant differences between the countries ($F = 52.3$, $df = 4$, $p < 0.001$). The Dutch rely the most on 'health care providers' professional expertise', followed by the respondents from England and Wales. The Germans are significantly less trusting on this dimension.

Moving to trust in the 'quality of care' (dimension 4), the Dutch are confident, more than respondents in the other countries, that doctors do not prescribe drugs too late. The respondents from England and Wales have more confidence that a lot of care is taken to keep patients' medical information confidential and that doctors always make the right diagnosis. Respondents from England and Wales place significantly more trust in the dimension 'quality of care' than those from The Netherlands ($F = 77.1$, $df = 4$, $p < 0.001$). However, the Germans are, again, significantly less trusting on this dimension.

Dimension 5 concerns trust in 'information supply and communication'. The countries differ significantly on this dimension ($F = 33.9$, $df = 4$, $p < 0.001$). Dutch respondents pose significantly more trust in information supply and communication than those from England and Wales and Germany. German respondents are significantly less trusting.

Dimension 6 is about trust in the 'quality of cooperation'. On this dimension, the countries also differ significantly ($F = 32.7$, $df = 4$, $p < 0.001$). The Dutch are more trusting, followed by the respondents from England and Wales. German respondents are less trusting in this area.

4.2. Public trust in health care professionals

Respondents in England and Wales place significantly more trust in family physicians ($F = 49.6$, $df = 4$, $p < 0.001$), specialists ($F = 39.7$, $df = 4$, $p < 0.001$), dentists ($F = 27.2$, $df = 4$, $p < 0.001$) and complementary/alternative therapists who are no doctors ($F = 227.1$, $df = 4$, $p < 0.001$) than the Dutch and German respondents (Fig. 3). The Dutch and Germans show similar results on public trust in these health care professionals.

[FIGURE 3]

Public trust in nurses ($F = 180.8$, $df = 4$, $p < 0.001$), complementary/alternative therapists who are doctors ($F = 144.7$, $df = 4$, $p < 0.001$), physiotherapists ($F = 72.5$, $df = 4$, $p < 0.001$) and pharmacists ($F = 188.2$, $df = 4$, $p < 0.001$) differs significantly between all three countries. Patterns are similar. For these health care professionals, public trust is more often placed by respondents from England and Wales, followed by the Dutch. Germans have the lowest levels of public trust in these health care professionals.

4.3. Trust in health care institutions

More people trust hospitals than they trust home care services and home care services are trusted more than nursing homes, regardless of the country they operate in (Fig. 4).

[FIGURE 4]

There are significant differences between the countries in the extent to which health care institutions are trusted. Respondents from England and Wales are significantly more trusting toward all three institutions (hospitals: $F = 87.5$, $df = 4$, $p < 0.001$; home care services: $F = 30$, $df = 4$, $p < 0.001$; nursing homes: $F = 119.5$, $df = 4$, $p < 0.001$), followed by the Dutch. Again Germans are significantly the least trusting. Mental health services are trusted least in The Netherlands ($F = 17.9$, $df = 3$, $p < 0.001$). In England and

Wales, mental health services are trusted just as much as nursing homes. In Germany, mental health services are organised differently and therefore trust cannot be compared.

5. DISCUSSION AND POLICY IMPLICATIONS

Trust in public service areas is regularly measured in different countries [23], although health care tends to have been neglected. Public trust in health care, however, is an important concept, in that it is an indicator of the level of support of the health care sector [21], an important resource in policy-making and governance [24] and it taps the future oriented dimension of performance of health care systems. This article fills the gap in knowledge on public trust in health care by presenting evidence from a study comparing public trust in health care in three different countries, namely Germany, The Netherlands, and England and Wales. The choice of these three countries, however, was a pragmatic one. Connections between researchers in these three countries already existed; all researchers shared the same interest in researching the topic 'public trust in health care'.

The answer to the first research question of this article – does public trust in health care vary between Germany, The Netherlands, and England and Wales? – is: yes, there is variation in public trust in health care between the three countries. The inhabitants of England and Wales trust health care most, followed by the Dutch. The Germans are in general less trusting toward health care.

How can these differences in public trust in health care between the three countries be explained? In Section 2 we suggested four sources of differences between health care systems: institutional guarantees, health care availability and quality, media attention, and cultural differences in placing trust. Although we cannot strictly test different explanations, because we compared only three health care systems, it is important to evaluate these sources of differences. The applicability of the concept of public trust in a comparative performance framework depends on how confident we are that differences in public trust reflect the first two sources of differences and not the latter two.

5.1. Explaining differences in public trust

The three countries have health care systems that are organised and financed in different ways [25]. England and Wales have the NHS (financed mainly through taxation), while Germany and The Netherlands have a social insurance model (financed mainly through premiums). Ambulatory physician payment differs per country [26]. In the UK and The Netherlands, the major payment of family physicians is a capitation fee for each patient and patients are on the list of a specific family physician or practice, enhancing longstanding relationships between physicians and their patients. In Germany all ambulatory physicians (both family physicians and specialists) used to be paid for by fee-for-service, but nowadays receive a standard fee per patient per quarter, based on average service volume. This change from fee-for-service to a standard fee based on average service volume, of which physicians have claimed publicly that it is too small to be able to provide adequate care, might have affected public trust in health care in Germany. In the UK and The Netherlands, family physicians have a gate-keeping role, restricting freedom of choice in access to secondary care. The German system does not encourage longstanding relationships with doctors. Choice of physicians on the other hand is larger in Germany.

Systematic information about other institutional guarantees in different countries is only available for a limited number of areas, such as length of education of health care providers. Education has been harmonised within the EU and is hence more or less comparable. Information about protection of patients' rights in different countries is outdated [27] and recent comparative data is not available. Only The Netherlands has a specific law on patients' rights (since 1993). In Germany, the legal position of patients seems to be firmly protected through the administration of justice and jurisprudence. Protection of patient data is regulated by law in all three countries; probably strongest in Germany. Health service provision, in terms of the package of services that people can claim, is much more regulated by law in Germany (Book of social law—*Sozialgesetzbuch V*) compared to England and Wales and The Netherlands. The approach taken to protection of patient rights in the UK is not through the legal system but through a series of Patient Charters. While these are not compulsory, they are increasingly built into contracts between commissioners and providers [28]. In all three countries to a more or lesser extent patient rights are protected; therefore it is difficult to ascribe public trust to these institutional conditions. Independent inspectorates are also part of the institutional guarantees. The Netherlands has an Inspectorate of Health Care and in England and Wales there is the Commission for Health Improvement, which is the independent inspection body for the NHS. It highlights where the NHS is working well and the areas that need improvement [29]. Germany does not

have a comparable institution. In sum, there is no unequivocal evidence of differences in institutional guarantees that might account for the differences observed.

Regarding the availability of care, numbers of physicians and hospital beds per head are much higher in Germany compared to The Netherlands and England and Wales [30]. The latter two countries are known for having problems with waiting lists. In general, health care supply in Germany is more abundant and this might be a source of more public trust in health care. In this case there is no evidence that German health care performs worse than the other two systems.

It seems that neither institutional guarantees nor the availability of health care explains the differences between the three countries in public trust. Could it be that increased negative media exposure around the time of data collection has influenced the results of our study? We did not find indications that this may have been the case. In Germany, data were collected in June 2002. The public discussion on health care during April, May and June focussed on the need for health care reform (it was pre-election time). Proposals were very general in order not to put off voters. Generally, health care problems and deficiencies were not 'hyped'. It was emphasised that reforms are needed, but this applies to many other policy fields in Germany. In The Netherlands, data were collected in November and December 2002. As in Germany, no media scares and scandals took place in The Netherlands. In that period of time as the Dutch Cabinet was under resignation, no major policy decisions were made and only few delicate subjects were mentioned in the media. Firstly, in January 2003, the sickness funds premiums would go up, and secondly, pharmacists were accused of enriching themselves on the account of the sickness funds. Both issues were addressed more than once by the media, but certainly not 'hyped'. In England and Wales data were collected between October 2002 and February 2003. The NHS is constantly in the public eye and thus the focus of continual media attention although during the period of field work there was no media coverage on specific issues concerning medical competence or health service performance (the discussion about foundation hospitals occurred some time after the data were collected). In sum, we conclude that differences in public trust between the three countries cannot be explained by differential media attention at the time the questionnaire was set out.

That leaves the possible role of cultural differences in the propensity to place trust. International data on differences in levels of trust between countries [19] have shown that people in Germany are generally less trusting than people in England and Wales and in The Netherlands. This is in line with our results on public trust in health care. Hofstede's study of cultural differences between countries is a source of information for more specific differences [31] and [32]. Germans score higher on Hofstede's cultural dimension of uncertainty avoidance, which is related to trust in expert knowledge. The implication of this might be that the difference between trust in physicians and trust in nurses is larger in Germany, compared to The Netherlands and England and Wales. This is indeed the case. Differences on the cultural dimension of individualism suggest that people in Germany might be less trusting than people in The Netherlands and England and Wales. Finally, differences in the cultural dimension of masculinity suggest that people in Germany and UK might have more trust in the curing aspects of health care (physicians, hospitals) than in the caring aspects (nurses, nursing homes), compared to people in The Netherlands. This assumption is partially confirmed. In all three countries more trust is placed in the curing professions or institutions, instead of the caring occupations or institutions. Comparing Germany and England and Wales on the one hand and The Netherlands on the other, it is clear that the differences in trusting between the curing and the caring profession, physicians versus nurses, is the smallest in England and Wales, and not in The Netherlands ($F = 49.1$, $df = 4$, $p = 0.00$). With respect to the curing and caring institutes, the difference between trust in hospitals and nursing homes is significantly smaller for the Dutch, but the difference is largest for Germany ($F = 29$, $df = 4$, $p = 0.00$).

It should be stressed that these hypothetical explanations need stronger tests, e.g. by collecting data about more health care systems. The World Values Survey is an example of a large-scale data collection that has been used to analyse cultural differences in trust in other people in general [33].

Moreover, the causal order is not unequivocal; do some features of health care systems induce public trust or do societies with higher levels of trust organize their health care systems differently?

5.2. Shortcomings of the study

This study provides possible explanations for differences in public trust, but it has several shortcomings. Differences in the selection of respondents might have created different types of biases. For Germany and The Netherlands, a health care panel was used. These panels led to relatively high levels of response. In

England and Wales a population sample was used with a lower level of response. Despite of these differences in response levels, however, it is expected that the respondents of the panels and the random sample are comparable. This comparability is caused by the fact that the panels used in our study are two-step samples. In the first step, a sample of persons is asked to join the panel (which means that they agree to participate in future surveys). In this step, the response rate is usually comparable to one-step samples for a conventional survey. In the second step, panel members are asked to answer a specific questionnaire and here the response is usually high. It therefore can be expected that the net effect on response of the two steps in the panel situation is comparable to the situation in a one-shot random sample.

An issue that could also be addressed is the fact that panel members might have higher levels of awareness of issues concerning health and health care. However, if there is increased awareness, it does not show in the form of comparable responses in Germany and The Netherlands.

Another important issue is the cross-culturally validity of the measurement of public trust. In the literature a number of critical questions concerning measuring trust in general have been posed [34]. Is trust a meaningful concept for the public and does it vary by social group? Can trust be measured on a Likert scale and does it have a 'natural' lowest point and highest point? The original Dutch items for the six dimensions were developed on the basis of a qualitative study asking people what they think about when the subject of trust in health care comes up and what issues they find important. This has increased the validity of the items. However, there have not been qualitative studies in the other two countries to explore cross-cultural comparability.

With respect to the use of specific rating scales, difficulties were encountered in translating the answering categories of the 4-point Likert scales. These difficulties were related to semantic meaning of the public trust concept, especially when used in English. When translating the Dutch 'vertrouwen hebben' and German 'Vertrauen schenken' into English, different options were available such as 'being confident', 'having confidence' and combinations with the verb 'to trust' (e.g. 'to put one's trust in ...'). These options were associated with different labels for the answering categories. In the panel discussions of the translation process, it was decided to use 'being confident'; the answering categories of the 4-point Likert scales are 'a lot of confidence', 'quite a lot of confidence', 'little confidence' and 'very little confidence' (in Dutch: 'heel veel vertrouwen', 'veel vertrouwen', 'weinig vertrouwen' en 'heel weinig vertrouwen'; in German: 'Sehr viel Vertrauen', 'Viel Vertrauen', 'Wenig Vertrauen' and 'Sehr wenig Vertrauen'). Empirical evidence showed that people equate the terms 'confidence' and 'trust' [35]. Therefore, in this study we use 'confidence' as an equivalent of trust.

Finally, public trust in institutions and health care occupations is measured with only one item each. For other research on public trust, for example trust in insurers [36], and in medical professions [37], scales were developed. However, both studies indicate that public trust is a one-dimensional construct. This might implicate that trust in health care organisations and professions can be measured with only one general trust question.

5.3. Policy implications of the study

Health care is an important institutional field, coupled to the near universal value of health itself and related important values, such as solidarity and equity. High levels of trust in this institutional field are therefore preferable. Low levels of public trust might have further consequences for the governance of the health care system and for trust in government. A certain level of public trust is important, because of the mutual relationship between public trust and interpersonal trust. Little trust might lead to over-use of health care. A low level of trust is related to less therapeutic success and compliance to therapeutic advice and might lead to more requests for second opinions [5].

On the whole, research on public trust in health care is still in its infancy. In this study the concept of public trust was explored by placing it in an international perspective. Differences in public trust between countries seem to be strongly related to cultural differences in general. This affects the applicability of the concept of public trust in international comparisons of health care performance.

In future research along international comparative lines it is important to test the explanations suggested in this article in a larger number of health care systems. Ways should be sought to distinguish between the part of variation in public trust that results from cultural differences and the part that results from differences in the way health care is organised and governed.

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FIGURES

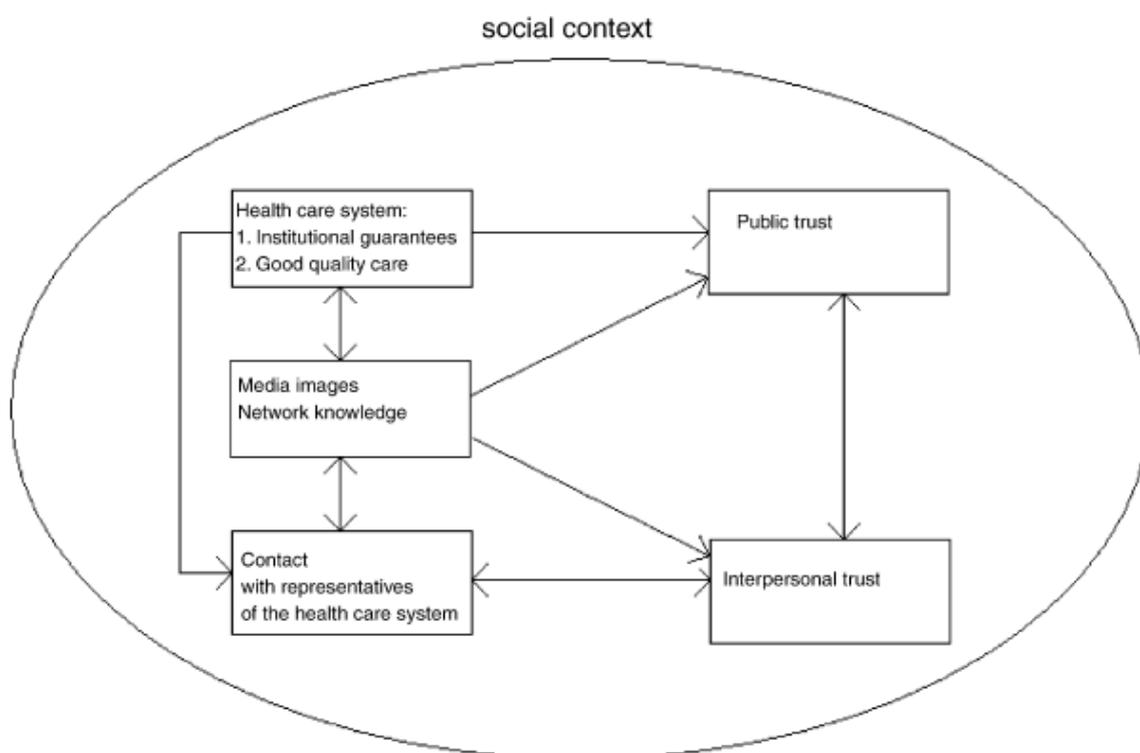


Fig. 1. Model of public trust in health care.

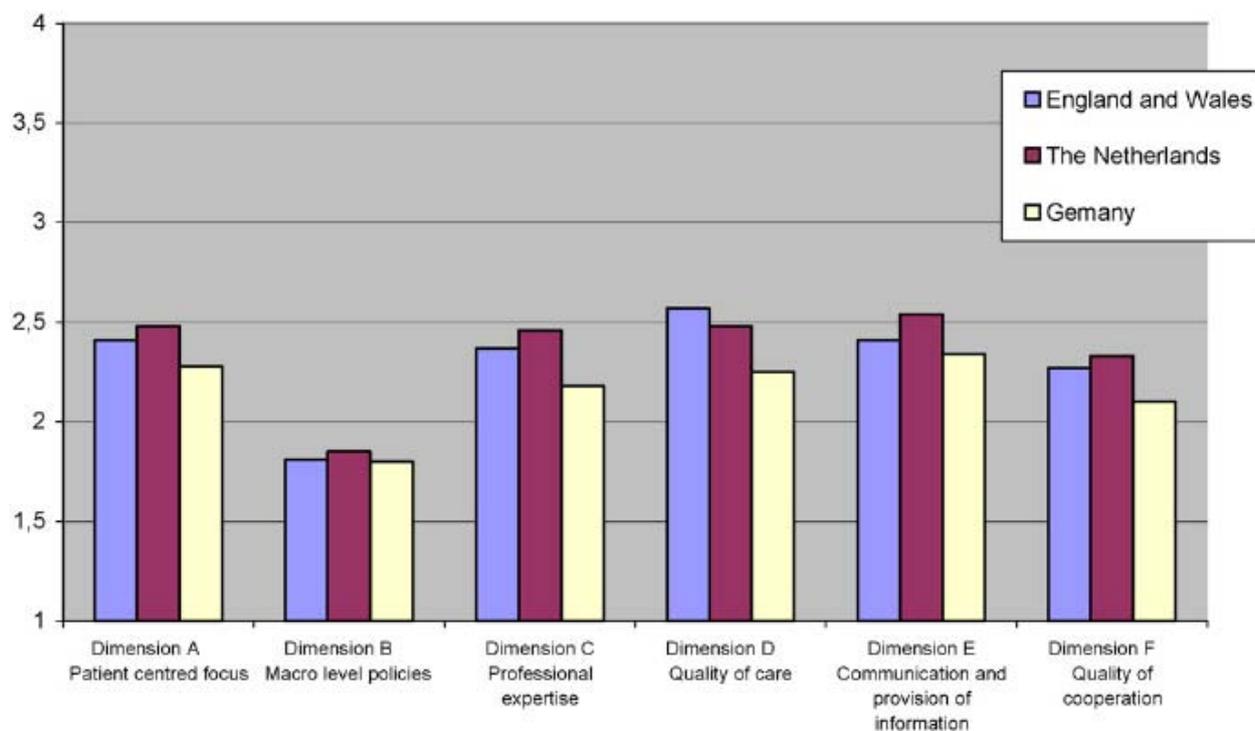


Fig. 2. Means of six different scales of the three countries, corrected for age and gender.

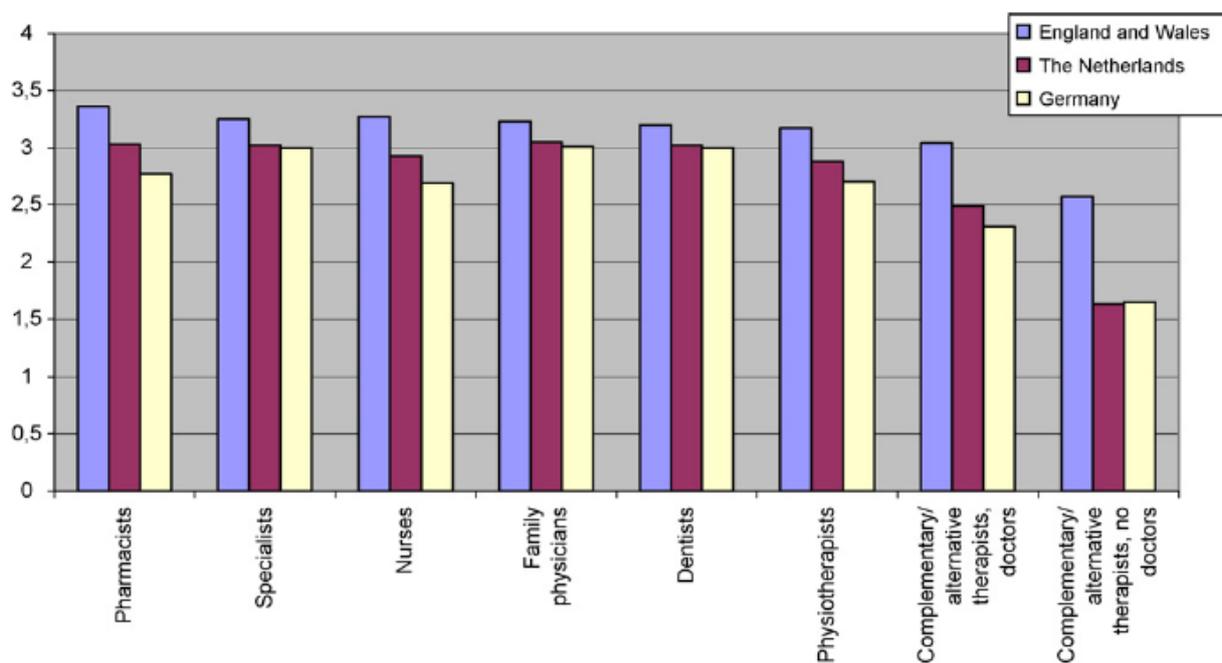


Fig. 3. Mean scores (1-4) of trust in health care professions, corrected for age and gender.

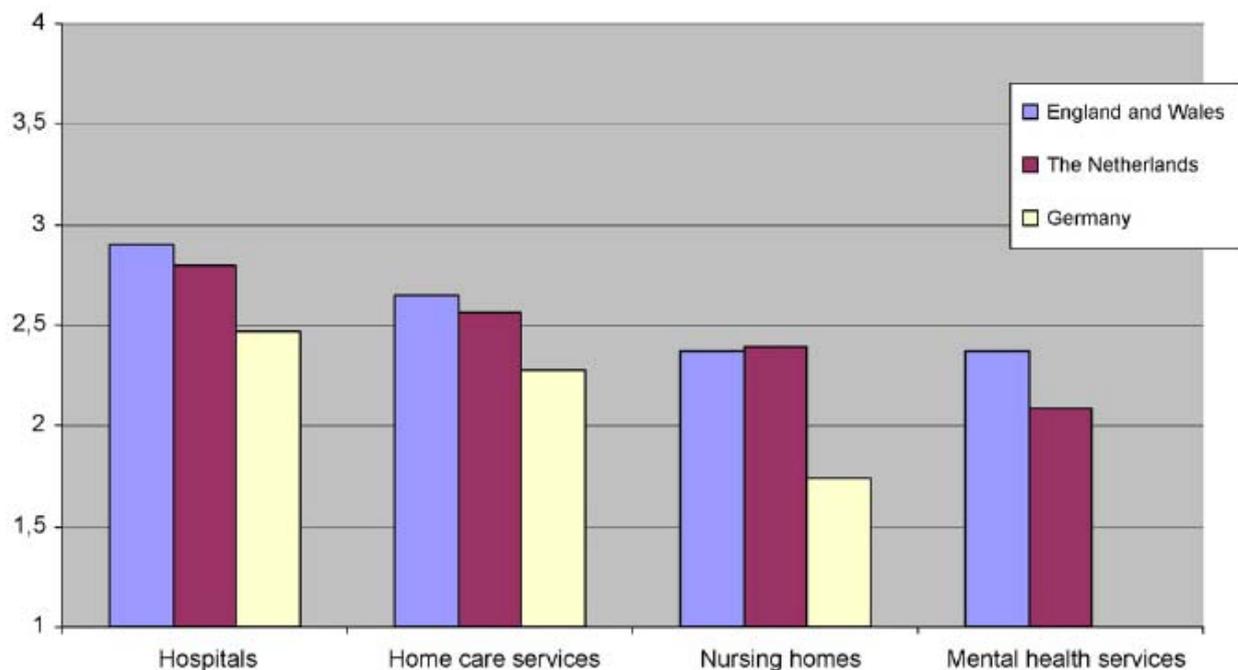


Fig. 4. Mean scores (1–4) of trust in health care institutions/services, corrected for age and gender.

TABLES

Table 1

Division by sex and age in the three datasets

	England and Wales	Germany	The Netherlands
Male (%)	43.1	44.7	42.4
Female (%)	56.9	55.3	57.6
Mean age	52.6	48.2	47.6
S.D.	16.4	15.6	16.3
Range	79	61	74
<i>N</i>	1155	1514	1415