Lay people's evaluations of health: are there variations between different subgroups?

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Abstract

Study objective – To elicit lay concepts of health and to see whether these are related to various sociodemographic factors, as has been suggested by previous smaller studies.

Design and setting – A total of 196 people aged 18 and over were selected, as a representative sample of the general population, from the electoral registers of Walsall and Dudley in the West Midlands. Respondents were interviewed in their own homes in the autumn of 1989.

Measurements – Open ended and structured questions were used to elicit concepts of health. The three main stages consisted of an unprompted section in which respondents were asked to describe the features of good or poor health in themselves or others; a prompted section in which they were asked to rate 37 health statements using a series of categories from “very important” to “not at all important”; and a section in which they were asked to indicate which of six groups of statements, each representing a particular concept of health, best represented their own notions of health.

Results – Health was seen as multidimensional. Irrespective of whether respondents addressed health in self or health in others, or good or poor health, the biomedical dimension remained an important one. The manner by which concepts of health are elicited may provide some explanation as to why so many and varied concepts are alleged to be held by different subgroups of the population (notably different social classes).

Conclusions – The differences found in this study between models of health employed by different subgroups of the general population have not been as great as has previously been suggested in the published reports. This is encouraging for those using existing health status measurements.

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claimed that those who most need the health and social services, are least likely to use them. When one suspects that many of the services and treatments provided by the health and social services are ill matched to the needs and priorities of the recipients, it is tempting to focus on specific socioeconomic subgroups – those thought of as least likely to respond, in what is seen as an appropriate manner, to health promotion campaigns and appropriate use of health services – to come up with a picture of the concepts held by these subgroups, and point out how and where they differ from those held by the health care providers.

Most of the studies into lay concepts of health found in the published reports have a particular context or hypothesis – for example, “How much do a particular group see health as their own responsibility?”²; “What is the effect of deprivation in a particular background?”³; or “What are the differences between the classes?”⁴ These studies have often been small scale and it has therefore been difficult to extrapolate from findings concerning these subgroups to the population in general.

Furthermore, claims by the authors of such early and small scale studies which employed these subgroups have been called into question by the findings of more recent studies employing more representative samples (for example, the concept of health as the absence of illness which was once thought to be unique to working class women has now been found equally among all social classes).

Blaxter, in fact, in her recent large scale study, found the complete opposite of her findings in an earlier study:³ the “not-ill” description of health was more frequently used by the better educated and those with higher incomes.⁵

It is clear that where samples are not representative of the general population, an accurate picture of the lay concepts of health and illness held by that population will not emerge. This has important implications for the construction of health status indices as choices have to be made regarding the inclusion of health related items.

A number of themes, however, frequently emerge in the published reports, and it has been suggested by Blaxter⁵ that there is widespread agreement among health researchers that *health in the abstract* is perceived by the lay person as the absence of illness, as functional capacity, and as fitness. She reports that individuals define health in different terms depending on whether they are defining it in relation to themselves or to another person. Health for oneself is described differently in

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Twenty years ago Freidson wrote that lay definitions of health and illness are important for our understanding of whether or not lay people will believe themselves to be ill, and this in turn has consequences for a related issue – whether lay people, after coming to believe they might be ill, then consult a physician.¹ This has an obvious relevance for use of health services and health policy: it is often

that although the categories listed above re-appear, health for oneself is predominantly thought of in psychological terms. The better known and well validated health status measurements such as the Nottingham Health Profile and the Sickness Impact Profile have incorporated such dimensions.

As yet no methodological paradigm exists within this field of study: methodologies used to date have therefore been many and varied, ranging from the use of one open ended question (for example, D'Houtard and Field⁷) to the use of in depth interviews (for example, Blaxter and Paterson³) and closed ended questionnaire type material (D'Houtard and Field⁸ and Wright⁹).

Pill and Stott¹⁰ favour an open ended approach to eliciting health beliefs: "data obtained by this method can be regarded as a measure of salience, i.e. a measure of the relative importance the individual attaches to an attribute or belief". They cite Lemon,¹¹ who suggests that the degree to which attitudes or beliefs are readily elicited in open ended interviews may be treated as a measure of salience. D'Houtard and Field, on the other hand, encourage the use of the closed approach. They conducted one study using an open ended approach⁷ and a study using closed questions⁸ and found differences between the concepts held by different occupational groups in the two studies. They attempt to explain the differences by noting that in "the open question, health is only defined according to the immediate or spontaneous evocations of the respondent, whereas, when facing an already formulated series of definitions, the choices are elicited preferably towards this or that theme as a function of more or less conscious attitudes and according to reactions resulting from the location of each theme in the sequence and the theme's own connotations with reference to other themes".⁸

The fact that the manner of eliciting concepts of health may yield different results also makes comparisons of findings from different studies rather difficult. In addition, researchers do not commonly report on the actual process or means of analysis by which categories of beliefs/health concepts have "emerged" from raw data. It is therefore hard to estimate how much of a researcher's own interpretation or subjectivity has gone into the analytic process.

Even more importantly, some researchers do not list the questions/types of questions that have been used to elicit the raw data in the first place. In addition, it is often unclear whether concepts of health have been elicited in conjunction with concepts of illness, or whether the two have been sought in isolation. Similarly, there has been a general failure to report whether health/illness definitions have been sought in relation to self, other, or in the abstract (with the exception of researchers like Blaxter, D'Houtard, and Field and Calnan).

Many of the existing health status measurements, such as the Sickness Impact Profile, the Nottingham Health Profile, and the Rosser Index, have been developed using convenience

samples, often of health personnel. It is therefore the aim of the present study to elicit the salient features of health as perceived by ordinary people for *eventual* use in a *health status index*, and to see whether this study supports the findings of the existing reports on lay concepts of health.

Methods

STUDY POPULATION

The survey was administered by interview and was conducted in the West Midlands. The sample consisted of 196 members of the general public (51.0% men and 49.0% women) aged 18 and over randomly selected from the electoral registers of the Walsall and Dudley areas.

DATA COLLECTED

During the *first* stage of the interview unprompted notions of good and poor health were elicited through the use of open ended questions.

During the *second* stage the respondents were presented with a structured questionnaire in order to elicit the relative importance to them of 37 different *stated* characteristics of good or bad health.

Various background information data about the respondent were also collected – basic sociodemographic information such as age, sex, and marital status; class related information such as qualifications gained, income, and social class as defined by the Registrar General; and health related information.

CONCEPTS OF HEALTH

The concepts of health in the first part of this study were derived from answers to five questions: (1) How would you describe someone who is in good health? (good health in others); (2) How would you describe someone who is in poor health? (poor health in others); (3) [When appropriate.] In what ways are things different now from when you were in poor health? (good health in self); (4) [When appropriate.] Although you are in good health now, what things would make you think you were not in good health? (poor health in self); (5) [When appropriate.] In what ways are things different now from when you were in good health? (poor health in self). The respondents were free to mention whatever they chose, and their responses were coded verbatim. The interviewers were given strict guidelines concerning prompting, only prompts such as "anything else" were allowed. The questions concerning health in self were asked at the beginning of the open ended interview, after the first part of a sociodemographic schedule had been completed. This part of the sociodemographic schedule contained a brief health history and was considered a warm up for the more abstract questions and it contained no hints concerning the notions of health or illness that might be employed.

PROCEDURE

Each respondent was interviewed at home, and to ensure that the interviewers were accurately transcribing the responses to the open ended questions, the first part of the interview (unprompted notions of health) was tape-recorded for quality control purposes. A random sample of the tapes was then transcribed and checked against the material written verbatim by the interviewers.

CODING OF RESPONSES

Initially, tentative categories were derived and checked independently by at least one other researcher. The same categories were used for the other good health concepts (for example good health in self). A similar coding scheme was used for the poor health concepts, using reverse statements with minor alterations and additions. Coding the material did not prove an easy task. Since the within-coder consistency and between-coder consistency proved relatively poor for some of the categories, all the questionnaires were reprocessed in a different way. A computer package was used which enabled all verbatim statements that had

Table 2 Concepts of health fitted into four dimensions

Functional dimension
Health as function
Biomedical dimension
Health as not ill/absence of disease
Fitness dimension
Health as physical fitness
Health as energy/vitality
Psychosocial dimension
Health as psychosocial well being
Not fitted into any of above dimensions
Health as a reserve
Health as behaviour

been coded under particular categories to be grouped together. These were then worked over by the entire research team, until consensus was reached. The verbatim statements are still available on a database, and can be recoded as necessary.

The final 30 "basic" categories were condensed into seven concepts similar to the ones Blaxter used, as shown in table 1.

Since the numbers in some of the seven dimensions were still very small for the purpose of analysis, four broader categories of functional dimension, biomedical dimension, fitness dimension, and psychosocial dimension as outlined by Blaxter¹² were also used (table 2), even though this weakened the analysis somewhat, because in the process of aggregation variation is lost, thus making effective comparisons more difficult. Table 2 summarises how these dimensions were derived.

Results

UNPROMPTED NOTIONS OF HEALTH

Health in others: good health

As can be seen from table 3, for good health in others, the two concepts most favoured were health as physical fitness and psychosocial well being. Good health was also seen as being able to function properly and not having any illnesses. Health is having a good constitution and as living a healthy life was mentioned less frequently.

When health as fitness is combined with energy/vitality to make up the fitness dimension, positive fitness becomes the most important dimension (table 4). The biomedical dimensions take on the least importance.

Health in the abstract is therefore less likely to be seen as not being ill but more to do with fitness and general well being.

Health in others: poor health

To obtain the preferred concepts for health in others, Blaxter concentrated on good health ("think of someone who is very healthy, who are you thinking of and why do you call them healthy"). Since we expected there to be a difference between describing good health in someone else and poor health in someone else, we added a "poor health in others" question.

As can be seen from table 3, for poor health in others, the emphasis was much more on the functional and biomedical aspects. Approximately 34% of the general population described

Table 1 Coding categories fitted into seven concepts of health

Good health	Poor health
Health as not ill	General "feel ill" items/illness
General "feel well" items	Pain
No pain	Poor appetite/eating
Good appetite/eating	Other symptoms
No other symptoms	Needing medication/see doctor/in hospital
Not needing medication/see doctor	Named diseases or conditions
No named diseases or conditions	Dying/terminal illness/respiratory problems
No respiratory problems	General "not well" items
General "not ill" items	
Health as a reserve	Weak/no resistance to illness
Strong/robust/resistance to illness	
Health as behaviour	General items
General items	Diet
Diet	Smoking
Smoking	Alcohol
Alcohol	
Health as physical fitness	Not keeping fit/or maintaining fitness
Keeping fit/maintain fitness	Unfit
Being fit	Weight problems
No weight problems	
Health as energy/vitality	No energy/lethargic/tired
Energy/active/lively	
Health as function	Unable to undertake usual activities
Able to undertake usual activities	Physical mobility problems, including housebound
Physical mobility	Sensory/speech impairment
No sensory or speech impairment	Cognitive impairment
No cognitive impairment	Always asking for help/needing help/dependence on others
Not dependent on others	
Health as psychosocial well-being	Stress/worried/unable to cope
No stress or worry/relaxed, able to cope	Feelings, ie, feel depressed/irritable/withdrawn/not enjoy life/lack of motivation
Feelings, ie, feel better/content/positive/confident/cheerful/joyful/happy/enjoyment/outgoing	No enjoyment of usual activities
Enjoyment of usual activities	Lonely
Being able to help others	
Not fitting into any of above concepts	Unlucky
Lucky	Financial problems/standard of living/income
No problems with finance/standard of living/income	Look ill/pale/drawn/haggard
Look well/good colour	Sleep problems
Sleep	
Other categories	Don't know
Don't know	Not relevant responses
Not relevant responses	Other
Other	

In this study, for good health in others, the concept most favoured by the general population was health as physical fitness and psychosocial well being.

Table 3 Number of people mentioning each concept of health (and as % of all respondents to that question): general population

Concepts of health	Good health in others (n = 196)	Poor health in others (n = 196)	Good health in self (having been in poor health) (n = 30)	Poor health in self (in good health now) (n = 143)	Poor health in self (in poor health now) (n = 20)
Health as not ill/absence of disease	50 (26)	83 (43)	22 (73)	105 (73)	13 (65)
Health as reserve/good constitution	11 (6)	29 (15)	1 (3)	13 (9)	—
Health as behaviour	25 (13)	11 (6)	3 (10)	3 (2)	—
Health as physical fitness	78 (40)	32 (16)	3 (10)	19 (13)	3 (15)
Health as energy/vitality	61 (31)	44 (22)	6 (20)	39 (27)	5 (25)
Health as function	75 (38)	84 (43)	10 (33)	43 (30)	11 (55)
Health as psychosocial well being	78 (40)	68 (35)	10 (33)	27 (19)	5 (25)

Note: People may mention more than one concept.

Table 4 Number of people mentioning each dimension (and as % of all respondents to that question): general population

Dimensions of health	Good health in others (n = 196)	Poor health in others (n = 196)	Good health in self (having been in poor health) (n = 30)	Poor health in self (in good health now) (n = 143)	Poor health in self (in poor health now) (n = 20)
Functional dimension	75 (38)	84 (43)	10 (33)	43 (30)	11 (55)
Biomedical dimension	50 (26)	83 (43)	22 (73)	105 (73)	13 (65)
Fitness dimension	122 (62)	66 (34)	8 (27)	49 (34)	7 (35)
Psychosocial dimension	78 (40)	68 (35)	10 (33)	27 (19)	5 (25)

somebody in poor health as somebody who looks ill, drawn, or haggard (figures not shown). More people mentioned poor health as having a poor constitution, than was the case for good health. When the seven concepts are combined to make up the four broader dimensions, there was less differentiation between the dimensions than was the case for good health in others (table 4).

There was little difference found in the average, modal, and median number of responses between the good health and poor health items. This seems to suggest that respondents are equally able to define good and poor health in others. In contrast, Herzlich and Graham¹³ suggest that as individuals will only ever have partial experience of illness, defining illness may present difficulties for them. Pill and Stott,¹⁰ however, note that respondents found it easier to talk about illness than health: they were more comfortable talking about illness, because of their actual experience of it.

One of the drawbacks of presenting two similar questions in close proximity to each other (how would you describe someone in good/poor health?) is that respondents may simply reverse the statements. The mean, mode, and median for these items may suggest that this is the case in this study. It is clear, however, that although some reversal may take place, there are still differences between the concepts employed (tables 3 and 4).

Health in self: good health

For health in self, the most important dimension was the biomedical one. Some respondents defined themselves to be in good health now but had had episodes of poor health in the past (n = 30). They were asked in what way things were different now from when they had been in poor health. A question posed in this way, perhaps, invites respondents to recite their previous ills and pains. Blaxter asked the question: "At times people are healthier than at other times. What is it like when you are healthy?" It was felt that this would have been

a more appropriate question to elicit concepts for good health in self.

Health in self: poor health

The poor health in self item was split into two questions: those who were in good health presently were asked to think about what would make them think they were not in good health, and those who considered themselves to be in poor health were asked to think how things are different from when they were in good health.

For those who considered themselves to be in good health now (the majority of all respondents), for all groups, the biomedical dimension yielded by far the most concepts, that is having complaints or illnesses would make them think they were not in good health. The numbers for those in poor health were very small, but the biomedical dimension also predominates.

BACKGROUND VARIABLES

The background variables were examined to see whether there is a strong association between models of health employed and various sociodemographic characteristics, as the published reports suggest. Only good health in others will be reported here.

Age, sex, and marital status

The published reports suggest that age and sex influence the models of health employed. Blaxter, for instance, found that fitness is a concept associated with the young and with men. This was also the case in the present study on the seven categories, but on the four broader dimensions of health (when health as energy-vitality is combined with health as fitness) these differences largely disappear. Health as positive fitness is the most favoured dimension among both sexes and the younger and middle aged groups alike. The older age group (over 60) saw good health in others more often in terms of psychosocial functioning, whereas this was the least favoured concept

among the younger age group. Apart from this age group, the biomedical dimension did not feature very highly for good health in the abstract. Marital status closely resembled the three age groups in the concepts of health favoured, presumably because the young are most likely to be single, the older age group most likely to be widowed, etc. The numbers in some of the categories were too small from which to draw any useful conclusions.

Class related variables: social class based on current job, social class based on job of head of household, education and incomes

As mentioned above, published reports suggest a strong correlation between social class and concepts of health held. A class stereotype has emerged where the working classes are seen to hold a socialised, functional conception of health with their main concerns being ability to get through the day properly, ability to fulfil their social roles, and having a good morale. The middle classes, on the other hand, are alleged to hold more esoteric notions of health: health as positive fitness, health as hedonism, health as personal unfolding, health as a striving for self realisation, and well being.

Evidence for this class stereotype has not been supported by Blaxter's large scale random study, nor by the findings of the present study. The non-manual workers are more likely to uphold a biomedical model of health ($p = < 0.05$) than the manual workers and mention positive fitness only marginally more often than those in manual occupations.

Education and income as a proxy for social class did not show much more social differentiation than the social class variable: those with qualifications were more likely to mention health as fitness than those without qualifications ($p = < 0.01$) and this is in accordance with published reports. There were no other differences.

The total number of concepts mentioned did not vary by social class. Differences between the class related variables must therefore reflect genuine differences in concepts held, rather than an ability of the non-manual classes and the better educated to be more articulate and generate more concepts; nor did the manual workers and those with less education simply "repeat" concepts more often than their non-manual counterparts.

Illness experiences

Overall, there was some evidence that various illness experiences affect the way lay people conceptualise health, but the findings are very tentative. Blaxter found that the "not-ill" concept of health was more frequently associated with the respondent's own state of health: "at all ages, but particularly among the elderly, those who themselves were in poor health or suffering from chronic conditions were less likely to define health in terms of illness".⁵ Those who claimed to suffer from a longstanding illness, disability, or infirmity were less likely to mention the biomedical dimension,

but saw good health more in terms of functioning ($p = < 0.05$). Those who did not have a chronic illness were more likely to uphold health in terms of fitness ($p = < 0.001$).

Respondents were asked to rate their current health status on a 0 to 100 visual analogue scale. Most respondents from the general population (70%) rate their health status between 75 and 100, which is approximately equivalent to the number of people who did not suffer from a longstanding illness. There were no differences on the broader four dimensions between those who rated their health below 75 and those above 75. There were no differences between those suffering limiting effects of their illness, however the numbers in this subgroup were very small.

Those who had experienced a recent death or admission to hospital of anyone close did not use different concepts to those who had not had these experiences, which is perhaps a little surprising.

THE PROMPTED RESPONSES

Respondents were presented with 37 health related items and were asked to state the importance of each in deciding what good health is, through the use of a five-point Likert Scale, ranging from "very important" to "not at all important". The items composing the scale were based upon results from earlier studies and also from existing health status measures. They cover a wide range of health related variables including symptoms, psychosocial functioning, disabilities, feelings, and physical fitness.

Principal factor analysis (with varimax rotation) was used to reduce a matrix of correlations between the 37 item response scores to a smaller number of representative dimensions or factors. This proved unsuccessful; there was little distinction within the data.

To see which of the socioeconomic variables are the main determinants of choice of conceptualisations of health, χ^2 statistics were used to estimate significant differences in cell distributions. This proved equally unsuccessful, the two concepts of health that seem to be associated with all class related variables are that those without qualifications, lower incomes, and in manual occupations don't like going to the doctor and like having a good memory! There were no other significant associations between demographic variables and the prompted notions of health.

Discussion

From the unprompted notions of health, it seems that although people employ many different concepts for poor and good health in self and others, the biomedical dimension is an important one, the notable exception being good health in others.

Positive health, it seems, is about being fit, energetic, and feeling on top of the world; poor health in self and others means not being able to get through the day properly, not being able to carry out one's usual tasks, and feeling

poorly. To some extent these differences may be due to the fact that the question, "how would you describe someone in good health" is a more abstract one. As has been discussed above, lay people may find it easier to conjure up images of those in poor health or what poor health in themselves means: poor health is more readily associated with incapacities or illnesses, good health has less dramatic connotations.

The effects of sociodemographic and related variables on the concepts of health advanced showed unsurprising results, given the indications from the published reports. Social class as defined by the Registrar General and based on the occupation of the respondent or of the head of household is either not an adequate discriminatory variable or there is in fact little social differentiation to be found, as might previously have been suggested.

It may be argued that closed ended questions such as the ones used in the present study, invite respondents to state that each statement is important. This certainly seemed to have been the case in the present study. However, a recent study in Australia that posed questions in a similar way, albeit using different items, was able to reduce the 33 items used to four dimensions and discriminate between the respondents perceptions on a number of items and dimensions. The original 33 items used in that study were selected from a list of ailments and diseases which a previous survey had shown were prevalent in the general population, and health topics which were considered to be important by large numbers of respondents.¹⁴ As mentioned above, the 37 items covered in the present study were based upon results from earlier studies and also from existing health status measures. Given the indications from the unprompted

notions of health, which showed up fewer differences between the variables examined than might have been expected, it may be concluded that all 37 items are important to most people. It is very encouraging that the health status measures they have been derived from do not disadvantage certain age, socio-economic, or illness groups.

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