

REVEALING WOMEN'S HEALTH: RE-ANALYSING THE GENERAL HOUSEHOLD SURVEY

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Secondary analysis of the General Household Survey (GHS) provides enormous and largely untapped potential for addressing feminist issues about women's health. This chapter will briefly discuss the GHS and then illustrate some of the ways in which secondary analysis can be used to exploit GHS data. Three case-studies will illustrate different ways in which the GHS can be used for feminist analyses of health. The exemplars focus on gender differences in sickness absence, gender and care of elderly disabled people, and inequalities in women's health.

What is secondary analysis? Simply, it refers to any reworking of data which has already been analysed by some other researcher or organization (Dale *et al.*: 1988). Hyman defines secondary analysis as 'any further analysis of an existing dataset which presents interpretations, conclusions or knowledge additional to, or different from, those presented in the first report on the inquiry' (Hyman 1972: 1). Because government data sets such as the GHS are relatively underanalysed by their originators, they provide a tremendous opportunity for secondary analysis.

The GHS is a multi-purpose continuous survey which has been carried out annually in Britain since 1971. It was designed to provide for the statistical needs of various government departments, for example: the Department of Health is concerned to monitor trends in the nation's health and use of health services; the Department of Employment is interested in trends in employment, unemployment, and patterns of job search; and the Department of the Environment uses the GHS to monitor migration and housing conditions. Other core areas asked about each year include education, income, family structure, and family

formation. In addition, questions are asked about smoking and drinking every second year, and other topics covered at more irregular intervals include leisure activities, methods of family planning, the needs of the elderly, and incidence of burglaries. Good descriptive overviews of the GHS are provided in Bulmer (1986), Hakim (1982), and Dale *et al.* (1988). Because data are collected on a wide range of topics, the characteristics of women in each of these areas can be interlinked, perhaps in ways not considered by the sponsoring government departments, for example, smoking behaviour can be analysed according to women's class, employment status, housing tenure, quality of housing, family structure, and income.

The GHS is a large, nationally representative sample of private households. The sample contains about 10,000 households each year, and over 25,000 individuals. The response rate has varied between 80 per cent and 85 per cent in recent years. Further details about the sample design and response rates can be found in the GHS reports which are published annually. Each year, data is available on about 1,000 variables. Secondary analysis of GHS microdata is in some senses more akin to primary analysis, since the 200 pages of the GHS Annual Reports contain only a fraction of the possible analyses which could be performed on such a large data set containing so many variables. In addition, the annual reports present data in tabular form only, whereas secondary analysts can use more sophisticated multi-variate analyses and modelling techniques.

The large sample size of the GHS means reliable analyses can be conducted on proportionately small sub-groups in the population. For example, if a researcher wanted to study the health of women who have young children and who work full-time it would be difficult to obtain a representative sample, because such women form a small proportion of all women and there are no readily available sampling frames. However, by combining two or more years of GHS data together, a large enough sample is obtained to provide reliable estimates of their health and other characteristics, for example, whether their health differs from women in similar circumstances who are not in paid work or who work part-time.

The GHS is a household sUIvey with a hierarchical structure. Comparable questions are asked of all adults in the household, and information is collected about the health and characteristics

of all children under 16 years old. The amount of data collected for each household therefore varies in length depending on the number of families and number of persons in the household. Hierarchically organized sUIveys are extremely powerful data sources, allowing the researcher to address many theoretical questions not envisaged by the designer of the original sUIvey. For example, Popay and Jones (1988) used secondary analysis of the GHS to study the health of children in the household and related this to the health of parents, and Payne (1987) analysed the relationship between the employment status of household members and showed the way in which unemployment seems to run in families. The ability to interrelate the characteristics of different individuals in the same household is a major advantage of secondary analysis of the GHS, although the conceptual and technical problems must not be under-estimated (Dale *et al.* 1988).

The GHS is available to researchers for secondary analysis in two forms (see Dale *et al.* 1988; chapter 5). It can be supplied by the ESRC Data Archive either as a flat SPSSX file based on individuals with information about the individual's household, housing, and the 'Head of Household' attached, or as a hierarchical file based on households. The latter contains records of varying length, depending on the number of individuals in the household, and must be analysed by a Database Management System such as SIR (Scientific Information Retrieval). SIR allows the researcher to analyse any of the interlinkages between individuals in the household which are present in the original GHS, but may not have been retained in the flat SPSSX files, for example, the smoking behaviour of spouses. A flat SPSSX file based on the GHS is relatively simple to analyse, once the researcher has obtained all necessary documentation and permission from the ESRC Data Archive, but the SIR GHS files are more complex than most novice users would wish to tackle. A full discussion of the alternative ways in which the GHS can be supplied, and of the process of ordering data sets from the ESRC Data Archive can be found in Dale *et al.* (1988).

The secondary analyst of the GHS need not be constrained to operate within the same set of conceptual assumptions as those held by the original designers. Clearly, the analyst is restricted by the questions which were asked in the GHS, and whole areas of

relevance for a feminist analysis may have been omitted. However, analysts have some room for manoeuvre, because they may bring a totally different theoretical framework to bear on their research. For example, providing that sufficiently detailed information is collected about occupation and employment status, it is possible to re-analyse GHS data using different occupational classifications, which more adequately measure the distinctions between women's occupations (Dale *et al* 1985). New household classifications can be devised which enable the study of the gender of co-resident carers, as discussed in the second case-study below, and the GHS may be used to compare 'conventional' approaches, which classify women according to their husbands' class, with an 'individualistic' approach, based on women's own occupation, as in the final case-study.

Many of the potential advantages of using the GHS for feminist analyses of health will be exemplified in the following three case-studies.

GENDER DIFFERENCES IN SICKNESS ABSENCE FROM WORK

The General Household Survey provides better statistics than those available from other data sources on gender differences in the level of sickness absence from work. This case-study relates to sickness absence before the introduction of the Statutory Sick Pay Scheme (SSP) in 1983.

Prior to 1983, the conventional source of information on gender differences in sickness absence was the National Insurance Sickness Absence statistics. These DHSS statistics showed that in 1979-80 married women had over 70 per cent more sickness absence than men, and non-married women had about 15 per cent more sickness absence than men.' However, these comparisons are biased because National Insurance (NI) statistics are based only on married women who paid the full National Insurance Contribution. At this time, about half of married women opted to pay a reduced rate National Insurance contribution and were therefore ineligible to claim sickness benefit on their own behalf. It is probable that women paying the full NI contribution were at greater risk of sickness and invalidity.

In 1982, the Equal Opportunities Commission (EOC) funded a study at the University of Surrey to examine gender differences in

sickness absence based on secondary analysis of the 1975 and 1976 GHS (Dale *et al* 1982; Allin *et al* 1983). The particular interests of the EOC were twofold.

First, with the introduction of the Statutory Sick Pay Scheme (SSP) in 1983, employers were responsible for paying the first eight weeks of sickness benefit. The EOC were concerned that employers might assume that one sex generally had a worse record of sickness absence than the other, and that these erroneous assumptions might lead to discrimination in the employment of particular groups, such as working mothers with young children.

Second, there was evidence that insurance companies were charging an approximately 50 per cent higher premium for Permanent Health Insurance (PHI) for women than for men. The EOC wanted evidence from the GHS to argue that the statistical data on which these higher premiums were based was inadequate and that these insurance companies were in breach of Section 45 of the Sex Discrimination Act.

The GHS was chosen as an appropriate data source because it covered all employees and absences of all durations, therefore it did not suffer from the inadequacies of the National Insurance sickness absence statistics (OHE 1981). The GHS asked a question along the lines of 'were you away from work at all last week for reasons other than business?'. A subsequent question asked the reasons for this absence, and the focus here is on answers coded 'absence due to own illness or accident'. The analysis was based on men and women aged 18-60 who were working as employees in the week prior to the interview. The response rate in 1975 and 1976 was 84 per cent.

These analyses represent information on sickness absence for all employees, irrespective of entitlement to sickness benefit, working hours, or whether sickness absence is officially recorded by an employer. However, since the GHS data on sickness absence applies only to those who are in employment, it omits people who may have left the labour force because of long-term sickness. The fact that the GHS is a nationally representative sample means that findings for particular sub-groups can be expected to hold throughout Great Britain, and since interviewing is conducted evenly throughout the year, conclusions are not affected by seasonal fluctuations in illness.

Contrary to findings based on National Insurance records of

sickness absence claimants, the GHS shows little difference between men and women in the overall extent of sickness absence. Two contrasting trends are revealed, first, women report a somewhat greater *frequency of spells* of sickness absence, but second, women are absent on average for a shorter *duration of time* than men. These contrasting trends are examined in Tables 3.1 and 3.2.

The frequency of spells of sickness absence is higher for women who work full-time (6.5 per cent report absence from work due to illness in the previous week) than for men (5.1 per cent report absence) - see Table 3.1 bottom line. A lower proportion of women who work part-time, 4.3 per cent, report absence due to sickness in the previous week.

Table 3.1 Percentage absent from work because of sickness in the previous week by whether has children under 16, working hours,* and sex

	Women		Men
	Part-time	Full-time	Full-time
Has children	4.1%	6.8%	5.0%
N =	(2,675)	(1,404)	(6,479)
No children	4.6%	6.4%	5.3%
N =	(1,584)	(4,335)	(7,192)
Total	4.3%	6.5%	5.1%
N =	(4,259)	(5,739)	(13,671)
	5.5%		
	(9,998)		

Source: General Household Survey, 1975 and 1976 (author's analysis)
Note: * Full-time is defined as working for 30 or more hours a week.

Contrary to popular opinion, women with dependent children are no more likely to be away from work because of illness than women without children. Women who work full-time and have dependent children are very slightly more likely to report sickness absence than women without children, but among women working part-time the pattern is reversed (see Table 3.1)

Although there is evidence of higher frequency of spells of sickness absence for women working full-time than for men, the opposite is true for duration of absence. Table 3.2 shows that women are more likely than men to be absent for one to three days. There is a major gender difference for long periods of

absence, 13 per cent of men had been absent for 41 or more days (over eight weeks) but this was the case for only half as many women, 7 per cent. The gender differential was even more marked for absences of over three months (66 days) - 8 per cent of men and 3 per cent of women who worked full-time. The finding that fewer full-time working women than men have long periods of sickness absence from work suggests that there is no evidence to support higher premiums for women for Permanent Health Insurance (PHI), which is the usual practice of insurance companies.

Table 3.2 Number of working days absent for this period of sickness by sex and working hours,* for employees absent through sickness during the previous week

Days absent	Women		Men
	Part-time %	Full-time %	Full-time %
1-3 days	49	54	39
4-10 days	30	25	29
11-40 days	17	14	19
41 or more days	5	7	13
N =	100 (181)	100 (367)	100 (695)

Source: General Household Survey, 1975-6 (author's analysis)
Note: * Full-time is defined as working for 30 hours or more a week.

A summary measure to compare gender differences in sickness absence is the average annual days of sickness absence from work, which takes into account *both* the frequency of absence (which is *higher* for women) and the duration of absence (which is *lower* for women). Women who work full-time have on average ten days sickness absence per year compared with nine days for men (see Table 3.3). This difference is substantially smaller than the figures suggested by the NI statistics reported earlier.

Analyses of the GHS also throw light on the main source of bias in NI statistics, which are based only on women who paid a full NI contribution. In the GHS, women who paid the full National Insurance contribution were more likely to be away from work in the previous week than those who were not eligible for sickness benefit - among women working full-time, 7.8 per cent and 5.8 per

cent respectively. The differential was similar for women working part-time - 7.5 per cent of those paying the full NI contribution compared to 4 per cent who were paying the reduced rate.

Table 3.3 Average number of annual days of sickness absence from work by age group, for women and men working full-time

Age group	Women Full-time	Men Full-time	Women's number of absence days as a % of men's
18-24	9.3	8.1	115
N =	(1,529)	(2,144)	
25-34	11.0	7.7	143
N =	(1,129)	(3,637)	
35-44	11.9	8.2	145
N =	(1,141)	(3,057)	
45-54	8.5	11.4	75
N =	(1,391)	(3,171)	
55-60	11.2	10.9	103
N =	(547)	(1,655)	
All	10.1	9.1	111
N =	(5,737)	(13,662)	

Source: General Household Survey, 1975-6 (author's analysis)

Age is differently associated with the level of sickness absence for men and women. The extent of sickness absence broadly increases with age for men, the highest rates are for men over 45 years - approximately eleven days per year, compared with approximately eight days for men under 45 (Table 3.3). The pattern for women does not show a clear increase with increasing age, indeed women aged 45-54 report the lowest number of days absent. Although, overall, women working full-time have 11 per cent more absence days than men, in the 25-44 age group women have 40 per cent more absence days, whereas in the 45-54 age group women working full-time have a 25 per cent lower rate than men. These age differences may indicate that older women either leave the labour market or do not re-enter it if they are prone to illness.

Our analyses of sickness absence based on the GHS were used by the EOC in two ways. First, to dispel the myths about women having much higher rates of sickness absence than men; for example, leaflets were distributed in 1983 to employers pointing

out the small gender differences in absence (Equal Opportunities Commission 1983). Second, the evidence on gender differences in length of illness is the opposite of what would be expected from the higher Permanent Health Insurance premiums for women. Since the GHS shows that men are much more likely to have been absent for long periods, this was used by the EOC as part of their evidence in a sex discrimination case against Friends Provident Insurance Company in 1983.

GENDER DIFFERENCES AND CARE OF THE ELDERLY

A current policy concern is the needs of elderly people and, in particular, the rapidly increasing proportion of 'old' elderly, aged over 75, and over age 85 (Henwood and Wicks 1985). Provision for elderly people of health care and domiciliary support, both by the state and by the informal sector, are key areas of concern for policy analysts and feminists alike.

A number of small-scale, qualitative studies on care of the elderly graphically portray the burdens and sacrifices made by carers (Nissel and Bonnerjea 1982; Nissel 1984; Ungerson 1987; Wright 1983; Lewis and Meredith 1988). The carers in these studies were largely women, mainly because of the nature of the samples chosen for study, for example Nissel and Bonnerjea studied elderly people living with a married couple, and Lewis and Meredith's sample were daughters caring for an elderly parent. One result of these qualitative studies is that a popular image has been created that daughters perform the bulk of care for elderly disabled people, for example, Allan comments:

Just as the bulk of housework and child care is undertaken by mothers, so too by far the largest portion of routine tending for the elderly is provided by daughters The support at a daily level is almost wholly given by women and is defined as an extension of their routine domestic role.

(Allan 1985: 130)

The General Household Survey is particularly valuable as a complement to small, qualitative, and localized studies. It provides a way of examining whether findings developed from smaller-scale research hold for a representative cross-section of the population.

It can therefore provide a means of testing theories and mapping the boundaries within which particular findings hold. The GHS, of course, cannot provide the wealth of detailed material about the meaning and experiences of caring, which can only be gleaned from more in-depth approaches to research.

The 1980 GHS provides a nationally representative sample of over 4,500 elderly people living in private households (OPCS 1982). People aged over 65 were asked a detailed section of questions on their ability to perform various activities of daily living, such as walking upstairs, doing shopping, and bathing themselves, and their use of various statutory health and welfare services in the previous month. The large sample size, high response rate (82 per cent), and representative nature of the sample therefore make the GHS a valuable data source to complement, extend, and systematically test findings and theoretical ideas derived from other small-scale studies. However, it is important to realize that the GHS is not representative of all frail elderly people because of the exclusion of those in institutional care.

This case-study uses the GHS to address two questions raised by feminists concerned about the care of the infirm elderly:

- 1 What is the sexual division of labour in caring for the infirm elderly?
- 2 Is there discrimination against women carers in the provision of statutory domiciliary services, such as home helps and district nursing care?

To answer these two questions it was necessary to develop an objective measure of the degree of disability of the elderly person. The assumption was that 'need' for support by a carer would be directly related to the elderly person's ability to manage activities of daily living on their own. A measure was constructed from a series of questions about the elderly person's ability to perform six daily tasks. These tasks formed a linear scale of increasing difficulty for most people: cutting one's toenails, getting up and down stairs, walking outside, bathing or washing all over, getting around the house, and getting in and out of bed (Arber *et al.* 1988). For each activity, the elderly person was given a score of 0 if they could perform the task easily on their own, a score of 1 if they could perform the task only with difficulty, and a score of 2 if the task

could be done only with help or could not be done at all. 'Severe' disability was defined as a score of 6 or more on this scale. Elderly people who were 'severely' disabled needed assistance from one or more carers on a daily basis; they were unable to walk outside without help and most could not bath nor wash all over unaided.

Table 3.4 Percentage of elderly women and men with 'severe disability'* within age groups

Age group	% with 'severe disability'			% of all with 'severe' disability
	Women	Men	All	
65-69	5.5	3.7	4.7	16
70-74	8.5	7.2	8.0	21
75-79	12.6	9.0	11.3	21
80-84	25.8	17.2	22.5	21
85 and over	43.9	31.5	41.4	21
All	12.7	7.7	10.7	100
N =	(2,603)	(1,771)	(4,374)	(467)

Source: General Household Survey, 1980 (author's analysis)

Note: * 'Severe' disability is defined as a score of 6 or more, on a scale composed of the sum of scores on six activities of daily living. For each activity the score is 0 if the respondent can perform the activity easily, 1 if the elderly person performs the activity with difficulty, and 2 if the activity can only be done with help or by another person.

Table 3.4 shows that 10.7 per cent of people over age 65 are 'severely' disabled and need support on a daily basis. This varies from under 5 per cent of people in their late 60s to over 40 per cent of people aged over 85. More elderly women, 12.7 per cent, than elderly men, 7.7 per cent, are 'severely' disabled and in need of daily support. At each age, a higher proportion of women than men are in need of support. It is interesting to note that although the need for care increases very sharply with advancing age, the actual proportions of elderly people in need of daily support are approximately evenly distributed between the five age groups over 65 (see final column of Table 3.4).

Contrary to the impression from many smaller-scale studies, Table 3.5 shows that under a fifth of elderly people in need of daily support live with their children. These elderly people are almost equally divided between those living with an unmarried child and a married child. However, there is a marked gender difference between the carers in these two types of living arrangements.

About 40 per cent of disabled elderly people who live with an unmarried child are living with their son, but among comparable elderly people living with a married child other studies, such as Nissel and Bonnerjea (1982), suggest that the main carer is virtually always the woman.

Table 3.5 Living arrangements of (a) elderly people (age 65 and over) (b) 'severely' disabled elderly people, and (c) proportion of 'severely' disabled elderly people living with male carers

Type of household	(a) % of all elderly people	(b) % of all 'severely' disabled elderly people	(c) % with male co-resident carers*
Elderly living Alone	34	38	—
Elderly with Spouse:			
Couple only	46	31	51
Couple and adult children	6	6	28-84
Elderly with Siblings or other elderly	4	7	9-33
Elderly with Unmarried Child	6	9	38-45
Elderly with Married Child (and some lone parents)	4	8	0-5
	100	100	35-44
N =	(4374)	(467)	(288)

Source: General Household Survey, 1980 (author's analysis)

Note: * From the GHS it is not always possible to identify the gender of co-resident carers. In these cases, a range can be defined.

Nearly two-fifths of the elderly who need care on a daily basis live with their husband or wife. The GHS shows the perhaps surprising finding that equal numbers of men are caring for their wives as women are caring for their husbands. This confirms the findings of two EOC studies on carers (EOC 1980; Charlesworth *et al.* 1984). Among the 6 per cent of frail elderly living with their spouse and adult children, it is difficult from the GHS to identify the gender of the carer, because it is not clear whether the spouse or the younger person is the main carer. However, it is possible to define a range (see Table 3.5). A fuller discussion of the gender of carers of elderly disabled people is in Arber and Gilbert (1989a, 1989b).

Another category of carer which tends to be overlooked are the 7 per cent of elderly disabled people who live with other elderly

people, generally their siblings. In these households, over two-thirds of carers are other elderly women.

A disadvantage of the 1980 GHS is that very little information is provided about the gender of informal carers who support the elderly living alone. Among the remainder of the elderly, Table 3.5 suggests that approximately 40 per cent of carers of the infirm elderly are men. This figure of 40 per cent male carers was confirmed in the 1985 GHS, which contained a section specifically designed to study informal carers (Green 1988). Such findings from large representative samples raise issues about why men have been neglected as carers. To what extent have men carers been neglected because they challenge dominant norms and values that caring is inherently feminine? In another paper (Arber and Gilbert 1989a), we suggest that men only take on the caring role when there has been a history of long-term co-residence with the elderly person. In these circumstances, there is generally a gradual change from a relationship of reciprocity to one of dependency. Women, unlike men, are also carers where an elderly person 'moves into' the household of the carer. They enter into caring relationships because of kinship obligations to care (Finch 1987). Research is needed to understand the similarities and differences between the caring trajectories of men and women, and to understand the circumstances under which men take on such intimate tasks as personal tending for the elderly. Thus, quantitative findings, such as these from the GHS, raise further questions which can be understood only by using more qualitative research methodologies.

The second issue of concern to feminists, which will be examined here, is that men carers receive more support from statutory services than women carers (Land 1978). The 1980 GHS provides evidence that discrimination is not primarily on the basis of gender alone, but is determined largely by the composition of the household in which the elderly person lives. Women carers are more likely to be in certain types of household which, on the whole, receive less service support. A range of domiciliary support services and personal health and social services was examined in Arber *et al.* (1988). The presentation of data here will be restricted to receipt of home helps and district nursing services in the last month.

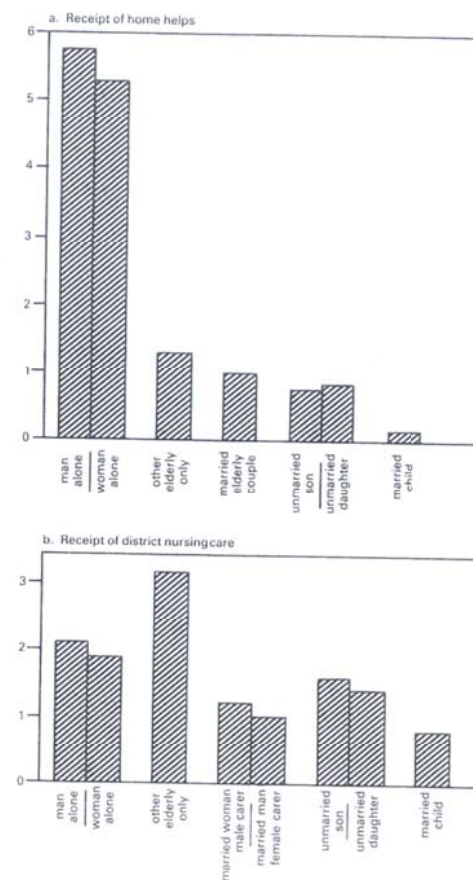
In order to analyse discrimination in the receipt of services, it is necessary to control first for the elderly person's degree of

disability. This is because the amount of support someone receives depends greatly on how well they can manage for themselves. The likelihood of an elderly person in different types of household receiving home helps and district nursing services is analysed by expressing the results as a comparison with a common standard.' For receipt of home helps, the standard is the likelihood of receipt by an elderly married couple, and for district nursing services, the standard is the likelihood of receipt by an elderly married man, where his wife is the main carer.

Figure 3.1a shows that, after controlling for level of disability, the major determinant of whether an elderly person receives a home help is the living arrangements of the elderly person. Elderly men and women who live alone are over five times more likely to receive home help support than an elderly married couple. An elderly person living with their unmarried son or daughter is less likely to receive a home help than an elderly married couple, but there is no apparent gender difference in home help provision where sons rather than daughters are carers. The group of elderly people least likely to receive home help support are those co-resident with a married couple - a living arrangement in which their daughter or daughter-in-law provides the bulk of their care.

Provision of district nursing care varies less (*see* Figure 3.1 b), but the major determinant of service receipt is the type of household of the elderly person rather than the gender of carer. Disabled women cared for by their husbands are about 20 per cent more likely to receive district nursing support than where a disabled husband is cared for by his wife. Similarly, unmarried sons who care for an elderly parent are about 20 per cent more likely to receive district nursing care than unmarried daughters. Elderly disabled people living with a married child receive the least district nurse support. It is clear that the substitution of informal carers for statutory domestic and personal health services is greater where women are carers. However, this occurs not primarily because of discrimination against women *per se* but because of discrimination against particular types of household and types of caring relationship in which women predominate as carers, especially where there are married women under 65 in the household. These analyses show that it is the family, and especially married women, who bear a large proportion of the costs of dependency.

Figure 3.1 Receipt of home helps and district nursing care in the last month by living arrangements of the elderly person, controlling for disability, odds ratios



Source: General Household Survey 1980 (author's analysis)

Domestic and personal health service receipt is thus dependent not only on the physical needs of the elderly person, but also on the assessment of the ability or perceived willingness of the carers to provide these services themselves. Although the GHS cannot be used to provide evidence of direct discrimination against certain categories of carer, it provides evidence of the disadvantaged position of married women who are co-resident with elderly disabled people.

INEQUALITIES IN WOMEN'S HEALTH

The third case-study will illustrate how large-scale data from the GHS can contribute to our understanding of inequalities in women's health. The major concern of the Black Report (DHSS 1980) was inequalities in men's health. Since its publication, a growing number of studies have examined inequalities in women's health. However, these studies present largely contradictory findings because of a failure to conceptualize adequately the socio-economic circumstances of women. The *Health Divide* (Townsend *et al.* 1988) reviewed evidence on gender and health and concluded 'all in all, these studies raise more questions than answers and the whole field is ripe for further research' (p.245) ... 'research is only just beginning to unravel the complexities of inequality in health for women' (ibid. 1988: 255). This case-study will address some aspects of this complexity and provide a clearer framework for understanding inequalities in women's health. Two particular concerns will be (1) are there as strong class differences for women as for men? and (2) whether different theoretical models are required to understand inequalities in short-term illness (health state) compared to longer term health problems (health status).

Using secondary analysis researchers can analyse data in very different ways from the approaches used in published reports. They need not be 'hidebound' by government (official) assumptions about the appropriate way to classify women (Oakley and Oakley 1979). This case-study therefore illustrates the advantages of secondary analysis of survey microdata rather than relying solely on published tables from the GHS.

The health tables in the GHS annual reports classify women according to their husband's occupation if they are married, and

all other women by their own current occupation (or last occupation if they are not working) (OPCS 1989a). This approach has been strongly criticized by feminists (Stanworth 1984; Allen 1982), but defended by others, such as Goldthorpe (1983, 1984). It has come to be known as the 'conventional' approach. Many feminists argue that women should not be characterized as dependent on their husbands but should be classified by their own occupation - using an 'individualistic' approach. Secondary analysis of the GHS allows an assessment of these two approaches to understanding class inequalities in women's health, which cannot be done solely from tables in the published GHS reports.

The data presented in this case-study are based on women aged 20-59 in the 1981 and 1982 GHS. Two years of GHS data have been combined to provide a larger sample and therefore more reliable estimates for proportionately small sub-groups, such as divorced, separated, and widowed women.

When analysing inequalities in women's health it is helpful to consider differences between various measures of health, and to theorize how they relate to class and to women's domestic and employment roles. Blaxter (1985) distinguishes between indicators of temporary health state - 'Am I ill today?' - which represent the present state of health of the individual, and indicators of longer term health status - 'Am I a basically healthy or unhealthy person?' - which provides a more general characteristic. Health state is similar to, but not the same as, acute illness and health status is related to, but not the same as, chronic illness. Although health state is a more erratic condition than health status, they are related, since health state may be a consequence of health status, and health state may be reflected back to be incorporated in health status. This case-study illustrates Blaxter's distinction by using two health measures derived from the GHS:

Limiting long-standing illness (LLI) is a measure of *health status* which is related to function. In the GHS the respondent was asked, 'Have you any long-standing illness, disability or infirmity?' If the answer was 'Yes', the respondent was then asked whether it limited his or her activities in any way (OPCS 1984a). This measure represents the consequences of health status for what the individual perceives as his or her 'normal' activities. It represents a self-assessment of the effect of any chronic ill health on daily life.

Restricted activity (RA) days due to illness reported in the previous two weeks is a measure of *health state*, based on the individual's perception of whether symptoms have altered their 'normal' activities over a specified time period. The proportion of women who report restricted activity will be used, as well as a variable measuring the average number of restricted activity days in a year. The latter is derived by multiplying the number of restricted activity days in a two-week period by 26.

Table 3.6 Measures of ill health by age for women (age 20–59)

	20–29	30–39	40–49	50–59	Total
<i>(a) Longstanding illness</i>					
– limits activities	8	13	18	26	16
– non-limiting	9	12	14	15	12
– no long-standing illness	82	76	68	59	72
	100	100	100	100	100
N =	(3,842)	(3,999)	(3,244)	(3,411)	(14,496)
<i>(b) Restricted activity</i>					
% reporting restricted activity in last 14 days	11.5	11.2	13.6	13.4	12.3
Restricted activity days in last year	19	20	25	29	23
N =	(3,841)	(3,997)	(3,241)	(3,411)	(14,490)

Source: General Household Survey, 1981–2 (author's analysis)

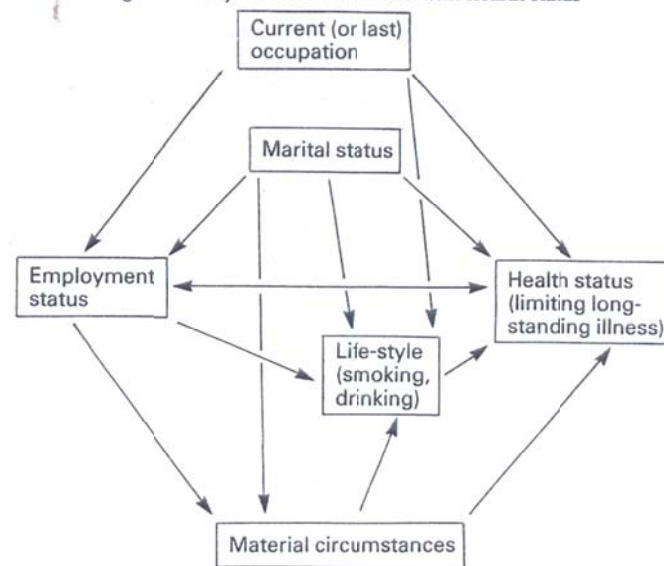
Both health status and health state are associated with age. Table 3.6a shows that a higher proportion of older women report a limiting long-standing illness, 26 per cent of women in their fifties, compared with 8 per cent of women in their twenties. Non-limiting long-standing illness increases less steeply with age from 9 per cent of women in their twenties to 15 per cent of women in their fifties. The following analyses are restricted to limiting long-standing illness. Health state varies less with age; 11 per cent of women under 40 report illness which restricted their activity in the previous two weeks, which increased to only 13 per cent for women over 40 (Table 3.6b). However, when the average number of restricted activity days per year is examined, the age trend becomes

clearer, varying from 18 days for women in their twenties up to nearly 30 days for women in their fifties.

Factors influencing women's health status

Prior to embarking on secondary analysis of survey data, it is important to have a clear model of the relationships between relevant variables. Figure 3.2 presents a simple model of the key factors associated with poor health status. The analysis here will focus only on some of the components of this model. Such a model will help in understanding the reasons for different findings when using a 'conventional' versus an 'individualistic' approach to class analyses of women's health status.

Figure 3.2 Key variables associated with health status



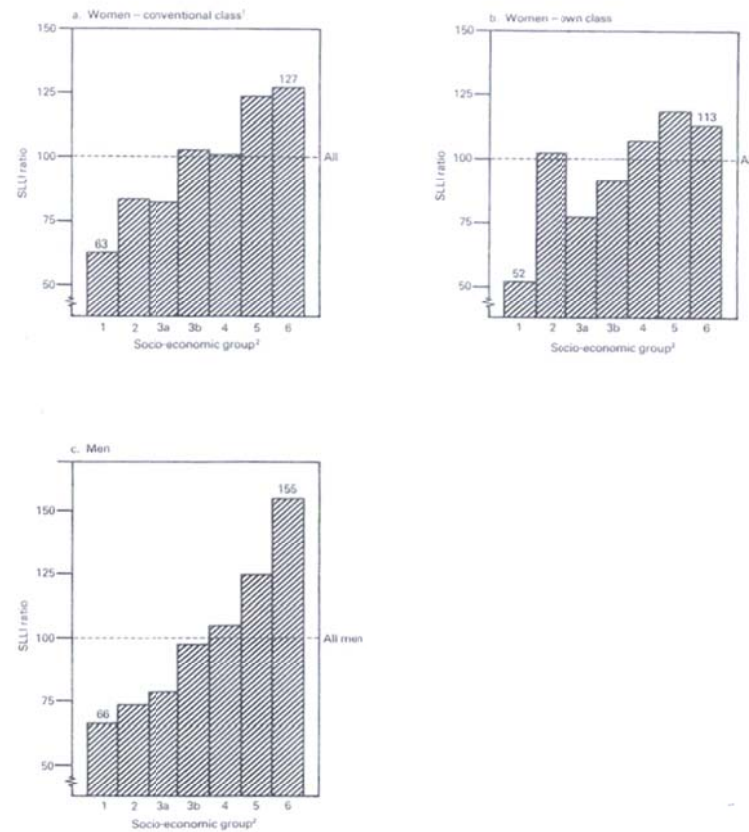
Since age is closely related to health status (Table 3.6), it is essential to remove any effects of age when analysing the relationship between a woman's class and her health status. For example, if some classes contain proportionately more older

Figure 3.3 Standardized limiting long-standing illness ratios by class for women and men (20–59) age standardized

women and women in these classes have poorer health, this might be a spurious effect caused by their older average age. Analyses of mortality usually remove the potentially spurious effects of age by calculating Standardized Mortality Ratios (SMRs), as has been done in the chapter by Pugh and Moser in this book (chapter 4). SMRs are a way of comparing the mortality of different groups with a standard of 100, which represents the mortality of all women. The same procedure can be used for analysing any measure of health, such as limiting long-standing illness. In this case-study, differences in age structure between each group are removed by using the indirect method of standardization to calculate Standardized Limiting Long-standing Illness (SLLI) Ratios, using 10-year age bands.

For analyses of women's class and health the ideal would be to use a measure which more sensitively captures distinctions between women's occupations (Abbott and Sapsford 1987; Arber *et al* 1986; Dale *et al* 1985), but the secondary analyst is restricted to the variables and coding categories available in the data set. Between 1977 and 1984 the GHS did not code detailed information about the individual's occupational unit group, so during these years it was impossible to derive variables which more adequately measured women's occupational class. The class measure used in the GHS is a categorization of the Registrar General's Socio-Economic Groups (SEG). This is similar to the familiar Registrar General's social classes, but has a number of differences, especially for women's occupations (Arber *et al* 1986). The GHS 'collapsed' SEG will be used here with a minor modification to separate out women working in semi-professional occupations, such as nursing and teaching (SEG 3a), from women working in intermediate and junior non-manual occupations (SEG 3b).

For men there is a strong class gradient with limiting long-standing illness (standardized to remove the effects of age differences between classes) (see Figure 3.3c). This linear class gradient is very similar to the mortality gradient for men (OPCS I 1986a). Unskilled men have a very disadvantaged health status - they report 55 per cent more limiting long-standing illness than the national average, while professional men have 34 per cent less long-term illness than all men (Arber 1989).



Source: General Household Survey, 1981–2 (author's analysis)

Notes: ¹ Women with husbands are classified by their husbands' occupation, women of other marital statuses are attributed to their own (current or last) occupational class.

² Socio-economic group

1 Higher professional, 2 Employers and managers, 3a Lower professional, 3b Supervisory and junior non-manual, 4 Skilled manual and own account, 5 Semi-skilled manual and personal services, 6 Unskilled manual

The class gradient for women using the 'conventional' approach (Figure 3.3a) is similar to men, but the disadvantaged position of women classified as 'unskilled' is less pronounced than for unskilled men (27 per cent more 'unskilled' women have a long-standing illness than all women). The gradient is not entirely linear, since women classified as ~unior non-manual' have an equivalent level of chronic illness to those in the 'skilled manual' category.

Characterizing women by their own occupation, an 'individualistic' approach, no longer produces a straight-line relationship but is curvilinear (Figure 3.3b). The small number of women with professional occupations have a very advantaged health status, 48 per cent fewer have a limiting long-standing illness than all women. But, women who are 'employers and managers' have a poorer health status than other women in non-manual occupations and than men in the same class. This illustrates the way in which the same class may have different effects for women and men. The 'individualistic' approach shows only minor differences in health status among women working in the three manual classes. Women's manual occupations may have different meanings in terms of skill level and relative standing compared with the class distinctions conventionally drawn between men's occupations (Dex 1984). These different patterns for women's own occupations raise questions. There is a need to analyse the pattern for women in their own right, rather than holding it up to the male standard and treating any differences between the patterns for women's and men's occupations as an anomaly. Analyses which present smaller class differences for women are in danger of interpreting this as evidence of reflecting less inequality in society for women than for men, rather than the occupational inadequacy of the tools used to measure women's class (Arber 1990).

Our understanding of the different relationships between class and health in Figure 3.3 can be advanced only from an appreciation of the wider network of factors influencing health status described in Figure 3.2. A distinction which is often not explicitly recognized in studies of women's health is that class is used to measure two conceptually distinct aspects of material explanations of inequalities in health. First, the material circumstances of the woman's household influences her health, and second, the nature of her paid employment may have a direct

influence on her health. For men, these two aspects of material position work in concert to increase inequalities in health, since a man's occupation is assumed to be both a primary determinant of his material circumstances, and has a direct bearing on his health.

Greater class inequalities in health status are found for men than women probably because a man's occupational class provides a better measure of his household's material circumstances than is the case for women, and material conditions are the major factor influencing health status. Women's health status measured by the 'conventional' approach (classifying married women by their husband's occupation and other women by their own current or last occupation) shows a pattern which is similar but weaker than for men.

It is perhaps naive to expect that a married woman's own occupational class would have as profound an influence on her health as is the case for a man. There may be some direct effect of her own paid employment on her health, but the major effect of material conditions is likely to be better captured by other measures of the material circumstances of that woman. In analysing men's health, a man's occupational class can be used as a surrogate for both the material conditions extant in his household and the direct effects of the nature of paid employment on his health. For women, it is necessary to separately theorize and measure the effects of a woman's material circumstances from any effects of her own employment status and the nature of her own occupation.

Although the 'conventional' way of measuring class for women shows a stronger association with poor health status than the 'individualistic' approach, it is conceptually complex because it combines two gender-differentiated occupational structures. Married women are assigned to the male occupational structure, which places more men in the higher reaches of both the non-manual and manual segments of the labour market. Single and previously married women are categorized by their own occupation and therefore assigned disproportionately to the lower reaches of the class structure (Martin and Roberts 1984). In the 'conventional' approach a woman's marital role is the sole criterion for deciding which gender-segregated class structure to use. Therefore, it is important to understand the ways in which marital status itself is associated with health status.

Married women have much better health status than single or previously married women - 7 per cent fewer married women report limiting long-standing illness than the average for all women (the SLU Ratio is 93 for married women). Single women have a poorer health status - 18 per cent more report long-standing illness than all women. Women who are divorced, separated, or widowed have the poorest health status; 40 per cent more have a limiting long-standing illness than all women. The direction of influence between marital status and poor health is not entirely clear; poor health status may be a disadvantageous factor in the marriage and remarriage markets. To understand the implications of using the 'conventional' approach when analysing inequalities in women's health, it is helpful to analyse separately class differences in health status for married, single, and previously married women (Figure 3.4).

Married women, irrespective of their class, have relatively good health status (Figure 3.4a and 3.4b). However, the effects of a woman's own occupation on her health are very considerable for single and previously married women (Figure 3.4c and 3.4d). For these women, the major health disadvantage is experienced by women working in manual occupations, who are over 50 per cent more likely to have a limiting long-standing illness than all women. Single women in non-manual occupations have as good health status as equivalent married women.

The occupational class of single women reflects both the direct effects of occupation and the effects of material circumstances in the same way as for men, but this is not the case for married women. The particularly poor health status of previously married women needs detailed research, in particular the direction of causality of the relationship. Previously married women are more likely to live in poor material circumstances, because their earnings are often insufficient as a 'family wage'. Lone mothers are particularly likely to be reliant on state benefits (Glendinning and Millar 1987)

If this case-study were to be extended it would need to take into account whether women are in paid employment, since housewives are more likely to be in poor health (Arber 1987), and how to measure more adequately material conditions for women (Arber 1990). The ideal would be a multivariate analysis of all the

variables in Figure 3.2, including lifestyle variables, such as smoking and drinking.

Factors influencing women's health state

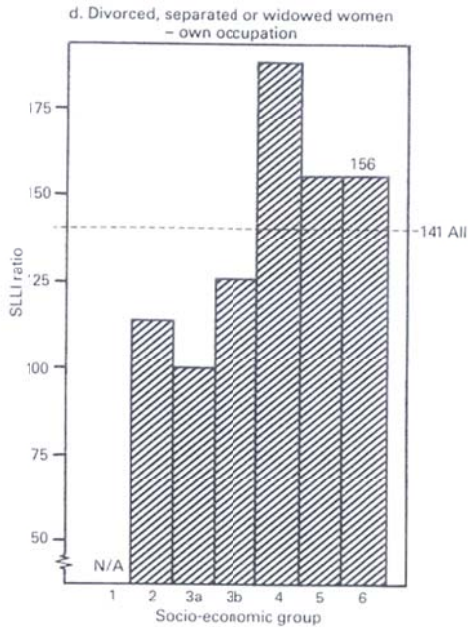
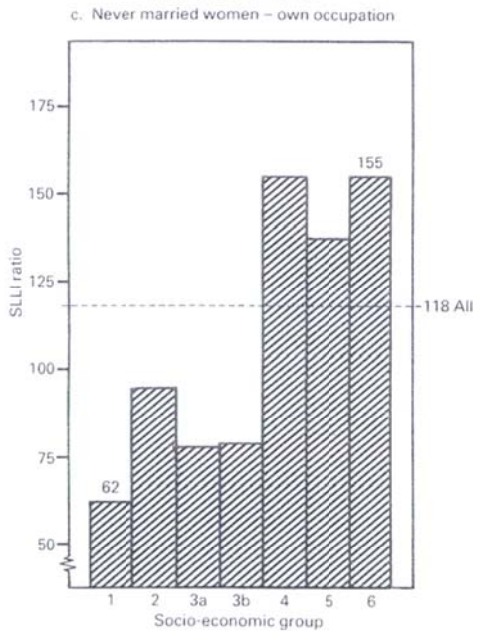
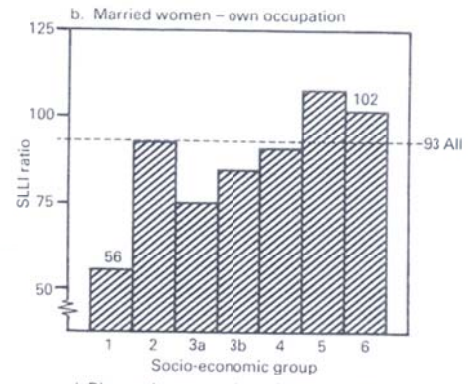
The factors which influence women's health state are likely to differ from those influencing health status in two important respects. First, health status influences health state. The main reason for the increase in poor health state with age is because age brings long-term illness. Second, the combination of women's employment, parental, and marital roles may result in role stress, which in turn influences the woman's health state. But the resulting level of role stress will vary with the woman's structural position. Women in disadvantaged material circumstances may be less likely to be able to cope with the stresses of being a mother and full-time employee than women in more 'privileged' circumstances. The extent to which partners contribute to the domestic division of labour will influence a woman's ability to manage the demands of fulfilling a number of roles, and their likelihood of role overload and poor health state. Figure 3.5 provides an outline model of the key structural and role-related factors associated with health state. All these variables, except equality of the domestic division of labour, could be analysed using the GHS.

An earlier study using the 1975-6 GHS examined two contrasting theses that (a) paid employment has beneficial effects on women's health state through role accumulation, and (b) that paid employment has adverse consequences due to role strain (Arber *et al* 1985). This study found adverse health consequences for women with children, who work full-time in lower non-manual and in manual occupations. The picture was somewhat different for women with professional and managerial jobs. Their greater financial resources could be used to ease some of the burdens of housework and childcare, so reducing role strain and fatigue. In addition, women working full-time in professional and managerial occupations are likely to have more flexible hours and more control over their work, making it easier to fit in with the demands of children, compared with women in lower level jobs who have less autonomy and more rigid work schedules. Thus, the adverse consequences of occupying the roles of mother,

Figure 3.4 Standardized limiting long-standing illness ratios by class and marital status for women (20-59), age standardized

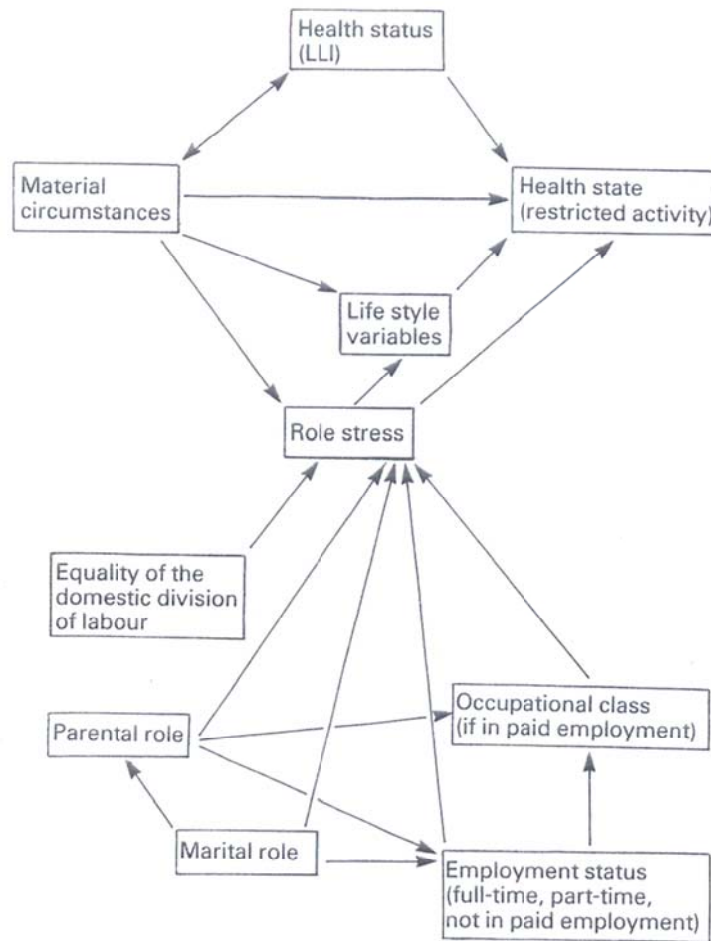


Figure 3.4 continued Standardized limiting long-standing illness ratios by class and marital status for women (20-59), age standardized



Source: General Household Survey, 1981-2 (author's analysis)
 Note: * Class is coded into socio-economic groups as in Figure 3.3 (See p. 83)

Figure 3.5 Key factors associated with health state among women (restricted activity due to illness)



housewife, and full-time worker are less for women in more 'privileged' structural positions. Indeed there may be positive benefits of role accumulation for these women. For other women freedom to work may be a dubious freedom if it means that they have little time to do anything except paid work, unpaid domestic tasks, and routine childcare.

Analyses of the health state of women must therefore consider the strain many women face in maintaining multiple roles as full-time employees, mothers, and housewives. Adverse health effects are likely to be mediated if there is greater equality in the domestic division of labour, but most evidence at present points in the direction of increased labour force participation for women with children but little change in traditional gender roles in the home (Martin and Roberts 1984). Women need to have a basically good health status in order to contemplate the rigours of coping with paid employment, childcare, and the housewife role.

These three case-studies exemplify a number of different ways in which the GHS can be fruitfully analysed to throw light on key areas of concern for feminists interested in women's health. Data collection is an expensive exercise, and prohibitively so for researchers on the scale available through the GHS. The GHS provides a large body of high quality data, which to date has been underexploited. This resource could well be used more fully, as these examples serve to demonstrate.

ACKNO~DGEMENTS

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1. See Table A of Allin *et al.*: (1983). This Table was derived from Table D2 in the Report of the Government Actuary on the First Quinquennial Review under section 137 of the Social Security Act 1975, 'National Insurance Fund, Long Term Financial Estimates', House of Commons paper 451, July 1982, HMSO.
2. The case of Pinder versus Friends Provident Insurance Company was contested between 1983 and 1985, but was unsuccessful in the courts.

9. A logit analysis was carried out using GLIM with receipt of services as the dependent variable and type of household and level of disability as the independent variables. The odds ratios in Figure 3.1 are derived from the coefficients of a main effects logit model.