Significant social class gradient in menstrual disorders

EDITOR,-Diana Kuh and Susan Stirling report significant educational gradients for risk of admission for diseases of the female genital system and breast, and in particular for menstrual disorders: 1% of highly educated women were admitted to hospital for menstrual problems compared with 19% of those with minimal qualifications.[1] Social gradients were also observed for hysterectomies and dilatation and curettage: 37% and 44% of these procedures, respectively, were related to menstrual problems. The authors refer to a slight increase in rates of hysterectomy since the 1970s. They were unable, however, to establish whether increased risks of admission and surgery among less educated women and women of lower social class reflected the prevalence of disease or a different pattern of primary and secondary care.

Evidence for social differences in menstrual disorders, not affected by use of health services, is available from the 1958 British birth cohort study (table). At age 33, women reported whether they had ever had a menstrual problem. Eighteen per cent reported that they had, of whom 14% had had such a problem during the past year. There were strong associations between social position and menstrual problems.

Social class distribution of menstrual problems among women in 1958 British birth cohort study

	At birth		At age 33	
	% (No)	Odds ratio	% (No)	Odds ratio
Social class:				
I	10·5 (24)	1·00	10·9 (15)	1·00
II	13·1 (92)	1·28	16·8 (265)	1·66
IIINM	16·1 (84)	1·64*	16·5 (318)	1·63
IIIM	19·0 (508)	2·01*	16·3 (63)	1·59
IV	22·1 (144)	2·43*	21·8 (208)	2·28*
V	18·5 (83)	1·94*	23·0 (67)	2·45*
χ^2 For trend	23·2		17·9	
P value	<0·0001		<0·0001	
Educational qualifications:				
Degree			14·4 (211)	1·00
A level			18·1 (106)	1·32*
O level			17·6 (362)	1·27*
<O level			18·7 (179)	1·37*
None			26·4 (161)	2·13*
χ^2 For trend			32·5	
P value			<0·0001	

*P<0·05.

Evidence suggests an association between menstrual problems and obesity, with overweight and obese women having a higher risk of menstrual disorders (JL, CP, TC, unpublished observations).[3] Women in lower social groups are also at a greater risk of obesity than those of higher socioeconomic status.[2] It is therefore important to consider whether the social distribution of obesity could account for the distribution of menstrual disorders highlighted in Kuh and Stirling's paper. The recent increase in obesity [3] may also be partly responsible for the increase in menstrual problems (and possibly hysterectomies and dilatation and curettage). If this hypothesis is confirmed then a reduction in the socioeconomic gradient in admissions for menstrual disorders (and possibly hysterectomies and dilatation and curettage) may be achieved by reducing the social gradient of obesity.

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1 Kuh D, Stirling S. Socioeconomic variation in admission for diseases of female genital system and breast in a national cohort aged 15-43. BMJ 1995;31 1:840-3. (30 September.)
2 Bennett N, Dodd T, Flatley J, Freeth S, Bolling K. The health of our nation: health survey for England 1993. London: Office of Population Censuses and Surveys, 1995.
3 Hartz Aj, Barboriak PN, Wong A, Katayama KP, Rimm AA. The association of obesity with infertility and related menstrual abnormalities in women. International journal of Obesity 1979; 3:57-63.