An evaluation of the effectiveness of an educational programme promoting the introduction of routine antenatal enquiry for domestic violence

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\begin{abstract}
 Objective: a feasibility study to evaluate the effect of an educational programme on midwives’ knowledge, skills, attitudes and implementation of routine antenatal enquiry for domestic violence.

 Design: pre-, post- and follow-up survey.

 Setting: an acute Trust within the South West of England.

 Participants: 79 of the 82 community midwives (96\%) working in the Trust participated in the training programme, with 70 (85\%) participating at all three stages of the research.

 Measurements: participating community midwives completed a 38-item questionnaire at three points during the study: before the educational programme to provide base-line data, post-test immediately after the programme, and at 6 months follow-up. The questionnaire was divided into the following categories: views of professional education, knowledge of domestic violence, attitudes to domestic violence, efficacy beliefs and issues of practice development. The aim of the study was to identify any differences between pre- and post-implementation test data in relation to all the areas identified. Repeated multivariate analysis of variance was used to examine changes between pre-, post- and follow-up measures of knowledge,
\end{abstract}

\begin{keywords}
 Domestic violence; Research; Routine antenatal enquiry; Pregnancy; Midwifery
\end{keywords}

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attitudes and efficacy. Hierarchical regression was used to identify potential influences on post-training disclosure rates using pre-, post- and follow-up measures as predictors.

**Findings:** the programme was positively received by participants, particularly in relation to an increased awareness and confidence in dealing with domestic violence. It was also associated with improvements in knowledge, attitudes and efficacy at post-test. These changes declined but remained above pre-test levels at 6 months follow-up. Levels of current and previous experiences of abuse obtained by midwives were predicted by past experience of dealing with the issue and efficacy scores immediately after and at 6 months after programme delivery. Rates of enquiry after programme introduction were lower than anticipated, with midwives routinely asking only 50% of the time. However, the key barrier identified was the presence of a male partner.

**Implications for practice:** the effect of routine enquiry for domestic violence on midwifery role development needs further exploration before universal introduction. Seeing women alone at least once during a pregnancy would clearly increase opportunities for directly asking about violence and allowing safe disclosure. Where enquiry is introduced, midwives should be given access to validated educational programmes and structured ongoing support if enquiry is to be sustained over time. Although further evaluations are necessary, it may be advisable to focus on skills-based programmes that increase midwives’ confidence and prioritise support and safety aspects for midwives and women during enquiry about domestic violence.

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**Introduction**

**Asking about domestic violence**

In recent years, an increasing number of UK government and professional bodies have emphasised the importance of the identification and assessment of domestic violence, with several recommending routine universal screening for all female service users of the NHS (Bewley et al., 1997; RCM, 1997; DoH, 2000; RCN, 2000). The Department of Health supports an approach of inter-agency working, and has issued direction and guidance for health-care professionals on their role and responsibilities. The Royal College of Midwives has also recommended that every midwife should assume a role in the detection and management of domestic violence (RCM, 1997). More recently, *The Confidential Enquires into Maternal Deaths in the UK 1991–1999* (NICE, 2001) has made several key recommendations for maternity services in relation to domestic violence issues within practice. These include the local development of guidelines for the identification and provision of support for women who experience domestic violence.

Women will rarely voluntarily disclose information to health professionals about their abusive experiences; however, the use of brief screening questions is known to lead to a higher rate of disclosure (Bacchus, 2002). Research has also shown that most women are in favour of routine questioning if asked in a sensitive manner and by a well-trained health professional (Bacchus et al., 2002). It has been argued that such an approach leads to increased rates of disclosure (Mezey et al., 2003). The ongoing debate about whether health professionals should or should not directly enquire about domestic violence continues, with several systematic reviews highlighting a lack of evidence around the benefits of such interventions (Ramsey et al., 2002; US Task Force, 2004). The review carried out by Ramsey et al. (2002) consisted of entirely non-UK-based research, and did not consider midwifery practice specifically. Nevertheless, this work makes a valuable contribution to the ongoing debate about whether or not to introduce routine enquiry for domestic violence. In the USA, the US Preventative Task Force (2004) also established that there was no direct evidence that screening for family and intimate partner violence leads to decreased disability or premature death. Although their review incorporated two studies that included the recruitment of pregnant women, these studies in particular showed an inclination (although not significant) of decreased violence after brief counselling interventions. Alternatively, an Australian study comparing the effectiveness of a self-report checklist with a standard set of direct questions revealed that a self-reported questionnaire was an effective substitute to direct questioning (Webster and Holt, 2004).

It has also been suggested that the reluctance of health professionals to enquire about domestic violence can be explained in terms of lack of
training, time constraints and fear of offending the women they are caring for. Failure to ensure the implementation of support for practitioners, including policies that prioritise the safety and confidentiality of both women and practitioners, has in the past lead to failures in sustainability of routine enquiry (Mezey et al., 2003). Similarly, attendance of partners at antenatal consultations or the presence of midwifery students have both been described as presenting a barrier to directly asking women about violence (Protheroe et al., 2004). A number of authors have also raised the difficult issues posed for those midwives who themselves have experienced violence, particularly when they are asked to support women in similar circumstances to their own (Humphreys et al., 2000; Mezey et al., 2003). Combined with these practical concerns, anxieties remain about the available evidence assessing the effect on women or the benefits of specific interventions in relation to routine enquiry (Ramsey et al., 2002).

Educational initiatives

Despite the increasing number of domestic violence educational programmes for health professionals, little is known about the quality or the effectiveness of such programmes (Davidson et al., 2000; Protheroe et al., 2004). Programmes range in scope and focus, including the variety of professionals attending, time allocated and emphasis (Spiby et al., 2001; Breslin et al., 2003). Programmes focus on different aspects of domestic violence, including awareness raising, inter-agency collaboration and response, disseminating new models of referral and practice and skills development around enquiry. Locations for programmes have also been wide ranging, including all primary-care settings as well as specific areas within Acute Trusts, such as accident and emergency departments. Although it seems that increasing numbers of practitioners are able to access educational initiatives, the time dedicated to exploring the issues varies from a lunchtime seminar to formal 2-day courses, including subsequent sessions for reflection on practice (Marchant et al., 2001; Breslin et al., 2003; Mezey et al., 2003; Price and Baird, 2003; Protheroe et al., 2004). To date, the degree to which any of these educational programmes or learning has been integrated into front-line work with women in health-care settings has not been fully established.

This leaves important unanswered questions around routine enquiry into domestic violence in relation to outcomes for women and the role of professionals in undertaking this new extended role. Before the universal introduction of routine enquiry into domestic violence, as recommended by professional bodies, it is vital to conduct UK-based research. In terms of its effect on professional practice, the aim of this study was to establish the extent to which an educational programme, combined with ongoing support, enabled the successful implementation of routine antenatal enquiry within a maternity service.

Methods

The intervention

The Bristol Pregnancy and Domestic Violence Programme

The programme was advertised as mandatory and took place over a normal 7.5-hr working day. Groups ranged in size, from eight to 12, with a mean group number of 10. Two trainers were present undertaking different elements of the teaching and group work that centred on the following elements: background information on pregnancy and domestic violence; skills-based learning; dissemination of national and local policy guidance on inter-agency responses to domestic violence; and practical advice and resources for women who presented with a positive disclosure.

The focus of the day was the development of skills associated with asking women directly about domestic violence. Before the programme, practitioners articulated high levels of anxiety about how to ask and respond to positive disclosures. Rehearsal of questioning through role-play and case study was therefore seen as an essential element of the programme. Confidence was developed through practising the skill and being able to clearly identify the support and supervision mechanisms available in cases of positive disclosure. Practitioners saw the opportunity to ‘practice’ asking women about domestic violence in a safe environment that allowed for constructive feedback from both colleagues and trainers as key to confidence building.

Midwives were also introduced to staff and organisations available to them, and in particular the strategies required to establish networking within local communities to support them in their direct work with women. It was important to identify support for sustaining participants’ learning and the subsequent integration into practice through a range of additional sources, including a specifically designed web-site, relevant policies, procedures and guidance, and literature from the field. These sources highlighted the appropriate
pathways of care for women on identification of domestic violence. The programme also offered relevant information and practical advice around inter-agency working. It emphasised the importance of working with agencies, such as the police, social services and many of the voluntary services. The midwives were introduced to evidence-based guidelines highlighting the appropriate pathways of care for women upon identification of violence. The guidelines were developed within a multi-agency perspective, and reflected the availability of local organisations and agencies. Twenty-four hour ongoing support was available for the midwives through the Network of Midwifery Supervisors.

Sample

The study took place in a Trust within the South West of England between March 2003 and March 2004. Participants were introduced and asked to consider participation in the study by letter 2 weeks before attendance at the study day. Recruitment to the study was undertaken by an independent researcher on the study day. Trainers were not present during the recruitment process, so they were not privy to any information about those who agreed to take part. The guidance cited in the NHS Research Governance Framework (DoH, 2002) was addressed throughout the research process, including informed consent, voluntary participation, confidentiality and anonymity. Ethical approval was required and obtained from the South West Local Research Ethics Committee, and approval was also obtained from the University of the West of England, Bristol Research Ethics Committee.

Research design and measures

The 79 participating community midwives completed a 38-item questionnaire at three points during the study, at pre-test immediately before the programme, at post-test immediately after and at 6 months follow-up. The questionnaire was divided into a number of sections that reflected the content and learning outcomes of the programme. Many of the items included were closed questions or focused on respondents completing agreement scales. However, there were a number of open questions where respondents were asked to share their perceptions around practice. The following areas were examined.

Views of professional education

Midwives were asked to assess the amount of coverage of domestic violence in their pre- and post-registration education using a four-point scale (none at all, minimal amount, moderate amount and great deal) or, if they could not remember, to state uncertain. Using the same scale, they were also asked to assess the extent to which they had dealt with the issue in their work.

Knowledge of domestic violence

Knowledge of domestic violence was assessed via a range of multiple-choice questions evaluating estimated rates and reporting, type of risk and effects. A summative score was calculated by allocating 1 for a correct response and 0 for an incorrect response. This allowed a maximum possible score of 12 and minimum of 0, with higher scores representing greater knowledge (mean 7.5, SD 1.8).

Attitudes to domestic violence and routine enquiry

Midwives were provided with three attitude statements to domestic violence. They were asked to respond using a five-point scale running from strongly disagree (1) to strongly agree (5). The statements related to stereotypes associated with ethnic minorities and women’s responsibility for violence. A further six attitude statements related to the perceived importance and effectiveness of routine enquiry and the importance of a range of professional groups (midwives, health visitors, general practitioners and obstetricians) in undertaking it. Statements were considered individually, with higher scores representing stronger agreement.

Efficacy beliefs

Midwives assessed their skills in dealing with domestic violence by responding to 11 efficacy statements. The same five-point scale was used, with higher scores representing higher perceived efficacy. Statements related to perceived confidence in their knowledge base, professional support structures and the provision of advice and referrals. Items showed a strong intercorrelation (Cronbach’s Alpha 0.82), and were combined to provide an overall mean efficacy score (mean 3.02, SD 0.8).

Barriers and support

At follow-up, midwives were asked to rate a range of five barriers and six sources of support, which either inhibited or facilitated inquiry using the same five-point scale as above. Items were examined individually, with higher scores representing stronger barriers or greater support, respectively.
They were also asked whether anything else prevented enquiry in an open-ended question.

Practice
At follow-up, midwives were asked to report the number of clients who had disclosed old or new violence since the introduction of routine enquiry, and the percentage of women asked. They were also asked to reflect on the affect of the programme on practice in an open-ended question.

It should be noted that the measures were checked for expression and understanding by a group of non-participating midwives (n = 10) and for ecological validity by the programme trainers and an independent academic advisor, but no further tests for validity or reliability were undertaken. The pre- and post-programme questionnaires were administered in formal controlled conditions by an independent researcher. Wherever possible, these conditions were replicated for the post-implementation questionnaire. However, in eight cases, this questionnaire had to be administered through a postal survey with a formal request to respondents to complete it unaided.

Data analysis
All baseline measures and follow-up questions examining perceptions of the training and experience of routine enquiry were subject to descriptive statistics. Changes in knowledge, attitudes and efficacy were examined using repeated measures analysis of variance with time as the within subject variable and Pillai’s related test for significance (Tabachnick and Fidell, 2001). To determine temporal differences, baseline measures were compared with post-test measures and with follow-up measures, with multiple pairwise comparisons corrected using Bonferroni test. Pearson’s correlation was used to identify the relationship between post-training disclosure rates, previous experience and training, post-test measures and percentage of women asked. Hierarchical regression was then conducted with disclosure rates as the dependent variable, and significantly correlated variables entered as independents in time sequence. All analysis was conducted using SPSS for Windows (version 11). In relation to the open-ended question about barriers to enquiry, three members of the research team independently analysed the data, and then arrived at a consensus about the categories of the responses (Silverman, 1993; Robson, 2002).

Findings
An examination of participating midwives: demographics and response rates
Data were collected from 79 participating community midwives who took part in the evaluation on multiple occasions over a 9-month period. This group represented 96% of the community midwives working in the Trust at the time of the study. Although all the midwives took part in the programme, three midwives declined to take part in the evaluation. Of those taking part, pre-test, post-test and follow-up questionnaires were completed by 89% (n = 70), with one midwife failing to respond at post-test and a further eight at follow-up. The 79 midwives who completed the pre-test show a broad range of qualifications and experience. Most were qualified to diploma level (43%), followed by certificate (39%), degree (12%) and masters level (5%). An examination of highest qualifications of the nine midwives lost to the study shows four with certificates, three with diplomas and one with a degree.

For previous coverage of domestic violence issues in pre-registration education, of the 71 responding, most (72%; n = 51) were uncertain whether they had received any, with a further 23% (n = 16) stating that they had received none at all. For post-registration education, of the 76 responding, 43% (n = 33) claimed not to have covered issues relating to domestic violence, with a further 42% (n = 32) expressing uncertainty whether they had or not. In terms of professional experience of the issues, of the 77 responding, 49% (n = 38) stated that they had no professional experience of dealing with domestic violence, with a further 32% (n = 24) uncertain whether they had dealt with the issue.

Changes between pre-, post- and follow-up measures: knowledge, efficacy and attitudes
Repeated measures analysis of variance with time as the within subject variable was used to examine changes between pre-, post- and follow-up measures of knowledge, attitudes and efficacy. Findings suggest that the programme was effective in improving knowledge, skills, positive attitudes towards routine enquiry and addressing stereotypes. Although declining over time, these improvements remained above baseline levels at follow-up.
Knowledge of domestic violence showed a significant effect ($F_2, 32 = 54.615, p < 0.001$). A significant rise at post-test, which remained above baseline levels at follow-up, is shown in Table 1. Similarly, efficacy beliefs ($F_2, 58 = 91.796, p < 0.001$) showed a significant rise at post-test, and remained above baseline levels at follow-up. Significance was also found for attitudes to routine enquiry, beliefs in its importance ($F_2, 63 = 10.893, p < 0.001$) increased significantly at post-test, a rise that was maintained at follow-up. Belief in its effectiveness ($F_2, 63 = 20.67, p < 0.001$) also saw a rise at post-test and maintenance at follow-up. Agreement on the importance of midwives in such routine enquiry ($F_2, 64 = 22.757, p < 0.001$) demonstrated a significant increase at post-test, but one that declined to a non-significant level at follow-up. No significant changes were found for views on the role of other health professionals enquiring about domestic violence.

Attitudes to domestic violence saw changes in relation to stereotypes. The belief that certain ethnic minority groups saw domestic violence as acceptable ($F_2, 63 = 7.473, p = 0.001$) declined at post-test, a change that was maintained at follow-up. Although support for the view that women may be responsible for domestic violence ($F_2, 63 = 4.630, p = 0.013$) declined at post-test, this change was not statistically significant at follow-up.

### Table 1  Comparison of post and follow-up means against pre-test means for efficacy, knowledge and attitudes to routine enquiry and domestic violence.

<table>
<thead>
<tr>
<th>Measure (n) (range)</th>
<th>Time</th>
<th>Mean</th>
<th>SD</th>
<th>Significance*</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total efficacy (60) (1 to 5)</td>
<td>Pre</td>
<td>2.9</td>
<td>0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>4.1</td>
<td>0.8</td>
<td>$p &lt; 0.001$</td>
<td>–1.4 to –1.0</td>
</tr>
<tr>
<td></td>
<td>Follow</td>
<td>3.8</td>
<td>0.5</td>
<td>$p &lt; 0.001$</td>
<td>–1.1 to –0.6</td>
</tr>
<tr>
<td>Total knowledge (34) (0 to 12)</td>
<td>Pre</td>
<td>7.2</td>
<td>1.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>10.4</td>
<td>1.1</td>
<td>$p &lt; 0.001$</td>
<td>–3.9 to –2.4</td>
</tr>
<tr>
<td></td>
<td>Follow</td>
<td>8.0</td>
<td>1.5</td>
<td>$p = 0.005$</td>
<td>–1.4 to –0.2</td>
</tr>
<tr>
<td>Screening important (66) (1 to 5)</td>
<td>Pre</td>
<td>4.3</td>
<td>0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>4.6</td>
<td>0.6</td>
<td>$p &lt; 0.001$</td>
<td>–0.5 to –0.1</td>
</tr>
<tr>
<td></td>
<td>Follow</td>
<td>4.5</td>
<td>0.7</td>
<td>$p = 0.034$</td>
<td>–0.4 to –0.0</td>
</tr>
<tr>
<td>Screening effective (66) (1 to 5)</td>
<td>Pre</td>
<td>3.1</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.8</td>
<td>0.8</td>
<td>$p &lt; 0.001$</td>
<td>–0.9 to +0.4</td>
</tr>
<tr>
<td></td>
<td>Follow</td>
<td>3.6</td>
<td>0.8</td>
<td>$p &lt; 0.001$</td>
<td>–0.9 to –0.3</td>
</tr>
<tr>
<td>Screening by midwives (66) (1 to 5)</td>
<td>Pre</td>
<td>4.2</td>
<td>0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>4.6</td>
<td>0.6</td>
<td>$p &lt; 0.001$</td>
<td>–0.7 to –0.3</td>
</tr>
<tr>
<td></td>
<td>Follow</td>
<td>4.3</td>
<td>0.8</td>
<td>$p = 0.373$</td>
<td></td>
</tr>
<tr>
<td>Women responsible for domestic</td>
<td>Pre</td>
<td>1.9</td>
<td>1.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>violence (65) (1 to 5)</td>
<td>Post</td>
<td>1.6</td>
<td>0.9</td>
<td>$p = 0.011$</td>
<td>0.0 to 0.6</td>
</tr>
<tr>
<td></td>
<td>Follow</td>
<td>1.6</td>
<td>1.0</td>
<td>$p = 0.85$</td>
<td></td>
</tr>
<tr>
<td>Domestic violence acceptable in</td>
<td>Pre</td>
<td>3.6</td>
<td>0.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ethnic group (65) (1 to 5)</td>
<td>Post</td>
<td>3.0</td>
<td>1.2</td>
<td>$p = 0.002$</td>
<td>0.2 to 1.0</td>
</tr>
<tr>
<td></td>
<td>Follow</td>
<td>3.1</td>
<td>1.3</td>
<td>$p = 0.012$</td>
<td>0.0 to 1.0</td>
</tr>
</tbody>
</table>

*Adjustment for multiple comparisons: Bonferroni.
of disclosures was 100. The range was 0–10, with 25 midwives identifying no cases, 12 identifying one case, 13 of them two cases, 10 recording three cases, one identifying four cases, three of them six cases and one midwife identifying 10 cases. All the figures highlighted above need to be understood in the light of the number of times participants had been able to ask women about domestic violence since the introduction of routine enquiry. Only three respondents had asked between 81 and 100% of the women seen. Most (n = 38) estimated that they had asked between 41 and 60% of women. This was followed by 16 who had asked between 61 and 80% of women seen, seven who had asked between 21 and 40% and one who had only asked between 0 and 20%.

Concern about the effects on the ongoing relationship with the women (2.8, SD 1.3) was rated the highest barrier to enquiry. This was followed by the midwives’ personal experience of domestic violence (2.6, SD 1.1), concerns about their safety (2.5, SD 1.2), a lack of resources to support women who disclose (2.4, SD 1.3) and a lack of organisational support (2.3, SD 1.2). In an open-ended question, midwives highlighted a number of additional difficulties in asking women about domestic violence (n = 42). Most of these referred to the presence of a family member (n = 30). Other perceived difficulties included lack of time and resources, difficulty in finding the appropriate time to ask, and not feeling comfortable with asking the question.

Turning to support structures, for those responding (n = 65), the domestic violence trainers were seen as most helpful (4.1, SD 1.0), followed by peers (3.5, SD 1.2), managers (2.7, SD 1.4) and supervisors (2.5, SD 1.4). These were followed by a source not specified on the list (2.0, SD 1.3). Those mentioned (n = 30) included health visitors, Women’s Aid and the Police Domestic Violence Unit. Behind these were medical colleagues, with a rating of only 1.7 (SD 1.1). Seventeen per cent of respondents (n = 11) had also accessed the North Bristol Trust Midwives Domestic Violence web site. All of those accessing it thought it useful in some way. When asked whether they had any comments on how support should be delivered, midwives identified a number of issues. The style of delivery was identified as sensitive, confidential, ongoing, consistent and non-judgmental. Interestingly, although already available, one respondent suggested that support accessibility should be increased to 24 hours, 7 days a week.

**Influences on disclosure rates**

To assess the potential influence of the training programme on routine enquiry, the association between number of disclosures and a range of measures were examined using Pearson’s correlation. These measures covered previous experience and training, post-test measures and percentage of women asked. The number of disclosures was significantly correlated with previous experience of dealing with domestic violence (r = 0.34, p < 0.01), post-test efficacy (r = 0.32, p < 0.01) and percentage of women asked (r = 0.27, p < 0.05).

Hierarchical regression was conducted, with the number of routine disclosures as the dependent variable, and the three correlated variables as independents. They were entered in time order, with past experience first, then post-test efficacy, and finally percentage of women asked. Past experience and post-efficacy seemed to be significant predictors. For past experience, the model adjusted R square was 0.09 and R square change 0.11 (p = 0.009). When post-test efficacy was entered, the model adjusted R square was 0.15 and R square change 0.07 (p = 0.027). Percentage of women asked resulted in a non-significant R square change of 0.02 (p = 0.217). Coefficients and standardised coefficients for the final regression model can be found in Table 2. Given the number of respondents in the analysis, however (n = 62),

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficient</th>
<th>Standard error</th>
<th>95% CI</th>
<th>Significance</th>
<th>Standardised coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>–3.96</td>
<td>1.89</td>
<td>–7.74 to –0.17</td>
<td>p = 0.041</td>
<td>0.29</td>
</tr>
<tr>
<td>Past experience</td>
<td>0.55</td>
<td>0.27</td>
<td>0.12 to 1.18</td>
<td>p = 0.017</td>
<td>0.27</td>
</tr>
<tr>
<td>Post-test efficacy</td>
<td>1.05</td>
<td>0.46</td>
<td>0.13 to 1.97</td>
<td>p = 0.027</td>
<td>0.27</td>
</tr>
</tbody>
</table>

Table 2. Results of regression analysis with number of disclosure incidents as the dependent variable (n = 62).
results should be interpreted with caution (Tabachnick and Fidell, 2001).

Discussion

Limitations of the study

Given the lack of a non-intervention comparison group, the relatively small numbers taking part and the use of measures not previously validated, this evaluation should be viewed as a feasibility study. Future studies could usefully use a larger sample and include a comparison group of midwives not undertaking the training, and adopt random allocation to training/delayed training conditions. An examination of different geographical regions and a comparative analysis of outcomes for women based on different models of questioning would also usefully extend our understanding about the appropriateness of interventions, and assess the degree to which they are context specific. However, although the evaluation was local to one NHS Trust in the South West, there are important findings from studying midwives that can inform national debates about the introduction of antenatal enquiry for domestic violence within maternity care.

Implications for education and practice development

Unlike previous work in this area (Ramsey et al., 2002; US Task Force, 2004), this study did not focus on the debates about the benefits or outcomes for women of antenatal enquiry about domestic violence. Rather, given the increasing dominance within policy agendas of the role of NHS staff in enquiring about domestic violence (Bewley et al., 1997; RCM, 1997; RCN, 2000; DoH, 2000), its focus was the effectiveness of a specific programme in promoting routine enquiry within a Trust in the South West. This was in response to the dearth of available evidence assessing the quality or effectiveness of a whole range of programmes currently being delivered around questioning women about domestic violence (Davidson et al., 2000; Protheroe et al., 2004).

Before attending this programme, midwives had received little education or experience of dealing with domestic violence. Nevertheless, they perceived routine antenatal enquiry for domestic violence as a health-service priority, and one in which they should take a lead role. The programme was associated with statistically significant increases in knowledge, efficacy beliefs, positive attitudes to routine enquiry and reduction of stereotypes. In general, these were of a small magnitude, something that needs to be kept in mind when assessing the clinical significance of the programme. However, the changes followed a relatively brief training programme; most were maintained at 6-month follow-up, and were related to measures that have been seen to be predictive of behaviours (Bennett and Murphy, 1997).

The day programme allowed practitioners protected time to develop their abilities and feel confident in asking women about family violence. The provision of a supportive and informed environment was viewed as key to the subsequent successful implementation. Innovative and diverse teaching approaches allowed midwives to practice skills development through role-play, case presentations and in-depth discussions. In particular, respondents emphasised the value of skill development associated with ‘how to ask the question’.

Although efficacy beliefs increased in midwives from pre-test levels throughout the period of introduction, and were predictive of incidents of disclosure, it did not always translate into high levels of enquiry by practitioners. Post-implementation data indicated that the proportion of times practitioners had been able to ask women was lower than anticipated, with most practitioners saying that they had been able to ask women only 50% of the time. In response to this, midwives identified a number of barriers that prevented them asking women, the most common of which was the presence of a family member. Nevertheless, findings suggested that both past experience and the training programme, through increases in perceived efficacy, influenced levels of disclosure. However, these findings have to be read in context of the recommendations set out in the Laming Report (DoH, 2003), which called for more stringent methods of child protection recording and referral. Over the evaluation period, this led to an increase in the reporting of cause for concern around a whole range of family related issues.

Although a few studies have been undertaken examining disclosure rates, the level of increase was consistent with those recently undertaken (Bacchus, 2002; Mezey et al., 2003; Protheroe et al., 2004). It also supports the views of many feminist commentators that open and direct questioning brings family violence into the public domain (Hester and Pearson, 1998; Mullender and Hague, 2000). However, practice development needs to build in the opportunity for midwives to see women alone at least once during pregnancy if
the most significant barrier to asking women directly is to be overcome. Similarly, consideration needs to be given to midwives’ anxieties about the long-term effect of this work on a number of practice areas. These include on-going relationships with women, the effect of personal experience of domestic violence on staff capacity, concerns about safety and providing adequate staff time to spend with women who disclose.

From the perspective of practitioners, key to the successful implementation of enquiry is the adequacy of integrated support mechanisms for those delivering front-line care. Midwives clearly viewed those with specialist knowledge as a key resource in the development of this work, alongside on-going relationships with peers and managers. Access to information was also viewed as important to enable accurate information to be shared with women in their care. Although most midwives were unable to easily access computerised systems, those who could found the specifically designed web site useful. Work from Mezey et al. (2003) clearly supports the view expressed here that it is essential to provide integrated support mechanisms for staff to prevent failures in implementation of routine enquiry and provide the opportunity to share information with women, which could save their lives.

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References