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Domestic violence: a comparative survey of levels of detection, knowledge, and attitudes in healthcare workers

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The objective of this study was to compare the knowledge, attitudes, responses and levels of detection of domestic violence among a variety of healthcare workers in different specialities.

Self-administered questionnaires were sent to community and hospital based healthcare workers in Oxfordshire working in primary care, obstetrics and gynaecology, mental health and accident and emergency. These comprised all principal general practitioners and general practitioner registrars, 50% of practice/district nurses and health visitors in each practice, and all healthcare workers in obstetrics and gynaecology, community mental health teams and accident and emergency in one trust.

The amount of domestic violence detected in different healthcare settings was far less than indicated by anonymous surveys and crime figures. Knowledge about many of the issues surrounding domestic violence was inconsistent and there were fundamental deficiencies. The attitudes of healthcare workers to domestic violence were generally sympathetic and supportive. Women, nurses and community mental health workers reported significantly better knowledge and more positive attitudes than other respondents. Gender, role and speciality were independently associated with more positive attitudes and the latter two were independently associated with good knowledge. The response that healthcare workers make when they uncover domestic violence is confused and often inappropriate.

In conclusion, most healthcare workers accept that domestic violence is a healthcare issue but lack fundamental knowledge about the issues surrounding domestic violence itself and appropriate agencies that can offer help. They also lack skills in identifying and discussing this issue with patients/clients. A large, unfulfilled training need has been identified. *Public Health* (2001) **115,** 89–95.

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Introduction

Action by Health Authorities to combat domestic violence has been given high priority by the Chief Medical Officer.[1] The BMA defines domestic violence as physical, sexual or emotional violence from an adult perpetrator directed towards an adult victim in the context of a close relationship.[2] Domestic violence is rarely a single event and usually starts early in a relationship, escalating in frequency and intensity over time,[3–6] with pregnancy being an additional risk factor.[3,7,8] The nature of violent relationships is often very complex and many victims do not want to leave their violent partners. Drug or alcohol usage within the relationship is more often the result of, rather than the cause of, violence.[9,10]

Domestic violence is a massively under-reported crime;[3] in the UK it is estimated that only 2–15% of cases are reported to the police. Estimates of the prevalence of domestic violence show that this is a common problem, affecting 27% of women in their life time.[11] Ninety-seven women were murdered in England and Wales by their partners in 1996, a figure which represents 45% of all female murders. Seventy six percent of female murders are perpetrated by someone known to them.[12] The British Crime Study of 1992[13] showed that 95% of victims of domestic violence were female but the survey of 1996[12] revealed an increase in male victims to 27%. There are major health implications[2,11,14] in terms of the physical and mental well being of both the victim and their children.[2,15]

A social taboo remains over the subject of domestic violence[16] so that victims do not voluntarily disclose their problems because of shame, self-blame, denial and fear. The fear is not only of their partner but also of losing their

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children into care. The vast majority of domestic violence victims have sought medical help,[17] indicating that there are opportunities for intervention.

This study looks at the knowledge, attitudes, responses and clinical experience of healthcare workers to domestic violence in a variety of specialities.

Methods

Participants

Healthcare workers from primary care, community mental health, obstetrics and gynaecology in the county of Oxfordshire. Within primary care, questionnaires were sent to all principal general practitioners, general practitioner registrars and practice counsellors, and in each practice 50% of practice/district nurses and health visitors. The selection process was carried out using computer generated random numbers. The population of Oxfordshire at the time was 616 707. There is a single Mental Health Trust for the whole county. Within community mental health all psychiatrists, psychologists, psychiatric nurses and occupational therapists were included. In obstetrics and gynaecology, all staff with patient contact from one trust were surveyed. A simpler questionnaire was initially given to accident and emergency staff but extensively modified for use in other disciplines. Results of the frequency of detection and patterns of referral by this group are included for comparison.

The questionnaire

The authors (KC, JS, SW) designed the questionnaire after review of the literature and consultation with the Oxfordshire Multi-Agency Groups on Domestic Violence and relevant specialists. The primary care questionnaire was piloted on a group of health visitors. Questions were asked about violence perpetrated by men on women but the existence of male victims was acknowledged in the covering letter. Questions were asked to assess knowledge and clinical experience of domestic violence as well as attitudes and professional responses to this issue. Some questions were modified to be relevant to each speciality but the majority of questions were identical across specialities. In particular, the enquiry put to different specialities on when to use 'direct' questioning to identify victims was modified to be relevant to each healthcare setting.

Statistical analysis

The questions were first analysed individually. Overall scores for knowledge and attitudes were then calculated by summing individual scores (Table 1). Sympathetic/supportive attitudes were scored +1 and +2 and unsympathetic/unsupportive attitudes −1 and −2. Correct knowledge was scored +1 and wrong knowledge −1. Don't knows and missing data were scored as zero. This gave a possible range of scores of −23 to 23 for attitudes and −13 to 13 for knowledge. Splitting at the median created binary variables reflecting 'good' and 'bad' attitudes and knowledge.

The χ^2 test was used to compare proportions. The overall scores were approximately normally distributed and F-tests were used to compare differences between groups. To estimate the independent effects of professional role, gender and speciality, a three way analysis of variance model (ANOVA) was used. A four-way ANOVA was used to estimate the additional independent effect of knowledge on attitudes. Pearson's correlation coefficient was used to examine the association between overall knowledge and attitude scores. Statistical significance was taken at the 5% level ($P < 0.05$).

Results

Response

The overall response rate was 54% (54% primary care, 48% community mental health and 56% obstetrics and gynaecology). In total, there were 685 respondents, 511 (76%) of whom were female. Two hundred and thirty six (35%) were doctors and 371 (55%) nurses. The modal age group was 35–44 y. The response rate from accident and emergency was 52%. The anonymity of respondents precluded comparisons with non-respondents.

Levels of detection

The frequency of detection of domestic violence is shown in Table 2. These data do not reflect the number of victims, as a victim may be subject to violence once a year or more. They reflect the individual respondents estimate of how often they identify domestic violence within their own patient group, which may include men and women with and without overt injury. With the exception of accident and emergency staff, the most frequent pattern of identification was between 2 and 11 incidents a year.

Knowledge and attitudes

Table 1 shows the combined responses of primary care, obstetrics and gynaecology and community mental health staff. Only 54% (95% CI 50–58%) of healthcare workers knew it was a crime to hit your partner according to English law. Very few healthcare workers had information leaflets and practically none used a written protocol. Most healthcare workers, 90% (88–92%), agreed that domestic violence was an important healthcare issue and 69%

Table 1 Combined responses of all healthcare workers to questions about knowledge of and attitudes to domestic violence

Knowledge questions (%)	Yes	No	Don't know	Attitude questions (%)	Strongly agree/ Agree	Don't know	Strongly disagree/ Disagree
Is a woman more likely to be murdered on the street than in her own home?	24 (4)	584# (86)	70 (10)	I think domestic violence is an important health-care issue	600# (90)	52 (8)	16 (2)
Is forcing sex on your partner a crime, according to English Law?	561# (84)	43 (6)	67 (10)	I think domestic violence is a private matter between partners	22 (3)	22 (3)	627# (93)
Does domestic violence usually stop during pregancy?	8 (1)	590# (87)	78 (12)	I have not got time to ask women about domestic violence within my initial assessment interview/normal contact time	84 (13)	54 (8)	528# (79)
Do you follow reports about domestic violence in the media?	481# (73)	179 (27)		I think my profession should be more involved in identifying cases of domestic violence	454# (69)	147 (22)	62 (9)
Does domestic violence occur in homosexual relationships?	453# (68)	10 (2)	208 (31)	I see no need for any written guidelines for managing domestic violence	40 (6)	96 (14)	533# (80)
Is a woman more likely to go to the police than to come to her general practioner if she has been abused?	47 (7)	426# (63)	199 (30)	I think domestic violence is part of normal life	38 (6)	35 (5)	589# (89)
If a woman leaves an abusive man is the abuse by him likely to stop?	23 (4)	518# (79)	116 (18)	Healthcare establishments/our department should display posters or leaflets about domestic violence	517# (79)	92 (14)	51 (8)
Is hitting your partner a crime, according to English Law?	363# (54)	100 (15)	205 (31)	Recognising domestic violence will not make any difference to the long term health of a victim	19 (3)	38 (6)	612# (92)
Does domestic violence occur more in lower socio-economic groups?	199 (30)	340# (50)	136 (20)	Would you personally welcome some training about domestic violence?	520# (82)	117 (18)	
Do you personally have leaflets that you can give to victims?	156# (23)	440 (66)	74 (11)	I feel uncomfortable asking direct questions about domestic violence	294 (44)	76 (11)	303# (45)
Is domestic violence more common in ethnic minorities?	76 (11)	218# (33)	375 (56)	Abused women should leave their partner if they do not like being hit, whatever the circumstances	239 (37)	91 (14)	320# (49)
Have you ever attended a lecture or seminar about domestic violence	204# (30)	470 (70)		If I ask every woman (who is relevant to my practice) if she has been abused I will offend a lot of my patients	308 (46)	93 (14)	265# (40)
Do you usually use a written protocol for dealing with domestic violence cases?	22# (3)	622 (97)					
Do the leaflets about domestic violence reflect the ethnicity of your population?*	85# (16)	149 (28)	295 (56)				
Would you personally refer children to the Child Protection Investigation Team if a woman disclosed domestic violence to you?**	299# (44)	150 (22)	180 (26)				

Percentages have been rounded to the nearest whole number and therefore totals may not equal 100.
All questions asked of all respondents, $n = 685$. Percentages exclude missing data.
*,**Questions excluded from calculation of overall score.
*Excluded because so few have leaflets available anyway.
**Excluded because there is no correct response.
#Responses which indicate the correct answer, good practice or a asympathetic/supportive attitude.

Table 2 The frequency of domestic violence identified in different healthcare settings

	Obstetrics and gynaecology (%)	Mental health (%)	Primary care (%)	Accident and emergency (%)	Total frequency of detection
Never	30 (16)	3 (5)	24 (6)	5 (10)	62 (9)
Once a year or less	80 (42)	20 (33)	146 (35)	13 (25)	259 (36)
Between 2 and 11 times per year	78 (41)	27 (45)	197 (48)	*	302 (42)
Once a month or more	2 (1)	10 (17)	45 (10)	33 (65)	90 (13)
Total number of responses	190	60	412	51	713 (100)

Missing data not shown and excluded from percentages.
*The bands of frequency options given to accident and emergency staff were fewer so these may be inflated.

Table 3 Significantly different responses to questions between different specialities

Question/Answer	Obstetrics and Gynaecology (%)	Mental health (%)	Primary care (%)	*P*-value
Would you personally welcome training on domestic violence/Yes	91	91	76	< 0.001
I feel uncomfortable about asking direct questions about domestic violence/Yes	64	25	37	< 0.001
If I ask every woman (who is relevant to my practice) if she has been abused I will offend a lot of my patients/Yes	74	13	38	< 0.001
I have not got time to ask women about domestic violence within my initial assessment interview/normal contact time/Yes	21	5	10	< 0.005

(65−73%) felt their profession should be more involved in identifying cases. Overall, 82% (79−85%) of staff would personally welcome training on domestic violence. Significant differences in responses between specialities are shown in Table 3. The 'correct' answer to the question about referral of children in violent relationships to Child Protection Investigation Teams is contentious and was excluded from the overall knowledge score. The overall scores of knowledge and attitudes in groups of subjects are shown in Table 4. Nurses, women and community mental health workers had significantly more positive attitudes and better knowledge. No significant differences were found between age groups, although younger workers tended to have better attitudes. Attitudes and knowledge were most strongly associated with professional role (both $P = < 0.001$).

After including professional role, gender and speciality in the same model, it was found that all three were independently associated with the attitude scores but only speciality and professional role were independently associated with knowledge scores (all $P < 0.05$). This is illustrated by the proportions of subjects having 'good' attitudes and knowledge in that the difference in knowledge scores between genders was smaller than the difference in attitude scores (Table 4). The finding implies that any knowledge differences between genders is a consequence of differences in terms of speciality and professional role.

Eighteen percent of the variability in mean attitude scores could be explained by knowledge (Pearson's $r = 0.43$, $P < 0.001$). After including professional role, gender, speciality and knowledge in the same model, speciality was no longer independently related to attitudes. This implies that the difference in attitudes between specialities is partly a consequence of differences in knowledge.

Knowledge of other agencies

The agencies to which healthcare workers would refer are shown in Table 5. Over 90 agencies were suggested and they have been grouped into the main categories shown. The three most frequent agencies referred to were social services, the police and primary healthcare teams. Women's Aid, one of the non-statutory services for women, was only mentioned by 7% (5−9%) of healthcare workers ($n = 51$). Ten percent ($n = 61$) of healthcare workers would refer cases only to other health service colleagues.

Table 4 Overall attitude and knowledge scores for individual categories

			Attitude				Knowledge			
Category	Respondents	Number	Mean scores** (s.d.)	Significance of mean difference*	Proportion with good^ attitude (%)	Significance of, difference in proportion#	Mean scores** (s.d.)	Significance of mean difference*	Proportion with good^ knowledge (%)	Significance of difference in proportion#
Professional role	Nurses	371	9.65 (4.48)	<0.001	60	<0.001	4.36 (3.00)	<0.001	60	<0.001
	Doctors	236	7.12 (4.74)		36		2.99 (3.13)		43	
Gender	Females	511	9.39 (4.76)	<0.001	59	<0.001	4.16 (3.15)	0.002	58	<0.005
	Males	163	7.13 (4.51)		36		3.23 (3.02)		45	
Speciality	Obstetrics and Gynaecology	197	8.38 (4.70)	0.003	51	0.05	3.56 (2.80)	0.001	50	0.001
	Primary care	427	8.68 (4.93)		51		3.87 (3.29)		53	
	Mental health	61	10.73 (4.31)		67		5.25 (2.89)		77	
Age	Under 35	153	9.40 (4.26)	0.478			3.52 (2.98)	0.186		
	35–44	249	8.83 (5.00)				3.94 (3.08)			
	45–54	196	8.76 (4.56)				4.24 (3.20)			
	Over 54	73	8.48 (5.39)				4.09 (3.44)			

*F-test.
#Chi squared.
^Good attitude/knowledge = score greater to or equal to median.
**High scores represent sympathetic attitudes and correct knowledge.

Direct questioning

These questions were modified to be relevant to speciality and were excluded from overall score. In primary care 59% (54–64%) felt 'direct' questioning would be valuable for injuries acquired in the home, but only 23% (19–27%) thought it would valuable in cases of depression. Only 26% (15–37%) of mental health team workers felt 'direct' questioning would be valuable in 'all patients referred with a mental health problem' and only 17% (12–22%) of obstetrics and gynaecology staff felt 'direct' questioning would be valuable 'with all pregnant women'. In accident and emergency, 7% (5–9%) agreed with direct questioning for 'all female patients'.

Discussion

In this study, most healthcare workers are detecting less than one case of domestic violence a month. Moreover, although attitudes were generally sympathetic and supportive, a lack of basic knowledge, particularly in doctors, has been demonstrated. Local knowledge of relevant referral agencies was poor. The response rate was low—54%.

This study reinforces others, which have shown that healthcare workers identify far fewer cases than are described by the police or anonymous surveys,[14] despite the fact that most victims have sought medical help.[11] A study in North London found that approximately 1 in 4 (27%) women were shown to experience domestic violence in their lifetime and 1 in 12 (8%) had experienced it in the preceding year.[11] Almost 20% of pregnant women have been assaulted.[14] The reasons for the failure of healthcare workers to identify domestic violence victims are varied.[18–20] Domestic violence may be regarded as a social problem in which the healthcare worker is powerless to intervene or which may be very time consuming. The taboo about domestic violence remains very strong and healthcare workers are also affected by this.[16] The lack of basic knowledge about domestic violence demonstrated here must also contribute to under-detection.

Attitudes to domestic violence were generally positive especially amongst women, nurses and community mental health team workers. Despite this, many healthcare workers (44%) feel uncomfortable talking about it. The apparent reluctance of community mental healthcare teams to be more involved in identifying victims is not in keeping with their otherwise positive attitudes and may reflect boundaries within their job specification. This study has shown that positive attitudes are partly explained by knowledge and that most healthcare workers would welcome training. The implementation of recent guidelines and recommendations[2,14,21] will not be effective unless healthcare workers receive training about domestic violence and learn how to raise it with their patients/clients.

The response of healthcare workers to domestic violence, once detected, was often confused and inappropriate.

Table 5 The agencies to which healthcare workers would refer when they identify a case of domestic violence

Agency	Obstetrics and gynaecology (%)	Mental health (%)	Primary care (%)	Total (%)
Social services (includes social workers within the healthcare team)	159 (94)	37 (70)	281 (70)	477 (77)
Police	38 (22)	51 (96)	277 (70)	366 (59)
Primary healthcare team	112 (66)	16 (30)	235 (61)	363 (59)
Non-statutory services for women	30 (17)	28 (53)	177 (45)	235 (38)
Counselling (including counsellors in the healthcare team)	19 (11.2)	19 (36)	138 (35)	176 (29)
Health service colleague (excluding primary care team and counsellors)	50 (29)	46 (87)	39 (10)	135 (22)
Legal services	13 (8)	13 (25)	98 (25)	124 (20)
Victim support	3 (2)	8 (15)	38 (10)	49 (8)
Drug and alcohol agencies	4 (2)	2 (4)	17 (4)	23 (4)
Housing	0	2 (4)	17 (4)	19 (3)
Miscellaneous	17 (10)	25 (47)	69 (18)	111 (18)

Missing data not shown and excluded from percentages.

The police and social services may increase the victim's fear and the two key voluntary agencies — Women's Aid and Victim Support — are not well known to healthcare workers.

The referral of children to the Child Protection Investigation Teams, where violence between partners is occurring, is unresolved. In order to balance the needs of children in danger with the realistic level of resource available, current policy in Oxfordshire is to refer only if (i) the child has been or is suspected of being assaulted themselves, (ii) has witnessed a serious assault (ie involving a weapon), (iii) has been left alone as a result of domestic violence or (iv) is already on the child protection register. Again, this is a difficult and confusing area for healthcare workers.

Most healthcare workers do not agree with 'direct' questioning of large, non-specified groups of patients. However, 69% of primary care workers agreed with direct questioning in the specific setting of injuries acquired in the home, suggesting that screening questions might be acceptable to workers in more defined circumstances. Many comments were returned on the questionnaire about indirect questioning being more appropriate in delicate situations. It may be that the term 'direct questioning' should be abandoned in favour of 'sensitive or specific questioning' for the idea to become acceptable to healthcare workers.

What then, is the minimum, a victim might expect from a healthcare worker?

As a minimum, healthcare workers need sufficient knowledge and understanding of domestic violence to identify victims within their practice. They should document injuries/illness and be able to offer appropriate advice and support to each individual as part of a multi-agency response. The health service has much to learn from the police who have undergone a complete culture change with regard to domestic violence. Well informed, dedicated domestic violence coordinators are in post throughout most police areas who have an on-going role in training their colleagues as well as supporting victims.

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