

# The incorporation of gender perspective into Spanish health surveys

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**Background:** Most studies into social determinants of health conducted in Spain based on data from health surveys have focused on social class inequalities. This paper aims to review the progressive incorporation of gender perspective and sex differences into health surveys in Spain, and to suggest design, data collection and analytical proposals as well as to make policy proposals.

**Methods:** Changes introduced into health surveys in Spain since 1995 to incorporate gender perspective are examined, and proposals for the future are made, which would permit the analysis of differences in health between women and men as a result of biology or because of gender inequalities.

**Results:** The introduction of gender perspective in health surveys requires the incorporation of questions related to family setting and reproductive work, workplace and society in general to detect gender differences and inequalities (for example, domestic work, intimate partner violence, discrimination, contract type or working hours). Health indicators reflecting differential morbidity and taking into account the different lifecycle stages must also be incorporated. Analyses ought to be disaggregated by sex and interpretation of results must consider the complex theoretical frameworks explaining the differences in health between men and women based on sex differences and those related to gender.

**Conclusions:** Analysis of survey data ought to consider the impact of social, political and cultural constructs of each society. Any significant modification in procedures for collection of data relevant to the study of gender will require systematic coordination between institutions generating the data and researchers who are trained in and sensitive to the topic.

Health interview surveys, which provide data about perceived morbidity, lifestyles, living conditions and health service utilisation, as well as revealing attitudes and opinions about specific topics,<sup>1</sup> are useful in health planning. As such they are recommended by the World Health Organization (WHO) as an efficient way of obtaining population level health information for the improvement of health policy and of providing an evidence based foundation for the monitoring and evaluation of health systems.<sup>2</sup>

However, these surveys suffer from certain limitations. These include the difficulty of making comparisons between different population settings, the analysis of time trends (since many surveys have changed over time, not only in terms of the variables collected but also in the formulation of questions), the difficulty in comparing data collected for the same concepts by different national and international organisations using different scales and the lack of "objective" instruments (that is, from an empirical or biological viewpoint) in order to permit external validation of the data, as most surveys rely on data based on the subjective perceptions of respondents.<sup>3</sup> Furthermore, surveys frequently ignore social determinants related to the production of health and disease and do not record variables which are required for determining the impact of biological differences and social inequalities that operate differently for men and women. Other health affecting variables or constructs such as social class, gender and work (reproductive and productive) are often not tackled in sufficient depth.

Since considerable theoretical thought has been given to understanding the origins and causes of social inequalities, especially of class and gender inequalities, any study of them in health should take these foundations as a starting point. In the design, statement of questions and data analysis of health interview surveys, the concept of gender perspective gives great importance to those contextual aspects that affect differently or

in an unequal manner the health of women and men. Biological factors such as different morbidity must also be taken into consideration as blindness to these can often create inequalities.<sup>4</sup>

Unfortunately, the confusion in the use of the terms "sex" and "gender" is just a sign of several conceptual errors that are frequently made in epidemiological and public health research. The specific case of the erroneous use of the term "gender" would seem to be a misguided belief that political correction requires the use of a synonym for the word "sex".<sup>5</sup> The term "gender" is also wrongly used to describe or analyse issues or situations which tend to be exclusively related to women.

In addition to biological differences that may determine vulnerability to disease as well as the symptoms and prognosis, women and men differ in their occupational status and in their tasks and assigned responsibilities. The analysis of the influence of these factors on health requires an examination of the deep sexual division both of occupations and of society as a whole that determine the different values, attitudes, expectations and power positions of women and men (gender inequalities) and reveals that gender defines and mediates social relationships between the sexes and, furthermore, that these have an impact on health.<sup>6</sup>

The aim of this paper is to review the progressive incorporation of gender perspective and sex differences into health surveys in Spain and to make proposals for future improvements.

**Abbreviations:** ENS, Encuesta Nacional de Salud; EOD, experience of discrimination; SESPAS, Spanish Association of Public Health and Health Administration

## HEALTH SURVEYS AND THE STUDY OF SOCIAL INEQUALITIES IN HEALTH IN SPAIN

Health surveys have only been widely used in public health in Spain since the 1980s. The first significant study was conducted in Barcelona in 1983<sup>7</sup> and since then the number of local, regional and national surveys has steadily grown. Almost all the autonomous regions of Spain have now conducted at least one health survey. There have also been seven national health surveys (known in Spanish as Encuesta Nacional de Salud or ENS) conducted in 1987, 1993, 1995, 1997, 2001, 2003 and 2006.<sup>8-13</sup>

To date, the study of social determinants of health using data from surveys has centred on the analysis of associations between socioeconomic level and health indicators. Unlike other routine sources of health information, health surveys collect data that permit factors such as health status, health service utilisation and lifestyles to be compared with demographic variables making it possible to identify the interviewees' socioeconomic status and reveal the gradient of related inequalities and lifestyle and service use patterns. Social class, obtained through occupation,<sup>14 15</sup> and educational level are used as the main variables to study health inequalities in terms of socioeconomic position. However, the incorporation of the study of gender inequalities from health survey data dates back only to the late 1990s and was initially scarce although the study of health gender inequalities in Spain does have a longer history.<sup>16 17</sup> National, regional and local health surveys have

progressively begun to incorporate gender perspective into health research.

This greater sensitivity to gender issues and the increase in the number of studies is a result of various factors: (a) international experiences,<sup>18-22</sup> (b) the exploitation of data from existing surveys, (c) the observation that certain questions formulated to better understand the health of the population and conditioning factors remained unanswered owing to a failure to collect the appropriate explanatory variables, and (d) concerns expressed by advocacy groups which have revealed the need to collect information on emerging and/or little known areas of public health. The first paper to establish the importance of the gender perspective in Spain in all stages of health interview surveys from sample design to question formulation and data analysis was written by the Gender Group of the Spanish Association of Public Health and Health Administration (SESPAS) in 2000.<sup>23</sup> This influential paper also set the standards for future surveys.

### Evolution of gender perspective in national health surveys from 1993-2006

Table 1 shows clearly how the Spanish national health surveys have evolved since 1993 and includes all the variables that were recommended by the SESPAS Gender Group paper.<sup>23</sup> As will be observed, the first significant change in the variables was introduced in 2001 and special emphasis was placed in the main ENS report of 2001,<sup>11</sup> published by the Ministry of Health

**Table 1** Progressive introduction of certain variables, which make it possible to conduct gender perspective analyses, into the Spanish national health surveys (ENS), 1993 to 2005-6

	ENS 93	ENS 95	ENS 97	ENS 01	ENS 03	ENS 05-6
<b>Demographic and occupational</b>						
De facto marital status	X	X	X	X	X	X
Living with a partner				X	X	X
Social class	X*	X*	X*	X#	X#	X#
Educational level	X	X	X	X	X	X
Job status	X	X	X	X	X	X
Productive work (paid)						
Occupation	X	X	X	X	X	X
Position				X	X	X
Type of firm in which you work or worked**				X	X	X
Activity of the firm where you work or worked				X	X	X
Type of contract						
Full time or part time				X	X	X
Number of hours worked per week						
Reproductive work (unpaid)						
Family structure (cohabitation)†	X			X	X	X
Domestic work‡				X	X	X
Performance of domestic work				X	X	X
Sharing of domestic work				X		X
Care of dependent people§				X	X - children	X
Sharing of care of dependants				X	X	X
Availability of outside help (family or contracted) to carry out domestic and caring work				X	X	X
Number of hours of reproductive work						X
<b>Morbidity, perceived health, quality of life and mental health</b>						
Perceived health status	X	X	X	X	X	X
Mental health and quality of life						SF-12
Chronic conditions¶	X	X	X	X	X	X
Number of hours of sleep per day	X	X	X	X	X	X
<b>Social support (existence and type of social network)</b>						
Network structure (size, density)						
Functional social support (affective and confidential)				X	X	X

\*In 1993, 1995 and 1997 a variable called social status was created: well off; medium-high; medium-medium; medium-low; low. Obtained by crossing level of education completed (illiterate; finished school aged 14-15 years; finished school aged 16-19 years; additional non-university studies; university studies; unknown) with occupation of the head of the household (self employed; public or private sector employee; other)

#In 2001, 2003 and 2005-6 social class was obtained through self occupation.

\*\*Public administration; public or private organisation, non-profit organisation or domestic service.

†Age, sex, relationship of cohabiting individuals.

‡Do the shopping, prepare meals, cleaning, ironing, etc.

§Children, elderly, disabled.

¶List of the most prevalent conditions or disablements (table 2).

**Table 2** Evolution of the list of chronic symptoms or conditions inquired about in the national health surveys (ENS), 1993 to 2005–6

Survey	Chronic symptoms or conditions
ENS 93, 95, 97	High blood pressure; raised cholesterol; diabetes; chronic asthma or bronchitis; stomach ulcer; heart disease; allergies
ENS 2001	Added: depression
ENS 2003	Added: emphysema (with asthma or bronchitis); other mental illness; headaches, migraines; poor circulation; hernias, arthritis and rheumatic conditions; conditions related to menopause; conditions related to prostate
ENS 2005–6	Added: myocardial infarction; varicose veins in legs; chronic back pain (neck); chronic back pain (lumbar); duodenal ulcer (with stomach ulcer); urinary incontinence; cataracts; chronic skin conditions; chronic constipation; stroke; piles; malignant tumours; anaemia; thyroid conditions

and Consumer Affairs, on the new variables that had been introduced with respect to the survey of 1997. The main changes were related to the introduction of variables that would make it possible to obtain a greater understanding of the impact of work, whether paid or domestic, on the health of women and men. Among others variables, interviewees were asked whether they worked full time or part time, how domestic tasks were distributed within the family and who looked after dependent persons in the household.

Early in 2005 a meeting of experts in the design of health surveys, gender perspective and health planning was convened by the Women's Health Observatory of the Spanish Ministry of Health and Consumer Affairs' General Directorate of the National Health Service Quality Agency in order to review the content of previous surveys and elaborate proposals to incorporate gender perspective into the ENS for 2005–6. In addition to variables that had already been included in ENS 2001, the most recent survey has also incorporated items that had been proposed at a later date<sup>13</sup> and not yet applied, such as the number of hours dedicated to reproductive work (domestic work) and the SF-12 mental health and quality of life questionnaire (see table 1). ENS 2005–6 also included other new variables resulting from changes occurring in society to cover emerging new public health priorities and to generate evidence of social and scientific interest in topics such as discrimination and intimate partner violence that had not been tackled by earlier surveys (see table 3).

Table 2 provides examples of the changes that have been introduced over time to the ENS questionnaires in the list of chronic conditions. This is one of the instruments which make it possible to analyse differences in morbidity between women and men in the population as a whole. The inclusion of several additional pathologies in the list may help to throw light on inequalities arising from blindness to biological differences which can have a high impact on quality of life. It has been said that "what is not asked is not known, what is not visible does not exist"<sup>24</sup>: a clear example of this was seen in the revelation that anaemia is seven times more common in women than in men resulting from the addition of this condition to the list of pathologies in the Health Survey of Catalonia in 2002.<sup>25</sup>

One of the most interesting innovations of the ENS 2005–6 questionnaire was the inclusion of questions adapted from the Stem Experience of Discrimination (EOD) Questionnaire by Krieger *et al*,<sup>26</sup> dealing with discrimination in its different forms and settings. Interviewees were asked how they were affected by their sex, educational level, social class, ethnic group or country of origin, sexual preferences and religion when looking for a job, at work, at home (whether by a partner or some other person), in receiving medical care, and in public places. Some variables were also included to determine the nature and the scale of any discrimination that was found.

As we have seen above, health surveys are instruments that need to evolve to encompass new insights into areas of public health concerns and to adapt to social changes. This, however, frequently presents the dilemma as to whether historical series should be maintained in order to allow comparisons between surveys over time.

### Analysis with gender perspective

In spite of the progress achieved in the design of health survey questionnaires in Spain, scientific literature in indexed publications still fails to reflect the significant increase in studies carried out to investigate the impact of gender as a determinant of health in women and men. It should also be noted that many studies and reports offering a gender perspective are not published in scientific journals or by commercial publishers but rather form part of what has been called a "grey literature" that is only made available to a limited readership consisting often only of those who have commissioned the work. Despite the fact that the results of these reports and studies may not be widely or publicly known, it is to be expected that they should act as a foundation for the development of public health policies.<sup>27</sup>

One point that stands out from a review of literature in Spain using the words "gender" or "sex" (1995–2005)<sup>28–47</sup> is that although there has been a notable rise in recent years in papers studying the variables mentioned above as being important for determining the impact of gender relationships on health, many do not perform an in-depth study of gender but only conduct a descriptive analysis disaggregated by sex or, alternatively, fit multivariate models adjusted by sex.

Disaggregation by sex, while constituting one of the first steps in any analysis of gender health inequalities, is not sufficient to understand the full underlying complexity of the situation.<sup>48</sup> The interaction between sex, which unlike gender is a measurable variable, and other variables, social constructs, and biological characteristics can also have an impact on health. These interactions may be additive or multiplicative, and in the multivariate analyses certain factors may counteract the effect of sex.<sup>6</sup> It should also be noted that the direction of certain associations between variables may be different when the analysis is stratified by sex. Data must be analysed with care in order to emphasise the social relationships between the sexes and clearly delineate underlying inequalities in them. In this respect, one of the aspects to be taken into account in analyses incorporating gender perspective is the life cycle, given that biological and social differences that vary depending on the age group can have a significant impact on determining gender patterns.

### PROPOSALS AND CONCLUSIONS

In a broad definition of health, the analysis of data from vital statistics and health information, principally from surveys,

**Table 3** Some proposals for future national health surveys

Aspects to take into account	Recommendation
Sample	Bear in mind, when calculating sample size, the subsequent need to disaggregate the sample by the variables of interest. In order to study social inequalities in health both sex and socioeconomic level are necessary, and only with a sufficient sample size can in-depth analyses of these relationships be tackled with the data disaggregated by these variables, and yet maintaining statistical significance.
Language used	Both the language of the interview and that of the instruction manual must take care that the terms used are not sexist or make one of the sexes invisible, and that there are no grammatical gender disagreements, nor stereotyped messages.
Variables to introduce or go into in more depth	
Intimate partner violence	Strict confidentiality and safety must be ensured, and the topic only tackled when the interviewee is alone. Detailed questions aimed at illuminating gender differences in patterns, characteristics and risk factors for violence, as well as associated health problems should be included. Both men and women should be asked these questions in order to achieve the broadest possible approach to the problem.
Discrimination	Expand the questions introduced in ENS 2005–6, according to Stem Experience of Discrimination (EOD) Questionnaire.
Social support	Social support is a possible modulator of the impact on health of negative or stressful situations. It is important to introduce variables capable of capturing both emotional and instrumental support.
Immigration	Immigration is an issue that has taken on considerable importance in Spain over the past decade. It is important to study the health of the immigrant population including questions about country of origin, nationality and years living in Spain along with the standard variables.
Household structure/ cohabitation	Household structure conditions: aspects such as non-paid workload, overcrowding, form of cohabitation (single parent family, extended family, various family nuclei, etc).
Household work	Questions that allow determination of the family distribution of domestic tasks and caring for dependent members; availability of outside (contracted) help in carrying out domestic tasks; number of household work hours during work days and at the weekend.
Job characteristics	The questionnaire should include questions to permit characterisation of: occupation of the interviewee and if possible their partner or the person with the highest income in the household, type of job contract, economic activity and working schedule.
Social class and socioeconomic position	Based on occupation and educational level, the same questions ought to be asked to determine socioeconomic situation of the partner or other reference person in the household indicated by the interviewee (the person with highest income).
Mental health	It is necessary to include at least one instrument which permits an approach to the mental health of the population. We recommend Goldberg's questionnaire (GHQ12).
Morbidity	Questions which permit a differential analysis of morbidity by sex and gender. Morbidity symptoms within a period of two weeks before the date of the interview would be a helpful measure of self perceived health status.
Data analysis	(1) Compare findings of women and men, and supply context in the framework of social inequalities in health, for which it is not sufficient to simply fit models by sex (sex as a confounding variable), instead separate analyses should be conducted for each sex. (2) Consider relationships and interactions of sex with other contextual variables such as social class. (3) Study the diversity of groups of women and compare their health—for example, in terms of their domestic and paid work loads, presence of social support, or their having experienced situations of violence or discrimination. (4) The way results are expressed is also very important, since the aspects that are emphasised can condition the interpretation that is made.

needs to consider the impact of the social, political and cultural constructs of each society.<sup>49</sup> For example, as stated before, collecting data on working conditions inside and outside the household is fundamental to understand health outcomes of women and men.

As is detailed in table 3, careful attention to certain aspects of survey design, incorporating a gender perspective into health surveys, and to the correct analysis of the data and the way that it is expressed is essential in order to deepen our understanding of public health inequalities.<sup>6 26 48 50–52</sup>

The researcher in public health must be aware that there are informational gaps; that it is often impossible to disaggregate data by sex, although it should be borne in mind, as mentioned earlier, that an analysis disaggregated by sex is not sufficient to understand the importance of gender as a determinant of health in women and men. In any case, a critical reading of the findings, which must be discussed within the historical,

political and social contextual framework of the society in which men and women live, is absolutely essential.

While improvements and innovations to surveys are often the result of scientific evidence, they may also be introduced in response to the work of advocacy groups, which have revealed the need to collect information on emerging issues, or issues that are not sufficiently studied from a public health perspective.<sup>53</sup> The inclusion of gender perspective in health surveys is an example of modification being made as a result of a combination of both of these reasons.

That there is growing scientific interest and political will regarding the study of gender inequalities in health can be clearly observed. Health surveys in general, and in the case of Spain the ENS, are excellent sources of information for determining these inequalities, and their use not only for research but also for health planning and the formulation of public policy should be actively encouraged.

### What this paper adds

- It was found that health surveys often fail to take into account the social determinants related to the production of health and disease. Aspects such as social class, gender and work (reproductive and productive), which affect people's health, are often not tackled in sufficient depth.
- Furthermore, the variables required to determine the impact of biological differences and social inequalities which operate differently for men and for women are frequently not collected.
- The paper reviews the progressive incorporation of gender perspective into health surveys in Spain and makes proposals for future improvements.

### Policy implications

- Taking a broad definition of health, the analysis of data from health surveys ought to consider the impact of social, political and cultural constructs of the population being studied.
- In refining the design of populational health surveys, it is essential that policymakers, social health investigators, epidemiologists and interest groups should contrast their perspectives and pool their knowledge in order to establish national guidelines that overcome shortcomings in the identification of gender and other social inequalities, which result in the failure to address unseen needs.
- The improved resulting data will help in formulating action plans that equitably tackle disadvantaged sectors of society.

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## APHORISM OF THE MONTH .....

“I believe that women-centred, physiologically accurate knowledge of what is normal related to our female bodies, menopause, menstrual cycles and many other aspects of our health does not exist”  
*Jerilynn C Prior*

**J**erilynn Prior made this statement during the First Congress on Women, Health, and Work (Barcelona, 1996). She is one of the first researchers who, over 20 years ago, realised that to avoid perceiving women as victims of their bodies or their culture an alternative approach was necessary. She thought it necessary to studying their health while taking biological, psychological and sociocultural factors into account. She also realised that this approach required taking what was “normal” in women’s biology as a starting point. When early in her career Jerilynn Prior had begun researching the role of the healthy menstrual cycle in the entire body’s functions, both during the reproductive period and during the transition towards menopause, she assumed that this “normalcy” was already defined in science, even if it was ignored or not applied. However, what she discovered was that this basic, necessary information simply did not exist. She has been devoted to this task ever since.<sup>1-5</sup>

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