should be honest about the lack of evidence for so much of routine practice. Problems may have arisen in North Stafford because the doctors wanted to "protect" the patients: they thus "sold" CNEP as "a kinder, gentler treatment." But it is neither kind nor gentle to deceive patients about the reality of their predicament.

A second principle should be partnership. Patients should be involved at all stages of designing, approving, and carrying out research. Finally, we should promote the principle that it is good for everybody, including participants, to conduct research. The worst outcome from this tragedy would be that it becomes increasingly difficult to do research in the NHS. Then we will never know how best to treat bronchiolitis.

Richard Smith *Editor, BMJ*

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Health inequalities in women and men

Studies of specific causes of death should use household criteria

Women are often excluded from studies of health inequalities. The justification given for this is lack of data, but there is also a belief that health inequalities are a smaller problem for women than men. An additional problem is that it is more difficult and controversial to classify women by social class or by general standing in the community.[1–3]

In this week's *BMJ* Sacker and colleagues show that using a particular indicator of social class or of social standing in the community influences the size of health inequalities (p 1303).[4] They show that for women the mortality ratio comparing the bottom and the top groups in a seven step social scale is 1.75 when the Cambridge scale of occupations is used. In contrast the same ratio for women is only 1.52 with the categories in the new Office for National Statistics (ONS) socioeconomic classification. For men the contrast between top and bottom groups was greater with the ONS classification than with the Cambridge scale.

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Health inequalities among women are (at least) of the same size as among men when Cambridge scores are used; the ONS classification, however, indicates that health inequalities are smaller in women. It is clear that we need to discuss the social indicators by which health inequalities in women are studied.

Similar papers in the past few years have grappled with health inequalities among women. The health outcomes in these papers comprise self perceived health, cardiovascular and other specific causes of mortality, and total mortality.[5–9] This research has become tied to the general sociological discussion about principles of social stratification. Advocates of the Cambridge scale of occupations[10] see it as an alternative to the Erikson-Goldthorpe scheme of social classes[11] as well as to the ONS classification. Sacker and colleagues conclude that "a better understanding of health inequality is possible when measures are used that are sensitive to the multidimensional nature of social inequality and the uneven effects of these dimensions on men and women." This is certainly true. But it is doubtful whether the comparison in their paper does in fact take account of this "multidimensionality."

The ONS classification is based on job characteristics (such as whether the job is routine or needs professional qualifications) and its position in the labour market. But occupations differ in other respects, income being the most obvious one. Occupations may also form "occupational cultures," among which smoking and drinking habits may vary systematically.[12]

The Cambridge scale, in contrast, comes from information on friendship choices. If two friends have different occupations this is taken as an indication that the social distance between those occupations is short.[13] Prandy explains that this is a rank order that reflects "differences in generalised advantage and disadvantage and hence in life style."[13]

The critical point here is whether friendship choices are based primarily on perceived equality in social advantage or disadvantage—a claim that has not been shown empirically. A second point is whether this also implies that lifestyle makes more of a contribution to poor health than other aspects of a person's general social standing (such as income). Sacker et al do not show that lifestyle is the key explanation. A previous study by the same authors showed, however, that certain cardiovascular risk factors were closely linked to Cambridge scores.[14]

Which of these two stratification schemes is the better one? Most sociologists would agree that such a question must be answered with reference to general sociological problems. In the comparative European study on health inequalities the Erikson-Goldthorpe scheme, which is based on occupation, was successfully applied to a large number of (west) European countries. The researchers did not conclude that class differences in self perceived health among women were due to work—rather, this became a starting point for a whole research programme.[15] How to understand the causal pathway between social position and health is a further, and different, issue than how to measure social position.

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How do we assign social position to women? Traditionally, the woman's occupation, her husband's occupation (single women being classified by their own occupation), or the household based "dominance" method are used. The last compares the two spouses' occupations and assigns the higher of these to the woman as well as to the man. In Sweden, use of the household dominance method showed greater social differences among women than use of the woman's own occupation, both for cardiovascular disease and for total mortality.[8] British data on self assessed health (but not on longstanding illness) gave the same results; the household based measures of social position showed greater social differences than methods based on individual criteria.[5]

In the paper by Sacker and colleagues, greater social differences among women were found with the Cambridge scale of occupations than with the ONS classification. Was this because the Cambridge scale used a household based method or was it because the principles behind this scale are more suitable for describing the general standing of women in society than those of the ONS classification? It seems unfair to compare the ONS scheme, which here is based on the woman's own occupation, with Cambridge scores based on the highest occupation in the household.

Koskinen and Martelin's study of socioeconomic mortality differences suggested that the smaller differences among women arose entirely from the subpopulation of married women; for single, divorced, or widowed women the differences in mortality were of the same size as in men.[9] Koskinen and Martelin also showed that for specific causes of death the socioeconomic differences in mortality among women were not smaller than those in men. Looking at specific causes of death using indicators of social position based on household criteria could find socioeconomic differences in mortality among women to be as large as or even larger than in men. For a major cause of death such as cardiovascular disease there are already indications that this is the case.[8 9]

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Depression in Parkinson's disease

Must be properly diagnosed and treated to avoid serious morbidity

Psychiatric symptoms frequently coexist with idiopathic Parkinson's disease and are often underdiagnosed and poorly treated.[1] Depression and anxiety are the most common psychiatric conditions that accompany Parkinson's disease. A study by Menza et al found that 12 out of 42 patients with Parkinson's disease met the criteria for an anxiety disorder according to the *Diagnostic and Statistical Manual* and 11 of them had a comorbid depressive disorder.[2] Recent reviews show that depression is a common and potentially debilitating aspect of Parkinson's disease, affecting 40-50% of patients.[3–5] While its aetiology in Parkinson's disease is unclear (biochemical changes, psychosocial factors, and situational stressors have all been implicated), it has an adverse effect on the quality of patients' lives, and doctors should ensure that it is diagnosed and properly treated.

The diagnosis is not easy because clinical symptoms of depression can overlap with or be mistaken for those of Parkinson's disease (such as the flat affect, inability to work, fatigue, preoccupation with ill health, loss of desire, and reduction in libido. Moreover, depression in patients with Parkinson's disease is qualitatively different from primary major depression in that self blame, guilt, delusions, a sense of failure, self destructive thoughts, and suicide are less frequent.[7]

Several studies have failed to find a clear association between the severity of depression and motor disability. Depressive symptoms precede those of motor dysfunction in 12-37% of patients with Parkinson's disease.[7] The severity of depression contributes to the cognitive disorders in Parkinson's disease; in a prospective cohort study of patients with Parkinson's disease who did not have dementia, depression was associated with a significantly increased risk of developing dementia.[9]

Depression in Parkinson's disease is usually linked to a reduction in brain catecholamines, serotonin (a decrease in the concentration of 5-hydroxyindoleacetic acid in cerebrospinal fluid), or dopamine (postmortem studies show dopamine depletion in the ventral tegmental area; glucose positron emission tom-

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