



Odds ratios for various aspects of menorrhagia management both before and after educational intervention. Bars represent 95% confidence intervals

tranexamic acid (3.36; 2.21 to 4.96), and a reduction in norethisterone treatment (0.67; 0.46 to 0.95) for cases of menorrhagia. Non-steroidal anti-inflammatory drugs were prescribed slightly less commonly in groups receiving intervention (0.61; 0.38 to 0.90). The odds of hysterectomy in the education group were increased by 2.33 (0.94 to 4.87). There were no demographic differences between practices.

### Comment

The data show a positive change in behaviour among doctors as a result of education. The results also validate previously reported randomised controlled

trial data.<sup>3</sup> There were no before and after differences in control practices, indicating that external confounders had no effect. The trend towards an increased chance of hysterectomy in intervention groups may be because they had already received appropriate first line treatment. These women may proceed to more appropriate surgery as a result of this intervention.

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## Violence by clients towards female prostitutes in different work settings: questionnaire survey

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Violence by clients towards prostitutes has seldom been the focus of public and academic interest, yet it is a major health issue.<sup>1 2</sup> Concern has mostly focused on the potential of prostitutes to transmit sexual infections, notably HIV, to their clients and subsequently partners.<sup>3</sup> Features of female prostitution that have a direct impact on the health of prostitutes but not the health of others have therefore tended to be overlooked. The scant research that is available on violence by clients shows that prostitutes who work outdoors in particular routinely confront clients who are verbally, sexually, and physically violent towards them.<sup>4 5</sup> We report on the prevalence of violence by clients against female prostitutes working either outdoors or indoors in three major British cities.

### Methods and results

During 1999 three female researchers (SC, MB, and Catherine Benso) contacted 240 female prostitutes; 115 worked outdoors (40 in Leeds, 75 in Glasgow)

and 125 worked indoors in saunas or flats (50 in Leeds, 75 in Edinburgh). We designed a structured questionnaire using previously validated measures to record personal characteristics, working patterns, drug and alcohol use (in the past six months), type and frequency of violence by clients (ever or in the past six months), and levels of attack reported to police. We contacted 156 (65%) prostitutes in their place of work and 84 (35%) through drop-in centres. We used SPSS to test for significance, and multivariate binary logistic regression analysis to identify variables most strongly associated with violence experienced ever or in the past six months.

The table shows that prostitutes working outdoors were younger, involved in prostitution at an earlier age, reported more illegal drug use, and experienced significantly more violence from their clients than those working indoors (81% (93 of 115) *v* 48% (60 of 125),  $\chi^2 = 29.2$ , *df* = 1, *P* < 0.0001). Prostitutes working outdoors most frequently reported being slapped, punched, or kicked, whereas prostitutes working

Personal characteristics, drug use, and experience of client violence by prostitutes working indoors or outdoors. Values are numbers (percentages) of prostitutes unless stated otherwise

Variable	Work setting		P value
	Outdoors (n=115)	Indoors (n=125)	
Mean (SD) age	25.7 (6.7)	28.4 (6.9)	0.002
Mean (SD) age first paid for sex	19.6 (5.1)	22.7 (5.9)	<0.001
Mean (SD) years in prostitution	4.8 (5.0)	4.3 (4.9)	0.440
Main reason for prostitution:			
Household expenses and children	32 (28)	93 (74)	<0.001
To pay for drugs	72 (63)	1 (1)	<0.001
To save up for something	5 (4)	23 (18)	0.001
Other	6 (5)	8 (6)	0.696
Illegal drug used in past six months	107 (93)	86 (69)	<0.001
Type of illegal drug used:			
Heroin	90 (78)	6 (5)	<0.001
Other opiate	45 (39)	12 (10)	<0.001
Tranquillisers	43 (37)	99 (79)	<0.001
Crack cocaine	37 (32)	5 (4)	<0.001
Amphetamine	13 (11)	38 (30)	<0.001
Cocaine	20 (17)	19 (15)	0.646
Cannabis	70 (61)	62 (50)	0.080
Injected drugs in past month	56 (49)	4 (3)	<0.001
Ever experienced client violence	93 (81)	60 (48)	<0.001
Experienced violence in past six months	58 (50)	32 (26)	<0.001
Type of violence ever experienced:			
Slapped, punched, or kicked	54 (47)	17 (14)	<0.001
Threatened with physical violence	45 (39)	18 (14)	<0.001
Robbery	42 (37)	12 (10)	<0.001
Attempted robbery	30 (26)	6 (5)	<0.001
Beaten	31 (27)	1 (1)	<0.001
Threatened with weapon	28 (24)	8 (6)	<0.001
Held against will	29 (25)	19 (15)	0.053
Attempted rape (vaginal or anal)	32 (28)	21 (17)	0.040
Strangulation	23 (20)	7 (6)	0.001
Kidnapped	23 (20)	3 (2)	<0.001
Forced to give client oral sex	20 (17)	4 (3)	<0.001
Raped (vaginal)	25 (22)	2 (2)	<0.001
Attempted kidnap	14 (12)	1 (1)	<0.001
Slashed or stabbed	8 (7)	0	0.003
Raped (anal)	6 (5)	8 (6)	0.696
Reported at least one incident of client violence to police	41/93 (44)	11/60 (18)	<0.001

indoors cited attempted rape. Multiple logistic regression showed that working outdoors rather than indoors was associated with higher levels of violence by clients than was the city, drug use, and duration of, or age that women began, prostitution. Prostitutes working outdoors in Glasgow were six times more likely to have experienced recent violence by clients than those working indoors in Edinburgh. Only 34% (52/153) of prostitutes who had experienced violence by clients reported it to the police, and this was reported more often by prostitutes working outdoors than indoors (44% (41 of 93) v 18% (11 of 60),  $\chi^2 = 10.4$ ,  $df = 1$ ,  $P < 0.0012$ ).

## Comment

Half of prostitutes working outdoors and over a quarter of those working indoors reported some form of violence by clients in the past six months. These levels of violence need to be addressed and reported attacks responded to more effectively in terms of service provision, police intervention, and judicial processes. Recognising that violence by clients occurs to women

working both indoors and outdoors would be an important step towards preventing or reducing the incidence of violence.

The sexual health of prostitutes is just one element of service need in circumstances where they confront potentially abusive clients. The range and content of comprehensive health services for prostitutes is an area that should be addressed with some urgency if levels of morbidity and mortality from violence by clients is to be reduced.

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Contributors: SC helped review the literature, helped collect and enter the data, performed the data analysis, formulated conclusions, wrote the first draft of the manuscript, and revised the manuscript. MH performed the data analysis, formulated the conclusions, and helped revise the manuscript. MB had the original idea for the study, helped review the literature, sought ethical approval and funding, helped with data collection, formulated the conclusions, supervised the overall conduct of the project, and helped revise the manuscript. GH had the original idea for the study, supervised the overall conduct of the project, and helped revise the manuscript. MB and GH will act as guarantors for the paper.

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## Corrections and clarifications

*Lipid concentrations and the use of lipid lowering drugs: evidence from a national cross sectional survey*

Because of an error on the part of the *BMJ*, the authors (Paola Primatesta and Neil R Poulter) of this paper (25 November, pp 1322-5) were said to have no competing interests, whereas in fact Professor Poulter has received funds from several pharmaceutical companies to attend symposiums, speak, organise education, consult, and support research and members of staff. Professor Poulter ticked our form to say that he had received this support but then ticked the box to say that he had no competing interests. Our form did not make sufficiently clear that we regard receiving funds for these reasons as being a competing interest. We failed to pick up on the inconsistency in Professor Poulter's form, and we apologise to him for that. We have amended the form, which is on our website at [bmj.com/cgi/content/full/317/7154/291/DC1#aut](http://bmj.com/cgi/content/full/317/7154/291/DC1#aut)

## Endpiece

### Freedom of press

Freedom of press is limited to those who own one.

H L Mencken,  
American editor, author, and critic, 1880-1956