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

Harmanna van Dalen, Alan Williams, Claire Gudex

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 measures.

(J Epidemiol Community Health 1994;48:248–253)
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 ques-
tion (for example, D'Houtard and Field1) to
the use of in depth interviews (for example,
Blaxter and Paterson2) and closed ended ques-
tionnaire type material (D'Houtard and Field3
and Wright4).

Pill and Stott5 favour an open ended ap-
proach 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,6 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 ap-
proach. 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 ques-
tion, 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 atti-
tudes and according to reactions resulting
from the location of each theme in the se-
quence and the theme’s own connotations with
reference to other themes”9.

The fact that the manner of eliciting con-
ccepts of health may yield different results also
makes comparisons of findings from different
studies rather difficult. In addition, re-
searchers do not commonly report on the ac-
tual 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 con-
junction with concepts of illness, or whether
the two have been sought in isolation. Simi-
larly, 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 measure-
ments, 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 there-
fore the aim of the present study to elicit the
salient features of health as perceived by or-
dinary 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% wom-
en) 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 question-
naire 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 informa-
tion 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 ques-
tions: (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.] Al-
though 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 re-
sponses were coded verbatim. The inter-
viewers were given strict guidelines concern-
ing 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 socio-
demographic 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 ill-
ness 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 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 Blaxter 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 2 Concepts of health fitted into four dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Good health</th>
<th>Poor health</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Functional dimension</strong></td>
<td>Health as function</td>
<td>Health as function</td>
</tr>
<tr>
<td><strong>Biomedical dimension</strong></td>
<td>Health as physical fitness</td>
<td>Health as energy vitality</td>
</tr>
<tr>
<td><strong>Fitness dimension</strong></td>
<td>Health as physical fitness</td>
<td>Health as psychosocial well being</td>
</tr>
<tr>
<td><strong>Psychosocial dimension</strong></td>
<td>Health as psychosocial well being</td>
<td>Not fitted into any of above dimensions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Table 1 Coding categories fitted into seven concepts of health</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Good health</strong></td>
</tr>
<tr>
<td>Health as not ill</td>
</tr>
<tr>
<td>General &quot;feel well&quot; items</td>
</tr>
<tr>
<td>No pain</td>
</tr>
<tr>
<td>Good appetite/eating</td>
</tr>
<tr>
<td>No other symptoms</td>
</tr>
<tr>
<td>Not needing medication/see doctor</td>
</tr>
<tr>
<td>No named diseases or conditions</td>
</tr>
<tr>
<td>No respiratory problems</td>
</tr>
<tr>
<td>General &quot;not ill&quot; items</td>
</tr>
<tr>
<td>Health as a reserve</td>
</tr>
<tr>
<td>Strong/robust/resistance to illness</td>
</tr>
<tr>
<td>Health as behaviour</td>
</tr>
<tr>
<td>General items</td>
</tr>
<tr>
<td>Diet</td>
</tr>
<tr>
<td>Smoking</td>
</tr>
<tr>
<td>Alcohol</td>
</tr>
<tr>
<td>Health as physical fitness</td>
</tr>
<tr>
<td>Keeping fit/maintain fitness</td>
</tr>
<tr>
<td>Being fit</td>
</tr>
<tr>
<td>No weight problems</td>
</tr>
<tr>
<td>Health as energy/vitality</td>
</tr>
<tr>
<td>Energy/active/lively</td>
</tr>
<tr>
<td>Health as function</td>
</tr>
<tr>
<td>Able to undertake usual activities</td>
</tr>
<tr>
<td>Physical mobility</td>
</tr>
<tr>
<td>No sensory or speech impairment</td>
</tr>
<tr>
<td>No cognitive impairment</td>
</tr>
<tr>
<td>Not dependent on others</td>
</tr>
<tr>
<td>Health as psychosocial well-being</td>
</tr>
<tr>
<td>No stress or worry/relaxed, able to cope</td>
</tr>
<tr>
<td>Feelings, ie, feel better/content/positive/confident/cheerful</td>
</tr>
<tr>
<td>joyful/happy/enjoyment/outgoing</td>
</tr>
<tr>
<td>Enjoyment of usual activities</td>
</tr>
<tr>
<td>Being able to help others</td>
</tr>
<tr>
<td>Not fitting into any of above concepts</td>
</tr>
<tr>
<td>Lucky</td>
</tr>
<tr>
<td>No problems with finance/standard of living/income</td>
</tr>
<tr>
<td>Look well/good colour</td>
</tr>
<tr>
<td>Sleep</td>
</tr>
<tr>
<td>Other categories</td>
</tr>
<tr>
<td>Don't know</td>
</tr>
<tr>
<td>Not relevant responses</td>
</tr>
</tbody>
</table>

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.
Lay people's evaluations of health

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

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

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

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

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 what they thought about having 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 about things that 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 men are more often in poor health than women and that for all respondents, the biomedical dimension is the most popular concept. This is consistent with the empirical evidence that indicated that for all respondents, the biomedical dimension is the most popular concept.

Downloaded from http://jech.bmj.com/ on June 15, 2017 - Published by group.bmj.com
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, 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 = < 0.01).

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, \( \chi^2 \) 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
Lay people's evaluations of health

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. 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, socioeconomic, or illness groups.

We would like to thank the Nuffield Provincial Hospital Trust for funding this study, the Department of Health and the ESRC for funding the research team, and all those individuals in the West Midlands who gave their time to participate in this project. Additionally, we would like to acknowledge the efforts of colleagues regarding the design of the project, and the coding and analysis of the material obtained during the interviews: Mary-Alison Durand, Paul Kind, Shirley McIver, and Jenny Morris.

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

H van Dalen, A Williams and C Gudex

*J Epidemiol Community Health* 1994 48: 248-253
doi: 10.1136/jech.48.3.248

Updated information and services can be found at:
http://jech.bmj.com/content/48/3/248

**Email alerting service**

*These include:*

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

**Notes**

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/