



Letters

Use of health services by children

BMJ 1999; 318 doi: <https://doi.org/10.1136/bmj.318.7187.876> (Published 27 March 1999) Cite this as:
BMJ 1999;318:876

Study does not rule out effect of social class

Fiona Reid, Lecturer in medical statistics, Patricia Sturdy (freid@sghms.ac.uk), Senior research fellow

Department of Public Health Sciences, St George's Hospital Medical School, London SW17 0RE

Dept of Palliative Care and Policy, Guy's, King's, and St Thomas' School of Medicine and Dentistry, London SE5 9PJ

Department of Health Policy Management, Erasmus University Rotterdam, NL-3000 DR Rotterdam, Netherlands

Northern Region, Public Health Training Scheme, Newcastle upon Tyne, NE6 4PY

Royal Hospital for Sick Children, Bristol, BS2 8BJ

Department of Sociology, University of Surrey, Guildford, Surrey GU2 5XH

EDITOR—In a secondary analysis of the British general household survey, Cooper et al conclude that the use of health services by children and young people is equitable in terms of social class status.¹ It is difficult either to agree or to disagree with them, since the results of the logistic regression analysis in table 3 do not include any details of their main social class variable (socioeconomic group of the head of family unit). We are told only that this variable was not significant and were not offered P values, odds ratios, or confidence intervals. The practice of presenting results only for variables that are statistically significant ($P < 0.05$) is adopted throughout table 3. We are surprised that the *BMJ* found this acceptable, since it ignores the journal's own published statistical guidelines.²

Cooper et al found a significant association between socioeconomic group and inpatient admissions in their univariate model (table 1), and a significant association between housing tenure and inpatient admissions in their logistic regression model (table 3). One would expect there to be a strong link between socioeconomic group and housing tenure, with a higher proportion of people from lower socioeconomic groups living in local authority housing. The logistic regression model does not include both housing tenure and socioeconomic group simultaneously since these variables would provide very similar information. Cooper et al themselves claim that both socioeconomic group and housing tenure are measures of social class. Therefore, all the indications are that inpatient admissions for children are indeed related to social class, after adjustment for morbidity, with higher admission rates among the lower social classes.

References

1. Cooper H, Smaje C, Arber S. Use of health services by children and young people according to ethnicity and social class: secondary analysis of a national survey. *BMJ* 1998; **317**:1047–1051. (17 October.)

2. Gardner MJ, Altman DG. *Statistics with confidence—confidence intervals and statistical guidelines*. London: BMJ Publishing Group, 1990:95.

Motivation for consultations may explain differential referral patterns

A Rogers (angela.rogers@kcl.ac.uk), Research fellow, **S Karlsen**, Research assistant

Department of Public Health Sciences, St George's Hospital Medical School, London SW17 0RE

Dept of Palliative Care and Policy, Guy's, King's, and St Thomas' School of Medicine and Dentistry, London SE5 9PJ

Department of Health Policy Management, Erasmus University Rotterdam, NL-3000 DR Rotterdam, Netherlands

Northern Region, Public Health Training Scheme, Newcastle upon Tyne, NE6 4PY

Royal Hospital for Sick Children, Bristol, BS2 8BJ

Department of Sociology, University of Surrey, Guildford, Surrey GU2 5XH

EDITOR—The use of health services by children and young people is an area that has been neglected. Cooper et al's study goes some way to redressing this imbalance.¹ Their assertion, however, that children and young people from ethnic minority groups may experience poor quality consultations in primary care and discrimination in referral to hospital services may be unfounded.

Data from the Camden and Islington Young People and Health Study suggest an alternative explanation for these patterns.² This was a self complete questionnaire based survey of 993 students aged 15 and 16, attending eight secondary schools in inner London. We were able to explore young people's own reports of use of general practitioners' services, in contrast to Cooper et al who rely on parental reports for those aged under 16.

In our sample, Asian and black young people were significantly more likely to report “excellent” self rated health and similar levels of longstanding limiting illness to their white counterparts. They were also more likely to report going to the general practitioner by themselves. Asian young people expressed less concern about the confidentiality of general practitioners' services. Asian and black young people were less likely to list their parents as a source of general health advice or to include parents or friends as potential sources of help or advice about drugs, alcohol, and sex.

Increased consultation rates among 15 and 16 year olds from ethnic minorities may therefore be accounted for by this group's reliance on their family doctor for health advice. Although this cannot fully explain the consultation patterns described by Cooper et al, it does highlight the need to gather more information about patients' motivation for consultation as well as their frequency. Children, young people, and young adults have different motivations for consulting their general practitioner, which aggregating data for young people aged 0-19 will mask. As young people have been shown to have distinct, yet unmet, primary healthcare needs, ^{3 4} future research should concentrate on young people's own experience of primary health care.

References

1. Cooper H, Smaje C, Arber S. Use of health services by children and young people according to ethnicity and social class: secondary analysis of a national survey. *BMJ* 1998; **317**:1047–1051. (17 October.)
2. Rogers A, Karlsen S, McCarthy M, Adamson JE, Tucker R. *Survey of health behaviours and attitudes in 993*

15 year olds in Camden and Islington schools. London:Department of Epidemiology and Public Health UCL, 1998.

3.Kari J, Donovan C, Li J, Taylor B.Adolescent attitudes to general practice in North London.*Br J Gen Pract* 1997; **47**:109–110.

4.Malus M.Towards a separate adolescent medicine.*BMJ* 1992; **305**:789.

Different data collection methods can lead to different findings

M A Bruijnzeels (m.bruijnzeels@bmg.eur.nl), Lecturer

Department of Public Health Sciences, St George's Hospital Medical School, London SW17 0RE

Dept of Palliative Care and Policy, Guy's, King's, and St Thomas' School of Medicine and Dentistry, London SE5 9PJ

Department of Health Policy Management, Erasmus University Rotterdam, NL-3000 DR Rotterdam, Netherlands

Northern Region, Public Health Training Scheme, Newcastle upon Tyne, NE6 4PY

Royal Hospital for Sick Children, Bristol, BS2 8BJ

Department of Sociology, University of Surrey, Guildford, Surrey GU2 5XH

EDITOR—The findings by Cooper et al about ethnicity and use of health services in the United Kingdom¹ are the opposite of my findings in the Netherlands. On the basis of data from the First Dutch National survey of morbidity and interventions in general practice, used in a regression analysis, socioeconomic status contributed significantly whereas ethnicity of the child did not contribute to the variation in the use of general practitioners.² A detailed analysis matching a child from an ethnic minority to a socioeconomically comparable Dutch child showed that consultation rates of general practitioners did not differ by ethnic origin, but the types of illness presented did.

I do not think that the Netherlands differs from the United Kingdom in this respect. The contradicting results may be explained by differences in the methods of data collection. Cooper et al's study used self reported data based on retrospective interviews (it is not clear whether these were written or oral interviews), whereas my study used registrations with general practitioners. I compared both methods for consultation data of the same children and period. I found that consultation data reported by parents from lower socioeconomic classes and ethnic minorities deviated more from the general practitioner registration than data reported by parents from higher socioeconomic classes.³ The self reported data by parents of lower socioeconomic classes and ethnic minorities may thus be less reliable.

Regarding the measurement of perceived health status, Cooper et al used a measurement that was too crude. Since experiences and behaviour with regard to illness are culturally bound, the complex process of illness behaviour cannot be captured with a few standardised questions.

The measurement of socioeconomic status—occupation of the head of the family—is dubious. The parents' education (especially the mother's) may have lead to different results, since the mother often decides to consult the general practitioner. Even more problematic is the measurement of socioeconomic status if ethnic minorities are to be compared with the white population, taking into account unemployment rates and numbers of one parent families.

Cooper et al did not analyse the non-response group their study. The absolute numbers of non-white participants are small, and extrapolation of the results is therefore not appropriate. People from lower

socioeconomic classes refuse participation in surveys more often. Also, people from ethnic minorities may have other characteristics that lead to greater non-response.

Large scale population surveys are important, but more emphasis should be put on the measurement of different concepts before it can be assessed whether equity has been achieved.

References

- 1.Cooper H, Smaje C, Arber S.Use of health services by children and young people according to ethnicity and social class: secondary analysis of a national survey.*BMJ*1998; **317**:1047–1051. (17 October.)
- 2.Bruijnzeels MA, Foets M, van der Wouden JC.General practice consultation in childhood in The Netherlands: sociodemographic variation.*J Epidemiol Community Health* 1995; **49**:532–533.
- 3.Bruijnzeels MA, Foets M, van der Wouden JC, van den Heuvel WJ, Prins A.Validity and accuracy of interview and diary data on children's medical utilisation in The Netherlands.*J Epidemiol Community Health* 1998; **52**:65–69.

Objective measures of health status are essential

Wai-Ching Leung, Senior registrar in public health medicine (W.C.Leung@ncl.ac.uk)

Department of Public Health Sciences, St George's Hospital Medical School, London SW17 0RE

Dept of Palliative Care and Policy, Guy's, King's, and St Thomas' School of Medicine and Dentistry, London SE5 9PJ

Department of Health Policy Management, Erasmus University Rotterdam, NL-3000 DR Rotterdam, Netherlands

Northern Region, Public Health Training Scheme, Newcastle upon Tyne, NE6 4PY

Royal Hospital for Sick Children, Bristol, BS2 8BJ

Department of Sociology, University of Surrey, Guildford, Surrey GU2 5XH

EDITOR—In their secondary analysis of the British general household survey Cooper et al found that south Asian children and young people used the services of general practitioners significantly more often than their white counterparts, but utilisation of hospital outpatient and inpatient services was significantly lower among all children and young people from ethnic minorities than among their white counterparts.¹

Cooper et al attempted to adjust for differences in health status among different ethnic groups using data based on reports from the children or their parents. Ethnicity has, however, been shown to be a significant predictor of differences in self reported health, and in one study, Asian patients were less satisfied and perceived as less sharing in the doctor patient relationship compared with other ethnic groups, even though they had better health or health of equal status compared with white people.² This observation might account for Cooper et al's findings. Before it can be concluded that children and young people from ethnic minority groups received a poorer quality of health care, data based on objective measures of health status are essential.

References

- 1.Cooper H, Smaje C, Arber S.Use of health services by children and young people according to ethnicity and social class: secondary analysis of a national survey.*BMJ*1998; **317**:1047–1051. (17 October.)
- 2.Meredith LS, Siu AL.Variation and quality of self-report health data. Asians and Pacific Islanders compared with other ethnic groups. *Med Care* 1995; **33**(11): 1120–1131.

Hospital care is not necessarily superior to primary care

Reg Bragonier, Specialist registrar

Department of Public Health Sciences, St George's Hospital Medical School, London SW17 0RE

Dept of Palliative Care and Policy, Guy's, King's, and St Thomas' School of Medicine and Dentistry, London SE5 9PJ

Department of Health Policy Management, Erasmus University Rotterdam, NL-3000 DR Rotterdam, Netherlands

Northern Region, Public Health Training Scheme, Newcastle upon Tyne, NE6 4PY

Royal Hospital for Sick Children, Bristol, BS2 8BJ

Department of Sociology, University of Surrey, Guildford, Surrey GU2 5XH

EDITOR—In their article, Cooper et al showed that Asian children are more likely to consult their general practitioners but less likely to be seen in hospital outpatient departments or be admitted as inpatients than white children.¹ Only one interpretation of this finding is offered, namely, that children of Asian origin receive health care of poorer quality because of bias and discrimination by their general practitioners. While this may one possible interpretation, it has some obvious flaws. First, it implies that a visit to hospital equates with high quality medical care whereas consultation with the general practitioner is somehow inferior. Second, there are other equally likely interpretations of Cooper et al's data.

Perhaps, through frequent contact with their patients, general practitioners of Asian children have a better knowledge of their patients and are better able to meet their health needs without making (possibly inappropriate) referrals to hospital. Alternatively, white children's parents may pressurise their general practitioners into early hospital referral because of their own perception that hospitals will offer higher quality service. It would be have been prudent of the authors to offer other interpretations of the data and not fall into the trap of assuming that hospital care is necessarily superior to primary care.

References

- 1.Cooper H, Smaje C, Arber S.Use of health services by children and young people according to ethnicity and social class: secondary analysis of a national survey.*BMJ*1998; **317**:1047–1051. (17 October.)

Authors' reply

S Arber, Professor of sociology, H Cooper, Research fellow, C Smaje, Lecturer in sociology

Department of Public Health Sciences, St George's Hospital Medical School, London SW17 0RE

Dept of Palliative Care and Policy, Guy's, King's, and St Thomas' School of Medicine and Dentistry, London SE5 9PJ

Department of Health Policy Management, Erasmus University Rotterdam, NL-3000 DR Rotterdam, Netherlands

Northern Region, Public Health Training Scheme, Newcastle upon Tyne, NE6 4PY

Royal Hospital for Sick Children, Bristol, BS2 8BJ

Department of Sociology, University of Surrey, Guildford, Surrey GU2 5XH

EDITOR—Given the unexpected and striking nature of our findings, it is unsurprising that comments focus on methodology and interpretation. Our population sample covers 20 473 children, including 2155

from ethnic minority groups. There are no larger or better quality population based British data than the General Household Survey.¹

In separate analyses for ages 0-9 and 10-19, social class of the head of the family unit was not statistically significant ($P<0.05$) in predicting the use of general practitioner, outpatient, or inpatient services when ethnicity and age were included in models. Housing tenure was, however, significant ($P<0.01$) for inpatient use when added to these models. This addresses Reid and Sturdy's criticism—housing tenure is not providing the same information as class. Rogers and Karlsen believe that aggregating data for 0-19 year olds masks differences among age groups, but separate analyses for younger and older children show comparable findings by class and ethnicity as for the aggregate 0-19 group. General Household Survey data for ages 16 and above are collected from young people themselves, removing potential error if young people attend general practitioners without their parents. Bruijnzeels comments that our measure of socioeconomic status is inadequate, but our table 3 included a measure of family work status that distinguished family structure and parental employment; this variable was not significant in any utilisation models but was a major predictor of children's health status.²

Little is known in Britain about ethnicity and the meaning of health, therefore both Bruijnzeels and Leung are right that minority ethnic groups may interpret questions about self assessed health status differently from white parents. However, less error is likely for reported outpatient visits in the past three months and inpatient stays in the past year—certainly not sufficient to explain our findings of such low use of inpatient and outpatient services by children from minority ethnic groups.

The interpretation and policy implications of our findings are of paramount importance. We agree with Bragonier that hospital care is not necessarily superior to primary care. As he suggested, parents from ethnic minorities may put less pressure on general practitioners for hospital referral than white parents. This probably reflects more fundamental underlying language and communication difficulties between general practitioners and parents from ethnic minorities, which we found in recent qualitative research³ and which needs further investigation. Alternatively, referral rates may vary between general practitioners; parents from ethnic minorities may be registered with general practitioners with a low propensity to refer, which may also relate to ethnic status of general practitioners and area of residence. This is a priority for research using administrative data from general practitioners and hospitals.

References

1. Thomas M, Walker A, Wilmot A, Bennett N. *Living in Britain: results from the 1996 General Household Survey*. London: The Stationery Office, 1998.
2. Cooper H, Arber S, Smaje C. Social class or deprivation? Structural factors and children's limiting long-standing illness in the 1990s. *Sociol Health Illness* 1998; **20**(3): 289–311.
3. Cohen S, Arber S, Smaje C. Primary health care services for children from minority ethnic groups. Report to South Thames NHS Executive, 1998.