The health care system is often the first place outside of friends and family to which victims of domestic violence turn, placing health professionals in a central role for their assistance (Pahl 1979; Dobash et al. 1985). Some researchers consider that the Emergency Department is the most likely place for domestic violence victims to enter the system (Rounsaville & Weissman 1977; Goldberg & Carey 1982). The reasons are that emergency services offer 24-hour service and relative anonymity compared to other health services. If these victims are not identified and offered appropriate management which addresses the issue of violence, they remain at risk for further episodes of domestic violence and for the accompanying physical and psychological consequences.

A prevalence study conducted at the Emergency Department of Royal Brisbane Hospital in 1991 showed that 30 per cent of women and 13 per cent of men who came to the Department had a history of experiencing domestic violence in their lifetime, including child abuse (Roberts et al. 1993). A second prevalence study conducted by the same investigators at Royal Brisbane Hospital in 1992 (Roberts 1994) supported the findings of the first study. This study showed that every fiftieth woman presenting to the Emergency Department was there as a direct result of domestic violence. Studies have been conducted in Emergency Departments in the USA which show similar results (Stark et al. 1981; Goldberg & Tomlanovich 1981).
Overseas and Australian studies have demonstrated that detection rates for victims of domestic violence by doctors in Emergency Departments were very low, ranging from 4 to 16 per cent (Stark et al. 1981; Goldberg & Tomlanovich 1984; Roberts 1994). Even when victims were identified, doctors’ and nurses’ attitudes about the aetiology of battering and their perception of the limited role they should play further mitigated against effective intervention (Bowker & Maurer 1987; Easteal 1992). These low rates of detection have been attributed to inappropriate attitudes of health professionals towards victims and lack of education and training regarding domestic violence problems (Pahl 1979; Davis & Carlson 1981; Binney et al. 1981; Borkowski et al. 1983; Burris & Jaffe 1984; Rose & Saunders 1986; Kurz 1987). Factors which were considered to impede the detection and management of victims of domestic violence have been identified. They included the biases which health professionals exhibited because of their beliefs about the causes of domestic violence (Elliott 1993); stereotypical notions of doctors and nurses about domestic violence victims and perpetrators (Shipley & Sylvester 1982); the right to privacy of families and individuals (Kurz & Stark 1988; Sugg & Inui 1992; Jecker 1993); the need of some professionals to create psychological distance from the problem (Morkovin 1982); the moral evaluation of clients made by staff (Roth 1972), and finally, the disillusionment of health professionals when victims return repeatedly to a violent situation (Binney et al. 1981; Davis & Carlson 1981; Borkowski et al. 1983; Sugg & Inui 1992). Klingbeil and Boyd (1984) considered that in the case of battered women the mythology influencing the treatment philosophy has led to poor case management and poor treatment results.

There have been few surveys of attitudes of doctors about domestic violence and most of the data on professionals’ attitudes have come from victim surveys. One of the difficulties experienced in surveys of doctors is obtaining good response rates. One study in Australia surveyed three groups of people—general practitioners, Casualty unit doctors and a sample of battered women (Easteal 1990). Since the sample of Casualty unit doctors was small (35 per cent response rate) caution about inferences must be exercised. However, there appeared to be little difference between attitudes of general practitioners and Casualty unit doctors. The larger sample of general practitioners (n=96) indicated that they believed that doctors should play a role in prevention and treatment, but this was not borne out in their behaviour. The most conservative group was a consequence of years of service and not of gender or training.

In one of the few studies to compare attitudes of doctors and nurses towards domestic violence in the USA the investigators concluded that nurses had more sympathetic attitudes toward battered women than physicians and that women, regardless of profession, were more sympathetic than men (Rose & Saunders 1986).

As part of a larger study at the Royal Brisbane Hospital Emergency Department in 1991, an educational intervention program about domestic violence was carried out with doctors and nurses. Surveys of the knowledge, attitudes and practices of the participants were conducted before and after the education program. In this paper the results of these surveys illustrate the impact of the education program on doctors and nurses in Emergency Departments.
Method

The educational intervention program about domestic violence for doctors and nurses who staffed the Emergency Department was conducted between two prevalence studies which were conducted 12 months apart, in 1991 (n=1214) and 1992 (n=1223), at the Department. The goals of the education program were to enhance the recognition of victims of domestic violence who came to the Emergency Department and to increase referral and specialist processes for victims. Knowledge, attitude and practice surveys of the staff were conducted before and after the education program to assess changes, and measure the impact of the program.

The knowledge, attitude and practice surveys received strong support from the Medical Director and Clinical Nurse Consultant in the Emergency Department. The self-administered questionnaires and covering letters were internally mailed to 72 doctors and 91 nurses in the Emergency Department. Respondents were assured of strict confidentiality for information provided on the questionnaire.

In the baseline survey there was a response rate from doctors of 43 per cent—1 senior staff specialist (25 per cent), 6 registrars (60 per cent) and 24 resident medical officers (41 per cent). Nursing staff consisted of 74 registered nurses and 17 enrolled nurses. Their total response rate was 72 per cent, with 74 per cent response from registered nurses and 76 per cent response from enrolled nurses. In the post-test survey the total response rate from doctors increased to 63 per cent—senior staff specialists (75 per cent), registrars (70 per cent) and resident medical officers (59 per cent). The response rate from registered nurses was 76 per cent and from enrolled nurses 88 per cent, with a total response of 77 per cent. The mean age of doctors was 26.1 years (baseline) and 26.7 years (post-test). The mean age of nurses was 30.3 years (baseline) and 30.8 years (post-test).

The baseline and post-test questionnaires in the surveys of doctors and nurses were identical. They contained thirty-three statements relating to facts about domestic violence, victims, perpetrators and legal aspects of domestic violence. The statements required a response of ‘true’, ‘false’ or ‘don’t know’. There were 10 opinion statements based on a 5-point Likert scale—‘strongly agree’, ‘agree’, ‘disagree’, ‘strongly disagree’ and ‘undecided’. Embedded within these statements were myths which have been perpetuated about domestic violence and have been described in the literature (Klingbeil & Boyd 1984). The statements are reported as either ‘true’, ‘false’, ‘agree’ or ‘disagree’, indicating the correct or desirable answer. Only those statements which had statistically significant changes are reported in the tables. Significance levels are reported at the p-values of 0.05 or less.

A matched-pair analysis of those respondents who answered both pre- and post-test questionnaires was conducted to measure the impact of the education program on doctors (n=20) and nurses (n=48). The groups were sub-divided into men (n=18), women (n=50), male doctors (n=10), male nurses (n=8), female doctors (n=10) and female nurses (n=40). McNemar’s test was used for dichotomous variables and t-tests for paired samples for continuous variables.
Results

The results showed that doctors and nurses had a reasonable knowledge about the topic of domestic violence before the education program. In the baseline survey doctors had 63.4 per cent correct answers, and nurses had 61.6 per cent correct answers. Both groups had significant changes in their knowledge after education: doctors had 72.4 per cent correct answers (p=0.015) and nurses had 71.5 per cent correct answers (p=0.0001). Nurses had fewer correct answers than doctors at baseline in some areas, but there were more areas in which there were significant changes for nurses than for doctors. Although female doctors had more correct answers at baseline (mean=21.5) than female nurses (mean=20.6), female nurses had a significant increase in their total correct answers after education (p=0.0001), and had more correct answers (mean=23.7), compared to female doctors (mean=22.8). Male doctors and nurses both had significant increases in their correct answers.

When attitude changes were measured for the combined sample of doctors and nurses, the mean number of positive attitudinal statements was 7.9 at baseline survey, and 8.6 at follow-up (out of 10 positive attitudinal statements). This showed that even at baseline, nurses and doctors had generally positive attitudes towards the topic of domestic violence. When the attitude changes were measured for each group separately, there were significant changes in positive attitudes for female nurses (p=0.005) and for male doctors and nurses combined (p=0.02), but not for any other groups. In fact, for female doctors positive attitudes diminished (pre-test mean=8.3; post-test mean=7.7).

Myths about domestic violence are that it is a rare occurrence, it only occurs in lower socioeconomic groups, men and women are equally battered, batterers are violent in all their relationships, and women can easily leave a violent relationship. If doctors and nurses subscribed to these myths, domestic violence may be largely undetected, particularly in middle and upper socioeconomic class families. Health care providers may recommend that a woman leaves a relationship, with little understanding of how the battered woman may be restrained physically or psychologically by a perpetrator.

Nurses had fewer correct answers than doctors at baseline about the prevalence of domestic violence, but there was a significant increase in the nurses’ correct answers after education. Before education both groups had limited knowledge that 95 per cent of victims were female, although nurses’ correct answers increased significantly after education. Both doctors and nurses disagreed that domestic violence was confined to lower socioeconomic groups, and their correct answers increased significantly after education. Both doctors and nurses had significant increases in their correct answers that many maladaptive psychological behaviours of victims were a result of the violence, and not the cause.

Doctors and nurses in the research acknowledged that doctors were consulted more than other professionals, and nurses’ correct answers increased significantly after education. Most respondents agreed that domestic violence behaviour was amenable to change. More nurses than doctors agreed that health
professionals could do something to stop domestic violence, and nurses’ correct answers increased significantly after education.

When the privacy issue was addressed, the majority of doctors and nurses believed that most victims did not want to discuss domestic violence with a health professional. For both doctors and nurses their correct answers increased significantly after education. After education, nurses displayed a significantly greater understanding of general statements by victims about emotional abuse being worse than physical abuse, although doctors’ correct answers about emotional abuse decreased.

**Discussion**

This study confirmed the difficulties in obtaining high response rates in surveys of doctors. The doctors’ response rates in these surveys increased from 43 per cent, pre-education, to 63 per cent after education, with more senior doctors and resident medical officers responding to the second survey. This may have been a result of the education program which showed the high prevalence rates of victims of domestic violence who came to the Emergency Department. Nurses had consistently higher response rates to the surveys (pre-test, 72 per cent; post-test, 77 per cent) than doctors. This indicated a greater interest in the topic of domestic violence by nurses. This may reflect the higher mean age of nurses, with their greater experience in years of service and encounters with domestic violence victims. A large proportion of the doctors were resident medical officers and the itinerant nature of their 6-week term in the Department may have contributed to their poor response rates. One of the limitations of this study is that the small numbers of respondents to pre- and post-test questionnaires, particularly doctors, may not have sufficient statistical power to measure changes.

Generally, doctors and nurses had very good knowledge, before and after education, about the extent of domestic violence in the Australian community, and the knowledge that at least some forms of domestic violence were highly accepted. Both nurses and doctors acknowledged the high usage of the health system by victims of domestic violence. This may have been related to the high rates of victims shown in the prevalence study which was conducted in the Emergency Department before the education program. Almost 100 per cent of nurses and doctors believed that medical facilities should have a protocol for handling cases of domestic violence. It was alarming that 40 per cent of doctors did not know that they were required to report criminal assault, and this did not change after education.

Nurses had greater knowledge than doctors that perpetrators may come from higher socioeconomic groups. Male nurses appeared to have more insight than male doctors about the status of perpetrators, after education. This difference between doctors and nurses may affect the way in which perpetrators and victims of domestic violence are identified in the health care system. Nurses may be more aware of those from higher socioeconomic groups who are victims or perpetrators.
Both doctors and nurses had strong beliefs that domestic violence was a behavioural pattern which could be changed. However, nurses’ beliefs that they could do something to stop domestic violence changed significantly after education. This finding indicated that nurses may be prepared to be more proactive than doctors in the management of domestic violence victims.

In domestic violence research two risk factors have been identified—being female and having a history of child abuse (Roberts et al. 1993). Numerous causal theories of domestic violence exist, but no one theory seems to provide a unitary explanation. It has been suggested that, at a clinical level, the causal theory of domestic violence which doctors endorse will determine how they respond to victims and perpetrators (Elliott 1993). One of the causal beliefs which was tested in these surveys is the basis of feminist theory, that is that one of the causes of domestic violence is a power imbalance between men and women (Saunders 1988). Nurses had significantly greater beliefs than doctors in this causal theory before and after education. Both nurses and doctors, before and after education, had poor knowledge of the process of retaliation or self-defence by female perpetrators of domestic violence.

Research has shown that alcohol has a high correlation with domestic violence but is not considered as a causal factor (McGregor 1990). One-third of the doctors and nurses in these surveys believed that perpetrators were usually affected by alcohol at the time of the abuse. These beliefs were consistent with societal beliefs that alcohol causes domestic violence (Office of Status of Women 1988).

Generally, doctors and nurses did not subscribe to a number of the myths which have been perpetuated about domestic violence (Klingbeil & Boyd 1984). They included victim-blaming, such as a woman being provocative and a woman’s poor performance as a wife and mother, and perpetrators being violent in both public and private relationships. Another myth is that victims leave a violent situation early. Most doctors and nurses did not subscribe to this myth.

Another belief which may influence the response of doctors and nurses in emergency department is that domestic violence is not a legitimate emergency unless there are physical findings when a victim presents. The result of this belief is that the psycho-social aspects of the violence are ignored and the ‘social emergency’ is not recognised. In these surveys most doctors and nurses recognised that the greatest proportion of presentations by victims of domestic violence to emergency department was not trauma, but medical and psychiatric. A large proportion of respondents also agreed that doctors and nurses should be prepared to treat more than victims’ physical injuries. However, after education, nurses had significantly greater understanding that victims often state that emotional abuse is worse than physical abuse.

This study showed that the education program impacted more on nurses than doctors, and that attitudes towards domestic violence were a function of profession rather than gender. Nurses appeared to have more interest in this topic and one reason may be that nurses have more personal experience of domestic violence. This is a theory that needs to be tested in further research.

The results of the study point to the necessity for introducing training programs for health professionals on domestic violence problems. It would
appear from the low response rates to the questionnaires by doctors that they still need to be convinced that domestic violence is a significant public health problem. Nurses made better responses to the surveys and made more positive attitude changes. This may have implications, not only for the training of nurses, but for the role which nurses may have to play in the identification, assessment and management of domestic violence victims at emergency departments.

References

Office of Status of Women 1988, *Domestic Violence: Break the Silence*, Department of Prime Minister and Cabinet, Canberra.

**ACKNOWLEDGMENT:**
This is a study supported by grants from the Queensland Department of Family Services and Aboriginal and Islander Affairs, the Criminology Research Council and Queensland Health. The views expressed are the responsibility of the author and are not necessarily those of the funding bodies.