

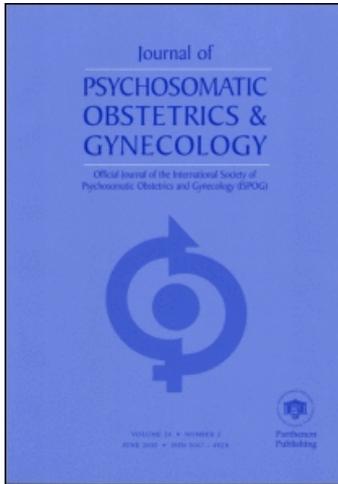
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The relationships between physical violence, verbal abuse and women's psychological distress during the postpartum period

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Abstract

Objective. To analyse the relationship between violence in the post-partum period and mothers' psychological distress.

Method. Three hundred and fifty two women responded to a questionnaire after the birth, at the Trieste Hospital (Italy), and 292 of them responded to a telephone interview 8 months later. Psychological distress was evaluated with the General Health Questionnaire (GHQ); partner and family violence were evaluated with a 28-item scale.

Results. Eight months post-partum, 10% of women were experiencing violence either from the partner or from another family member; 5% showed high psychological distress. Multivariate analyses show that, after adjustment for covariates, the OR for depressive symptoms was 19.17 for women experiencing partner or family violence. Being dissatisfied with their working situation, hospitalisation of the baby and pre-pregnancy mental health were also significantly associated with high GHQ scores

Conclusion. These results stress the relationship between violence in post-partum and maternal psychological distress. Measures aimed to identify and end violence against women around pregnancy could contribute to the improvement of women's mental health post-partum.

Keywords: *Mother's psychological distress, domestic violence, post-partum, post-partum depression*

Introduction

In the last decades, a number of studies have described the impact of violence on women's health to the point that the WHO has defined violence as one of the most important health risk factors for women of reproductive age [1]. Researchers have addressed the question of violence during pregnancy, showing it is frequent and may negatively affect both woman's physical and mental health and the health of her baby [2–5].

Less is known about violence in the post-partum period and its association with women's mental health. Partner violence is not uncommon in the months following childbirth, with rates ranging from 2% of women experiencing physical abuse in a Swedish sample [6] to 19% reporting physical or psychological violence among disadvantaged US women [7]. Studies found that violence is even more common in the post-partum than during pregnancy [7,8]. The few studies looking at the health impact of

partner violence after birth found it to be associated with mothers' depression [3,9].

To intervene effectively to protect women's and children's health, we need to understand the relationships between violence and women's mental health in the post-partum period. First, different types of violence and different perpetrators should be considered; studies to date tend to consider mostly partner physical violence. Second, the relative contribution of violence to maternal mental health should be analysed. Previous studies have shown that unemployment and work dissatisfaction, migrant status, financial problems and unwanted pregnancy are associated with partner violence [10,11]. Having experienced violence in childhood puts a woman at higher risk of later experiencing partner violence [12]. As all these variables represent important risk factors for post-partum depression [13–15], it is necessary to unravel their relative contribution to new mothers' mental health.

The aim of this study is to analyse the relationships between current violence and maternal psychological distress 8 months after birth, taking into account other psycho-social factors, known to be associated both with violence and with new mothers' mental health.

Methods

This longitudinal study was carried out in Trieste (Italy), and based at the maternity hospital, where more than 95% of the births in the city take place. From January to April 2004, women were approached on the post-natal ward, and asked to participate in a study on health during pregnancy; confidentiality of the responses was assured. Women who refused were asked to respond to a few questions (nationality, age, type of birth). Women who accepted were interviewed with a questionnaire, and asked if they would agree to respond to a follow-up telephone interview 8 months later. The women gave oral informed consent.

Well-trained female research staff carried out the interviews. Contacts were established with the hospital social worker and with the local Women's Shelter, in case a woman requested a referral. The study was approved by the Ethics Committee of the Hospital.

We used two different questionnaires. Questions in the post-partum questionnaire covered: social and demographic characteristics, pregnancy intendedness, woman's health and health behaviour during and before the pregnancy, childbirth, health of the baby and experience of violence.

The second questionnaire, 8 months post-partum, covered: baby's health, breast-feeding, resumption of sexual activity, physical and mental health, working situation, couple relationship and past and present violence. The main reason for having the follow-up interview at 8 months post-partum was to be able to explore the role of paid work in new mothers' mental health. In Italy, most women who resume work after birth, do so between 6 and 9 months post-partum [16,17].

There are no specific instruments to investigate violence against women in the post-partum period. To assess violence occurring after the birth, we developed a detailed series of 28 questions, adapted from the international literature and from previous studies on violence against women in Italy [18], covering four areas of violence: (1) domination and control, (2) verbal abuse (considered both as psychological violence), (3) physical and (4) sexual violence. Some items (like degrading the woman's competence as a mother), were developed for the specific situation of a new mother. Possible answers were: not at all, occasionally or more than occasionally.

Women were asked to respond to the questions regarding violence, first asking about partner's

behaviour and then about the behaviour of other people, whom the woman was asked to specify. In the context of a couple relationship, the classification of some of these items as violence, such as pressures not to have another baby, taken in isolation, could be ambiguous. Therefore, women were considered to have experienced 'present partner violence' when they answered positively to at least two abusive items. As the other perpetrators mentioned by women were exclusively family members, we constructed the variable 'present family violence', including women who had answered positively to at least one abusive item. These questions were used to construct a synthetic variable, 'any present violence', including 'present partner' or 'present family' violence at the time of the post-partum interview.

Three questions investigated past violence. Women were asked whether, as a child or an adolescent, they had experienced physical, psychological or sexual violence, and by whom. As most of this violence was perpetrated by family members, we constructed a synthetic variable called 'past family violence', including all women who had experienced any violence by a family member in the past.

Present psychological distress was measured with the General Health Questionnaire (GHQ), in its 12-item version, an internationally validated screening instrument [19], covering anxiety, depression and self-esteem experienced in the last month. It has been widely used with women in the perinatal period [20] and in studies on the mental health impact of violence, in both cases also with Italian samples [13,18]. Although a cut-off point of >2 positive answers is generally used as a screening measure, a cut-off point of >5 was chosen for this study to select a group of more seriously distressed women. In the analyses, a dichotomous variable was used: GHQ score 0–5 versus GHQ score 6–12.

To analyse women's previous mental health, we used two questions from the first questionnaire regarding 'frequent feelings' of depression and 'frequent feelings' of anxiety. In the present analyses, we combined these two variables into one: reporting of frequent feelings of depression or anxiety before pregnancy.

In the first questionnaire, we asked whether the pregnancy was: wanted in the same way by the woman and her partner; unwanted in the same way; she wanted it more; he wanted it more; she had almost forced the pregnancy on him; or he had almost forced the pregnancy on her. The question was re-coded in two categories: 'both wanted to the same extent', including the first answer; and 'other', including all the other responses. Another question concerned couple decision-making on contraception before the pregnancy. Answers were: contraception was (1) mostly decided by the woman, (2) mostly decided by the man, (3) decided together, (4)

disagreed on or (5) unnecessary because they wanted a baby. The question was re-coded into two categories. One category, 'decided together' included answers 3 and 5; the category 'other', included the other answers.

In the second questionnaire, we asked women about the congruence between their wishes and reality concerning current work situation. Answers were: (1) I am at home but would prefer to be working, (2) I am at home and happy with that, (3) I am working and happy with that, (4) I am working but would prefer to stay at home and (5) I am working full time, but would prefer a part-time job. Answers 2 and 3 were recoded into one category, referred to as 'satisfied'. Answers 1, 4 and 5 were recoded as: 'dissatisfied'.

After initial examination of bi-variate relationships between demographic, violence and other psychosocial variables and high psychological distress in the post-partum period, multivariate logistic regression was used to examine the relative importance of violence, controlling for other important predictors of distress.

Results

Response rate

Among the 389 women approached, 352 participated. Half of the non-participating women were not Italian, and did not speak Italian. Non-participating women were younger and more likely to have undergone a cesarean section.

Among the 352 women responding to the first questionnaire, 333 agreed to the follow-up interview; 292 were successfully contacted and completed the second questionnaire (83%) (mean infant age: 33.7 weeks, SD 1.6 weeks). Women lost to follow-up were significantly more likely to be non-Italian, not married and under 25 years of age, as compared with participants. There were no differences in the number of children, type of childbirth, baby's birth-weight or gestational age.

Characteristics of the sample

Respondents' mean age was 32.6 (SD 4.4); 57% had given birth to their first child. Most were Italians (92%), with a high school or university degree (73%), married (82%) and living with the baby's father (97%); 12% reported financial problems at the time of the second interview; 11% of babies had been hospitalised since the birth. Babies with a low birth-weight were significantly more likely to have been hospitalised.

Eight months post-partum, 40% of women were back at work, 36% were on maternity leave, 8% defined themselves as unemployed and 15% as

homemakers. The proportion of women discontent with their working status was similar among those working and those staying at home (33 and 29%, respectively).

In 14% of couples, the partners did not concur on wantedness of the pregnancy and in 17%, they did not decide together about contraception; 49% of women evaluated the couple relationship as 'very good', 37% as 'good' and 13% as 'not good'.

Fifteen women (5.1%) had GHQ scores >5 and 14% reported frequent feelings of anxiety or depression before pregnancy.

Fifteen women (5%) reported violence from a male partner. In six cases (2% of the sample), violence included threats or physical or sexual aggressions, whereas in nine cases it was exclusively psychological. The most frequently mentioned items were 'controls me all the time' (15 women) and 'frequently criticises me as wife or mother' (12 women). Six percent of respondents reported abuse, exclusively psychological, from a family member. Women who reported partner violence were also more likely to report family violence (17.4% of those with partner violence also had family violence, *vs.* 3.7% of those who did not have partner violence, chi-square = 13.25, $p < 0.05$). Overall, 29 women (10%) were experiencing violence, either from the partner or from another family member; 28 (9.5%) reported physical, psychological or sexual violence during childhood, perpetrated by a family member. The association between having experienced family violence in childhood and experiencing partner violence in the post-partum was not statistically significant.

Factors associated with women's psychological distress

Age, nationality, education, number of children, marital status and living with a partner were not associated with high GHQ scores (Table I).

Reporting financial problems, being unsatisfied concerning work, the baby's hospitalisation and frequent feelings of anxiety or depression before the pregnancy were all strongly associated with women's psychological distress. Type of childbirth, baby's gestational age and birth weight, current breastfeeding status and contraception after birth showed no association with GHQ scores (data not shown).

The indicators of the quality of couple relationship – lack of concurrence between partners concerning contraception before pregnancy and pregnancy intendedness, woman's feeling that they had resumed sex too early, her negative evaluation of the couple relationship and of the fathers' play interaction with the baby – were all strongly associated with high GHQ scores 8 months post-partum (Table II).

Having experienced violence was strongly associated with high GHQ scores. Women were more distressed when they reported present partner or

Table I. Women's demographic and social characteristics and psychological distress 8 months post-partum.

| | | Percentage with Ghq > 5 <i>p</i> -value from chi-square test |
|---|--|--|
| All (292) | | 5.1 |
| Age* | <25 (11) | 9.1 |
| | 25–29 (55) | 3.6 |
| | 30–34 (125) | 5.6 |
| | > 34 (100) | 5.0 |
| | | NS |
| Nationality* | Italian (269) | 5.9 |
| | Non-Italian (22) | 4.5 |
| | | NS |
| Education* | ≤ Middle school (79) | 5.1 |
| | High school (135) | 5.9 |
| | ≥ University (77) | 3.8 |
| | | NS |
| Number of children* | 1 (164) | 4.8 |
| | 2 or more (127) | 5.5 |
| | | NS |
| Marital status | Married (239) | 4.6 |
| | Never married (33) | 6.1 |
| | Separated/divorced (19) | 10.2 |
| | | NS |
| Lives with a partner | Yes (283) | 5.2 |
| | No (8) | 0 |
| | | NS |
| Financial problems | No (257) | 3.5 |
| | Yes (34) | 17.6 |
| | | <i>p</i> = 0.004 |
| Baby hospitalised | No (260) | 3.8 |
| | Yes (31) | 16.1 |
| | | <i>p</i> = 0.03 |
| Frequent feelings of anxiety or depression before pregnancy* | No (251) | 2.8 |
| | Yes (41) | 19.5 |
| | | <i>p</i> < 0.001 |
| Women's working situation | | |
| Working situation | At work (116) | 3.4 |
| | Maternity leave (105) | 6.7 |
| | Unemployed (22) | 9.1 |
| | Homemaker (44) | 2.3 |
| | | NS |
| Work: wishes and reality | At home, prefers to work (30) | 16.7 |
| | At home, as preferred (73) | 0 |
| | At work, as preferred (124) | 2.4 |
| | At work, prefers to be at home (61) | 9.8 |
| | | <i>p</i> < 0.001 |
| Work: wishes and reality (synthesis) | Dissatisfied (94) | 12.8 |
| | Satisfied (197) | 1.5 |
| | | <i>p</i> < 0.001 |

*Asked in the first questionnaire.

family violence (27.6 vs. 2.7%, *p* < 0.001), or a history of past childhood family violence (14.2 vs. 4.2%, *p* = 0.04) (Table II).

Table II. Relationship with the partner, present and past violence and psychological distress 8 months post-partum.

| | | Percentage with Ghq > 5 <i>p</i> -value from chi-square test |
|--|------------------------------------|--|
| Couple relationship | | |
| Couple concurrence on pregnancy intendedness* | Both wanted the pregnancy (251) | 3.6 |
| | Other situations (41) | 14.6 |
| | | <i>p</i> = 0.01 |
| Concurrence on contraception (before pregnancy)* | Decided together (242) | 3.7 |
| | Did not decide together (49) | 12.2 |
| | | <i>p</i> = 0.025 |
| Felt ready when resuming sex after birth | Yes (232) | 3.9 |
| | No (44) | 11.4 |
| | | <i>p</i> = 0.05 |
| Father plays with the baby | A lot (160) | 5.0 |
| | Fairly (104) | 2.9 |
| | A little (25) | 16.0 |
| | | <i>p</i> = 0.03 |
| Woman's evaluation of the couple relationship | Very good (143) | 2.1 |
| | Good (106) | 4.7 |
| | Not good (39) | 17.9 |
| | | <i>p</i> = 0.0001 |
| Violence | | |
| Present partner violence | No (275) | 4.0 |
| | Yes (15) | 26.7 |
| | | <i>p</i> = 0.005 |
| Present family violence | No (274) | 3.6 |
| | Yes (17) | 29.4 |
| | | <i>p</i> = 0.001 |
| Any present violence | No (262) | 2.7 |
| | Yes (29) | 27.6 |
| | | <i>p</i> < 0.001 |
| Family violence in childhood | No (264) | 4.2 |
| | Yes (28) | 14.3 |
| | | <i>p</i> = 0.04 |

*Asked in the first questionnaire.

Multivariate analyses

We examined the relationship between present violence and mothers' psychological distress, controlling for the other potential intervening factors: couple relationship, financial problems, work, baby's hospitalisation, past violence and previous depression (Table III).

As a measure of present violence, we used the variable combining partner and family violence. As an indicator of the couple relationship, we chose the woman's evaluation of the couple relationship at the time of the post-partum questionnaire, dichotomised as 'good or very good' versus 'not good'.

After adjusting for the other determinants of maternal distress in the model, present violence by a partner or by family member was found to be strongly related to having a GHQ score > 5. Past

Table III. Multiple logistic regression analysis of present and past violence on mothers' psychological distress 8 months after birth, controlling for other key determinants ($n = 289$).

| | Odds ratios [Exp(B)] for GHQ > 5 after adjustment for co-variables (95% confidence interval) |
|--|--|
| Any partner or family violence since the birth | |
| No [†] | 1.00 |
| Yes | 19.17** (3.73–98.50) |
| Any family violence in childhood | |
| No [†] | 1.00 |
| Yes | 1.74 (0.26–11.83) |
| Woman's evaluation of the couple relationship | |
| Very good or good [†] | 1.00 |
| Not good | 4.20 (0.88–20.20) |
| Economic problems | |
| No [†] | 1.00 |
| Yes | 1.26 (0.23–7.01) |
| Woman's satisfaction with current employment situation | |
| Satisfied [†] | 1.00 |
| Dissatisfied | 16.80** (2.99–94.49) |
| Hospitalisation of the baby | |
| No [†] | 1.00 |
| Yes | 7.61* (1.51–38.38) |
| Frequent feelings of anxiety/depression before pregnancy | |
| No [†] | 1.00 |
| Yes | 4.31* (1.06–17.50) |

* $p < 0.05$; ** $p < 0.01$.

[†]Reference group.

family violence, the woman's evaluation of the couple relationship and financial problems were no longer statistically significant. The woman's dissatisfaction with her work situation, the baby having been hospitalised and the woman's pre-pregnancy mental health all remained significant predictors of distress in the adjusted model. Results were similar when using concurrence on the pregnancy instead of the woman's evaluation of the couple relationship and when including parity as a covariate.

Discussion

In this sample, 10% of women reported violence either by a partner, another relative or both at 8 months post-partum. During the same time period, 4% of women in a French study reported partner violence [9], and in a Swedish sample, 2% said to have been hit by a male partner [6]; this result is similar to the 2% of women reporting physical violence in our study. Higher rates of partner violence have been found in a Chinese sample, 8.3% and among disadvantaged US mothers,

19% [7,8]. Obviously, violence against women is a serious problem also in the post-partum period.

This study has a number of limitations. The sample was small, so results must be taken with caution. To compare our results on mothers' mental health with those of other Italian studies on the matter [13,18], we used the GHQ, which is a self-report instrument of psychological distress widely utilised with post-partum women [20], but is not specifically constructed to measure post-partum depression.

In this sample, 5% of women showed high psychological distress 8 months after childbirth. Although strict comparisons with studies using other measures of depression are impossible, this rate is similar to what found in other European studies using the Edinburgh Postnatal Depression Scale (EPDS) [21,22].

The strongest associations in the current study were between present violence and mothers' psychological distress: high GHQ scores went from around 4% in women without violence to 26% for those experiencing partner and 29% for those experiencing family violence [3,7,9]. As in other studies [3], most of this violence fell in the area of domination and control and of verbal abuse: psychological violence is a serious matter. Results from a large US study on partner violence show that, when both physical and psychological violence were included in the model, psychological violence was more strongly associated with negative health outcomes than was physical violence [23].

Having experienced family violence in childhood was also significantly associated with maternal post-partum distress. Health professionals, when discussing violence with new mothers, should also ask about violence perpetrated by relatives other than the partner, both in the present and in the past.

Bivariate results confirm the importance of other psycho-social factors – financial difficulties, problems with women's work and with the couple relationship, the baby's health and the woman's previous mental health in the mother's current psychological distress, whereas there were no associations with demographic factors, nor with factors linked to the type of childbirth, contraception and breast-feeding. Contrary to other studies [14,15], we did not find an association between nationality and mental health but, as non-Italian women are under-represented in our sample, this result should be considered with caution.

Other studies have found that marital difficulties are strongly related to depression in women in the post-partum period [13,24]. Lack of concurrence on pregnancy intendedness seems to be a key indicator of problems in the couple, for studies in various countries have shown that it is strongly associated with partner violence during pregnancy [3,11,25]. In one US study, women with an unwanted/mistimed

pregnancy accounted for 70% of women with violence [26].

When the baby had been hospitalised during the 8 months after the birth, mothers also experienced more psychological distress. Some authors assume that a baby's higher frequency of hospitalisations is a consequence of postnatal depression [22]. Our data, showing associations between baby's birth-weight and subsequent hospitalisations, suggest that mothers may become distressed because their baby is unwell.

Most of the bivariate results were confirmed in the multivariate analyses. The risk of reporting high depression scores was 19.17 times higher when women were experiencing partner or family violence. Women unsatisfied with their working status had an adjusted odds ratio of psychological distress of 16.80. Baby's hospital admission multiplied by 7.61 the risk of mothers' psychological distress. The occurrence of anxiety or depression previous to the pregnancy was also independently associated with depression (Adjusted Odd Ratio (AOR) = 4.31). On the contrary, economic problems, couple relationship and family violence in the past become non-significant after their inclusion in the multivariate model.

Although this study has a number of limitations, it also has many strengths. The sample is likely to be representative of Italian women giving birth in Trieste, as it took place in the only maternity hospital in the city with a good response rate. We asked questions on childhood family violence and on current partner and family violence; we have multiple indicators of women's working situation and of the quality of the couple relationship, also collected in the first questionnaire. Moreover, the study is unique in demonstrating the impact of current partner and family violence, even when mostly consisting in controlling behaviour and verbal abuse, after controlling for other risk factors of depression, including indicators of the couple relationship.

New mothers' mental health is a serious concern for health workers, as women's depression, besides being painful for her, can negatively affect her child's development [27]. To prevent and treat mothers' depression and its effects, a number of programs have been developed and evaluated, but these interventions do not appear to be effective in most cases [28]. It is possible that they are not successful because they are too generic, and do not address women's more urgent problems, such as violence.

If health workers are competent and sensitive, women do not mind being asked about violence; as a consequence of the screening process, some may be referred to other agencies and get help [6,29,30]. The present study, underlining both the frequency of violence, and its relationships with new mothers' mental health, is another indication of the necessity

of addressing the role of violence in women's lives, including the post-partum period.

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