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ANGRY WIVES, ABUSIVE HUSBANDS: RELATIONSHIP BETWEEN DOMESTIC VIOLENCE AND PSYCHOSOCIAL VARIABLES

Farooq Naeem, MBBS, MSc, MRCPsych[a], Muhammad Irfan, MA[b], Qaiser A. Zaidi, MBBS, MRCPshych[c], David Kingdon, MBBCh, MD[d], and Muhammad Ayub, MBBS, MSc, MRCPsych[e,*]

[a]*Department of Psychiatry, Sheikh Zayed Medical College & Hospital, Rahim Yar Khan, Pakistan*
[b]*Lahore Institute of Research and Development, Lahore, Pakistan*
[c]*South Staffordshire & Shropshire NHS Foundation Trust, England*
[d]*Department of Psychiatry, Royal South Hants Hospital & Southampton University, Southampton, England*
[e]*St Luke's Hospital, Middlesbrough, England*

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Background. **A small number of studies conducted in Pakistan have shown high rates of domestic violence. None of the studies, however, discussed associated psychosocial factors. We interviewed a group of women to look at violence and associated psychosocial factors. We wanted to see if self-esteem, quality of relationships, social support, stressful life events, psychiatric symptoms, and different measures of anger were associated with domestic violence.**

Methodology. **In a cross-sectional survey of women presenting to primary care physicians, we used Women's Experience with Battering and Domestic Abuse Checklist to measure domestic violence. The Relationship Assessment Scale, Oslo Social Support Scale, State Trait Anger Inventory, and Evaluative Belief Scale were used to look at the correlates of violence. We used the information in a regression model to identify independent predictors of violence in this sample.**

Results. **More than half of the women reported experiencing battering and/or violence. Women in abusive relationships reported unhappiness with their intimate relationships and had high scores on 1 subscale of anger. Living in extended families was protective against violence.**

Conclusions. **We were able to replicate findings that women in abusive relationships are not satisfied with the relationships with their partners. Living in extended families was protective against violence. Community studies may provide a better design to look at the association between abuse and poverty, literacy, self-esteem, and social support.**

Background

Domestic violence is a serious problem around the world experienced mostly by women (Heise, Ellsberg, & Gottemoeller, 1999). It has been associated with a number of health-related problems (Dube et al., 2005; Dutton, Kaltman, Goodman, Weinfurt, & Vankos, 2005; Ompad et al., 2005; Zlotnick, Johnson, & Kohn, 2006).

Violence within intimate relationships might be affected by personal, cultural, religious, and psychosocial factors. Past studies have found social factors like current poverty and poverty during childhood and adolescence (Byrne, Resnick, Kilpatrick, Best, & Saunders, 1999; Cunradi, Caetano, Clark, & Schafer, 2000; Moffitt & Caspi, 1999) and weak community sanctions against partner violence (Counts, Brown, & Campbell, 1992) to be associated with partner violence. Individual factors in men like substance abuse (Coker, Smith, McKeown, & King, 2000; Kyriacou, McCabe, Anglin, Lapesarde, & Winer, 1998; McCauley et al., 1995;

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* Correspondence to: Muhammad Ayub, Flatts Lane Centre, Flatts Lane Normanby, Middlesbrough, England TS6 0SZ; Phone: +44-1642-3454.

E-mail: mohammad.ayub@tney.northy.nhs.uk.

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Rodgers, 1994), history of violence in the family of origin (Ellsberg, Pena, Herrera, Liljestrand, & Winkvist, 1999; Moffitt & Caspi, 1999; Nelson & Zimmerman, 1996), young age, and low income (Krug, 2002; World Health Organization [WHO], 2005) are associated with violence toward their partners. Men perpetrating violence have been found to be emotionally dependent, insecure, low in self-esteem, and less able to control their impulses (Kantor & Jasinski, 1998). They are prone to greater anger and hostility, are depressed, and score high on certain scores of personality disorder such as antisocial, aggressive, and borderline (Johnson et al., 2006).

Individual factors in women like history of violence in family of origin, low self-esteem (Coker et al., 2000; Coker et al., 2002; McCauley et al., 1995), psychiatric symptoms of anxiety and depression, and substance abuse (McCauley et al., 1995) are associated with domestic violence toward them. Among women, a lack of social support impairs the capacity to cope with the effects of violence and feelings of isolation hinder efforts to seek support (Rose, Campbell, & Kub, 2000).

Some studies from developing countries and Muslim populations found lower education and socioeconomic status (Gonzales de & Gavilano, 1999; Martin, Tsui, Maitra, & Marinshaw, 1999), being a Muslim, living in a nuclear family (Koenig, Ahmed, Hossain, Khorshed, & Mozumder, 2003), low self-esteem (Ali & Toner, 2001), and being with a partner who abuses alcohol or smokes cigarettes (Ellsberg, Pena, Herrera, Liljestrand, & Winkvist, 2000; Khosla, Dua, Devi, & Sud, 2005; Maziak & Asfar, 2003) to be associated with domestic violence. On the other hand, $\geq$1 study in Bangladesh did not find poverty to be associated with domestic violence (Schuler, Hashemi, Riley, & Akhter, 1996). Marital conflict or discord in relationships is associated with domestic violence (Hoffman, Demo, & Edwards, 1994; Jewkes, Penn-Kekana, Levin, Ratsaka, & Schrieber, 2001) . Marital instability (Byrne et al., 1999) is another factor associated with domestic violence.

Community response to the domestic violence is also important. Sanctions against violence and supportive attitude of the society toward the victims are protective factors against domestic violence (Counts et al., 1992).

The status of women in a society has a complex interaction with violence. In places where women have a low status, men are less violent because women do not challenge their authority. In societies where women already have high status, their status protects them from violence. It is in societies where women's status is in transition from low to high that the risk of domestic violence is high. Here, the women have enough power to challenge the authority of men but not enough status to stop violence (Krug, 2002).

A WHO multicountry study looked at a number of risk factors for domestic violence and found that younger women were at increased risk and education had a protective effect particularly secondary education (WHO, 2005). In societies where men have economic and decision making power, women have difficulty in accessing divorce, and adults who routinely resort to violence to resolve conflict have greater risk of domestic violence (Levinson, 1989).

Wars, social upheaval, and situations where social relations are disrupted increase the risk of domestic violence (Krug, 2002). Structural inequality between genders, rigid gender roles, notions of manhood linked to dominance, and male honor and aggression increase the risk (Heise, 1998). A body of literature suggests that women who face abuse in childhood are more vulnerable to abuse as adults (Arata, 2000; Coid et al., 2001; Filipas & Ullman, 2006).

In our literature search, we found few studies from Pakistan (Fikree and Bhatti, 1999; Fikree, Jafarey, Korejo, Afshan, & Durocher, 2006; Shaikh, 2000, 2003). These studies were conducted in secondary or tertiary health care settings. None of these authors looked at psychosocial variables associated with domestic violence.

Pakistan has a population of 150 million. It is culturally quite diverse. People speak a number of languages. About 55% of the population of the country live in Punjab; Lahore is its capital. Lahore has an estimated population of >9 million. Like many other big cities, it is socioeconomically, culturally, and linguistically diverse. It is an ancient city and its different parts were built through different periods in history. The walled city is the oldest, but there are Mughal, Sikh, and British parts outside the wall. More recent developments have been built over the last 60 years. The population has expanded rapidly over last 6 decades because of migration from different parts of the country and from rural areas. People have moved to Lahore looking for economic opportunities. Migrants speak different dialects of Punjabi and other regional languages. Urdu is the main medium of instruction in schools and it overlaps with Punjabi in vocabulary and grammar. The current Lahore is the microcosm representing the diversity of the country as a whole (en.wikipedia.org/wiki/Lahore).

We have looked at the rate of various forms of violence reported by women attending primary care facilities in Lahore. We hypothesized that the rate of reported violence would be high. Many of the factors reported in literature as being associated with violence are present in this population. Women have limited autonomy in terms of decision making, mobility, freedom from threatening relations with husband, and access to and control over economic resources (Jejeebhoy & Sathar, 2001).

Movement of families to Lahore from other places means loss of social support networks as well as some of the sanctions against violence provided by the settled communities. Despite the rapid economic growth over last few years, the level of income for majority of families remains low. This report looks at the psychosocial variables associated with domestic violence in primary care settings in Pakistan.

Methods

Setting

The WHO defines primary health services functionally as the first level at which help from the medical system is sought, the route through which continuing care is provided, and the point of the delivery of many different types of health and social care services is coordinated (Ustun & Sartorius, 1995). Some of these roles are performed by the family in Lahore. Within the health care system to some extent these roles are performed by the general practice facilities, both in the private and public sectors. The major proportion of health care is not free at point of delivery. The public and nonprofit voluntary sector is the preferred option for people with minimal means where services are free or subsidized. The aim of this research was to consider patients from different facilities with primary care role within private public and nonprofit sector.

For an initial understanding of the health delivery system, consultations were held with representatives of the organization of family physicians. They arranged group meetings with their members that were attended by up to 60 physicians from different parts of the city. Through discussions with physicians and from organization records, a list of the practices and primary care facilities run by the government and voluntary sector was compiled. The city was divided into 7 geographic sectors reflecting the socioeconomic diversity within the city. Different parts of Lahore have different levels of affluence. This is reflected in property prices, size of the houses, cost of schooling, and the quality of public roads and other facilities. We used our own knowledge of the city (3 of the authors have spent >10 years of their adult life in Lahore), the information from family physicians, and held meetings with a number of leading property consultants and senior tax officers to make judgments about the levels of affluence in different parts of the city. Five facilities from private sector and 2 facilities from public or voluntary sector were randomly selected. Each area was represented in the selection.

A meeting was held with the physicians working in these sites to explain the purpose of the study. Only 1 general practice declined to participate; another practice was selected from the same area that agreed to take part in the study. Through this process, 7 sites for collection of data were identified.

Participants

Women between the ages of 17 and 65 who were married and living with their spouses were selected. Women with ill infants or with severe illness presenting to the doctors were excluded from the study.

Data collection

Data were collected between February and September 2005. We interviewed 650 women. We approached 807 women; among them, 657 agreed to be interviewed. Seven women suffered from overt symptoms of psychosis and we excluded them from this analysis.

Because the clinics are walk-in facilities, prior randomization was not possible. The interviewers interviewed the first eligible and consenting woman. To keep the process uniform, they interviewed every 5th patient after the first. If the patients were not eligible or did not consent, interviewers moved on to the next patient. The average duration of interview was 90 minutes. The interviews were conducted at the clinics and separate rooms were provided for the interviews out of respect for the privacy of the participants.

Measurements

We used Women's Experience with Battering (WEB) scale (Smith, Earp, & DeVellis, 1995a) to assess battering. Battering has been distinguished from physical abuse. Domestic violence was measured using a checklist that we called the Domestic Abuse Checklist (DAC). We also gathered information regarding, age, education, socioeconomic status, and visits to the family physician.

The WEB scale

The usual way to conceptualize violence against female partners by men is through focus on the frequency, severity, and incidence of violent acts. Battering is an alternative concept that focuses on the subjective experience and perceptions of women who are victims of violence. Its emphasis is on the emotional and psychological impact on women. The WEB operationalizes this construct to a scale. WEB has 10 questions. It asks the women how their partners make them feel. The responses are on a scale of 1–6: strongly agree, somewhat agree, agree a little, disagree a little, somewhat disagree, and strongly disagree. The questions concern the women's sense of fear and lack of security as well as psychological control and lack of empowerment in the context of their relationship with their partners. Examples of the questions are "He makes me feel unsafe even in my own home," "I feel like he keeps me prisoner," and "I hide the truth from others because I am afraid not to."

The questions are not about incidents of violence. Battering is seen as an ongoing chronic phenomenon as opposed to discrete events. For each question, there is a possible score of 6; the possible total scores range

between 10 and 60. Scores >20 indicate battering. The WEB Scale has good construct validity, accurately discriminates battered from nonbattered women, and shows strong internal consistency (Coker et al., 2000; Smith et al., 1995a; Smith, Smith, & Earp, 1999; Smith, Tessaro, & Earp, 1995b). The WEB was designed to be self-administered, but we used interviews to collect information because of literacy concerns in this population. The WEB scale asks women how they feel about their partners generally and is a prevalence measure that is not bound by any particular time frame (e.g., within the past year). A modified version of this scale was used in which women responded in yes or no instead of showing agreements on a Likert scale. The modification of the scoring system could have caused some reporting bias. The Cronbach's alpha in our sample was 0.88. WEB was translated into Urdu and then backtranslated.

The DAC

We made a list of items in the domains—control, threats, violence, severe violence, and sexual abuse—from the available literature (Coker et al., 2000, Ernst, Nick, Weiss, Houry, & Mills; 1997, Freund, Bak, & Blackhall, 1996; Johnson & Elliott, 1997; Krug, 2002; Marais, de Villiers, Moller, & Stein, 1999; Mazza, Dennerstein, Garamszegi, & Dudley, 2001; McCauley et al., 1995; McGibbon, Cooper, & Kelly, 1989; Richardson et al., 2002; Stanko, Crisp, Hale, & Lucraft, 1997). We had a list of 39 items. We then held separate focused group discussions with local psychologists and women and developed a list of items that were thought to be relevant to the Pakistani context. Our final list consisted of 18 items: control, 3 items (Cronbach's alpha 0.543); threat, 2 items (Cronbach's alpha 0.477); violence, 4 items (Cronbach's alpha 0.654); severe violence, 6 items (Cronbach's alpha 0.823); and sexual abuse, 3 items (Cronbach's alpha 0.71). Because it was to be administered by interviewers, we decided to have the answers in yes or no format. The DAC Cronbach's alpha was 0.89.

Differences between the WEB and the DAC

The WEB measures the subjective experience and perceptions of women who are victims of violence. The DAC is more detailed assessment of various forms of violence used by men against women. It draws on the international experience but operationalizes the measures for local use.

The Bradford Somatic Inventory

The Bradford Somatic Inventory (BSI) has been used to measure psychiatric morbidity in a number of studies in Pakistan. It is a measure of psychiatric distress and it enquires about the somatic symptoms of psychiatric disorders. It was developed in South Asia in Urdu. It has 45 items. When used along with psychiatric interviews, a cutoff score of 21 predicted most cases of depression (Mumford et al., 1991).

Life Events Checklist for Pakistan

Events that require major adjustment in life, such as illness, death of a relative, or job changes, are stressful. They have been studied in psychiatric research and there is a large body of literature to suggest that they are causally linked with various forms of mental illness (Paykel, 2003). There are various instruments available to study them. Rahman, Iqbal, and Harrington (2003) have derived items relating to life events and difficulties from the Life Events and Difficulties Schedule and developed a semistructured instrument that explores events and difficulties in the previous year. This instrument looks particularly at the areas relevant to the Pakistani context. The issues this instrument enquires about are serious illnesses and accidents (personal and close relatives), death or suicide or terminal illness in the close relatives, child birth in the family, stillbirth, problems with work or education, financial difficulties, problems with police or law, problems with accommodation, and problems in relationships with relatives and spouses. We added the scores and used them for logistic regression analysis (Brown & Harris, 1978; Rahman et al., 2003).

The Relationship Assessment Scale

The Relationship Assessment Scale (Hendrick, Dicke, & Hendrick, 1998) measures satisfaction with intimate relationships. It has 7 items that enquire about satisfaction with relationship with the partner. Each item is scored on a scale of 1–5. The scores on 2 items are reversed: "In, general how satisfied are you with your relationship?" and "How often do you wish you hadn't gotten in this relationship?" A score of 7 indicates low satisfaction, 8–34 indicates moderate satisfaction, and a score of 35 indicates high satisfaction. The Cronbach's alpha for our sample was 0.94. The scale was translated into Urdu.

The Oslo Social Support Scale

The Oslo Social Support Scale (Dowrick et al., 1998) is a scale to measure social support, which we translated into Urdu. It has 3 items selected from community mental health studies among a number of variables measuring social support (Dalgard, 1996) on the basis of factor analysis (neighborhood support and support from friends/family), and the individual effect of each item on mental health. The items enquire about the respondents perception of the number of people she can count on in case of a serious problem, concern people show to what the respondent is doing, and how easy the respondent can get help when it is required

from neighbors. The higher scores indicate more support. The Cronbach's alpha for our data was 0.62.

The State-Trait Anger Expression Inventory

The State-Trait Anger Expression Inventory (STAXI; available: http://www.sigmaassessmentsystems.com/assessments/staxi.asp) provides a concise measure of the experience and expression of anger. This scale has 44 items. The first 10 items describe response to state anger (Cronbach's alpha 0.78), the next 10 items describe trait anger (Cronbach's alpha 0.89), and the last 24 items describe anger expression (Cronbach's alpha 0.74). The trait-anger (items 11–20) scale contains 2 subscales, T-Anger/T (items 11–13 and 16), which measure the general disposition toward angry feelings (angry temperament), and T-Anger/R (items 14, 15, 18, and 20), which measure the tendency to express anger when one is criticized (reaction to criticism). Additional scales include Anger Expression—In (items 23, 25, 26, 30, 33, 36, 37, and 41), which measure the frequency with which angry feelings are suppressed; Anger Expression—Out (items 22, 27, 29, 32, 34, 39, 42, and 43), which measure the frequency of the expression of anger toward other people or objects in the environment; and Anger Expression—Control (items 21, 24, 28, 31, 35, 38, 40, and 44), which measure the frequency of attempting to control the expression of anger.

The Evaluative Belief Scale

The Evaluative Belief Scale (EBS; Chadwick, Trower, & Dagnan, 1999). There are 18 items in this scale. It has 3 subscales; other—self (the person's perception of how others evaluate him or her); self—self (the person's evaluation of self); and self—others (the person's evaluation of others). The EBS measures 6 themes: worthlessness, unlovability, helplessness or weakness, badness, failure, and inferiority. All these themes are measured in the above 3 dimensions. Examples of questions include the following: other—self-evaluation, "Other people think I am a bad person"; self—self–evaluation, "I think I am a total failure"; and self—other evaluations, "I think other people are worthless." Individuals have to tick 1 of 5 boxes: agree strongly, agree slightly, unsure, disagree slightly, or disagree strongly. These responses are scored 3, 2, 1, 0, and 0 respectively, such that both forms of disagree score 0. The possible score on the EBS ranges from 0 to 18.

At the time of scale development, factor analysis generated 2 clear factors, a factor combining negative other—self and self—self beliefs, and a factor consisting of negative self—other beliefs. It was found to have good internal reliability, a clear factor structure, and high concurrent validity. Negative other—self and self—self evaluations are related concepts in cognitive theories of anxiety and depression, whereas self—other evaluations are characteristic of anger (Ellis, 1994; Trower, Casey, & Dryden, 1988). The Cronbach's alpha in our sample was 0.87.

Interviewers

The interviewers were all female psychology trainees with a Masters Degree in Psychology. They had a minimum of 2 years of experience of working in clinics under supervision. They underwent 2 weeks of training before they started to collect data.

Statistical analyses

We used SPSS v14 for analyses. Differences between the 2 groups were measured using the t test where data had continuous spread; for categorical, variables the χ^2 test was used. If data were missing for a variable in a case, we excluded that case from the analysis for that particular variable.

We used linear regression to look at the variables that independently predicted the scores on the WEB scale and the DAC scale. In 1 analysis, WEB scores were the dependent variable and in the second analysis, the DAC total score was the dependent variable. The independent variable in the equation were family groups (nuclear and non-nuclear), total score on Oslo Social Support Scale, scores on BSI, scores on Life Events Checklist for Pakistan, scores on 3 subscales of Evaluative Belief scale, participant age, 6 STAXI subscales, scores on the Relationship Assessment Scale, and education groups. We used the Enter method for regression.

Results

The mean age of women in our study group was 34.5 years (SD, 10.45; range, 17–65). For women from voluntary sector the mean age was 34.9 (SD, 10.5) and for women from private sector facilities it was 34.2 (SD, 10.3). These were not significantly different ($p = .4$).

Table 1 describes the sociodemographic characteristics of our sample. Most women lived in nuclear families and nearly all (97.8%) were house wives. Only one fifth of the women (20.3%) had >10 years of education; 41% had <5 years of education.

Differences between women from voluntary sector and private sector clinics

Table 2 shows the details of differences between the 2 groups. The women from private sector clinics more often lived in the extended families and they saw their general practitioner more frequently. There was no difference between the 2 groups in terms of education, income, or age.

Prevalence of violence

A total of 379 (54.8%) women had experienced ≥1 type of battering, 254 (36.7%) women described ≥2, and 118

Table 1. Demographic characteristics

Variable	*N* (%)
Education (yrs)	
<5	269 (41.4)
5–10	237 (36.5)
>10	132 (20.3)
Missing	12 (1.8)
Family	
Nuclear family	490 (75.4)
Extended or joint	156 (24)
Missing	4 (0.6)
Employment status	
House wife	636 (97.8)
employed	7 (1.1)
Self-employed	1 (0.2)
Missing	6 (0.9)
Household income (Rupees)[a]	
≤5,000	344 (52.9)
5,000–10,000	188 (28.9)
≥1000	71 (10.9)
Missing	47 (7.2)
Frequency of contact with the GP	
Once in 3 months	595 (91.5)
Once a month	5 (0.8)
More than once a month	46 (7.1)
Missing	4 (0.6)

[a] $1 equals about 70 rupees.

(17.1%) ≥3. Three hundred fifty-one (50.7%) women said they had experienced 1 type of violence, 205 (29.6%) experienced ≥2, and 128 (18.5%) experienced ≥3. For DAC—control, 330 (47.7%) women gave a positive response. The response rate for other categories was DAC—Threat 48 (6.9%), DAC—Violence 151 (21.8%), DAC—Severe Violence 55 (7.9%), DAC—any types of Violence 148 (21.4%), and DAC—Sexual violence 76 (11.0%). The rate of battering was similar in the 2 groups of women; however, women attending voluntary sector clinics reported a higher rate of violence as measured by the DAC (Table 3).

Domestic violence and psychosocial variables

Linear regression. We initially performed a univariate regression analysis. In 1 analysis, WEB scores were the dependent variable; in the second analysis, DAC scores were dependent variable. Table 4 gives the results for univariate regression.

Satisfaction with intimate partner relationships, social support, and living in extended families were negatively associated with both WEB and DAC. State anger, trait anger, stressful life events, and psychiatric distress were positively associated with both WEB and DAC.

One subscale of EBS (self—self) was positively associated with WEB. Income was negatively associated with DAC and 2 further subscales of STAXI (Trait_r and Anger out) were positively associated with DAC.

Table 2. Differences between the 2 groups of women

Category	Voluntary, *n* (%)	Private, *n* (%)	Chi-square *p*-value
Family structure			
Nuclear	170 (98.3)	320 (67.7)	.000
Extended/joint	3 (1.7)	153 (32.3)	
Education (yrs)			
<5	73 (43.7)	196 (41.6)	.371
5–10	55 (32.9)	182 (38.6)	
>10	39 (23.4)	93 (19.7)	
Frequency of contact with GP			
One in 3 months	173 (100)	422 (89.2)	.000
Once a month	0	5 (1.1)	
More than once a month	0	46 (9.7)	
Income (rupees)			
≤5,000	92 (56.8)	252 (57.1)	.995
5,000–10,000	51 (31.5)	137 (31.1)	
>10,000	19 (11.7)	52 (11.9)	

Multivariate analysis. All the factors significant at the 1% level were included in the multivariate analysis. We used these stringent criteria because of multiple testing in the initial analysis. We used the Enter method for these analyses. Again, we performed separate analyses for WEB and DAC.

Table 5 gives the results of multiple regressions. For both WEB and DAC, only 3 variables were independent predictors in the final model. Satisfaction with intimate partner relationship and living with extended family were protective, whereas state anger was a risk factor. The adjusted r^2 for the model for WEB was 0.46, meaning that 46% of the variance was explained by the predictor variables in the model. The adjusted r^2 for DAC was 0.32, or 32% of the variance was explained by the predictor variables.

Discussion

We present herein findings from the first study that has gone beyond simply measuring the extent of violence between marital partners in Pakistan. We sought to explore factors that might be associated with domestic violence in Pakistan. Because high rates of domestic violence have been reported in Pakistan, we were interested in determining whether factors associated with violence are different in Pakistan than in other places. Study of factors associated with violence can inform

Table 3. Difference in the rates of violence between 2 groups of women

Variable	Voluntary, *n* (%)	Private, *n* (%)	Chi-square *p*-values
WEB, ≥1 present	104 (59.8)	254 (53.4)	.15
DAC, ≥1 present	107 (61.5)	232 (48.7)	.005

For each cell, the percentages are of the total number in that group.
Abbreviations: DAC, Domestic Abuse Checklist; WEB, Women's Experience with Battering.

Table 4. Results of linear regression

Variable	WEB		DAC	
	Coefficient	*p*	Coefficient	*p*
Age	−0.01	.68	−0.01	.78
Income	−0.05	.18	−0.1	**.016**
Education	0.009	.83	−0.02	.57
Relationships	−0.68	**.00**	−0.56	**.00**
Anger state	0.29	**.000**	0.16	**.00**
Anger trait	0.08	**.036**	0.088	**.031**
STAXI-in	0.05	.15	0.07	.069
STAXI-out	0.059	.15	0.096	**.019**
STAXI-control	0.063	.122	0.072	.082
STAXI-R	0.063	.12	0.10	**.01**
STAXI_t	0.071	.079	0.031	.44
Life events	0.244	**.00**	0.21	**.00**
EBS self-o	0.071	.08	0.062	.127
EBS self-s	0.082	.044	0.05	.22
EBS others-s	0.062	.127	0.073	.075
OSSS	−0.172	**.000**	−0.173	**.00**
BSI	0.124	**.002**	0.087	**.034**
Family structure	−0.096	**.016**	−0.113	**.005**

Significant values at .05 are in bold.
Abbreviations: BSI, Bradford Somatic Inventory; DAC, Domestic Abuse Checklist; EBS, Evaluative Belief Scale; OSSS, Oslo Social Support Scale; STAXI, State Trait Anger Inventory; WEB, Women's Experience with Battering.

the development of interventions. We were not able to study all the variables of interest, which have already been studied elsewhere. For example, we did not look at the relationship of abuse with arranged marriages, history of abuse in the family, or different characteristics of the husbands.

Our study has a few limitations. Its cross-sectional nature is not likely to sort the issue of causal and temporal link between variables. Because of the number of variables studied, it may lack the power to detect the association with variables of small effect size (Miles & Shevlin, 2001). We used a modified version of the Women's Experience with Battering scale, which may have created a reporting bias. The process of help-seeking from health facilities is influenced by a number of factors. The women in the study are likely to be different in some variable from women in the community who have not come forward to seek help. The measures of abuse relied on self-reports by women and some of variables we were studying would have influenced the women's decision to report the abuse.

Table 5. Results of multiple regression for WEB and DAC as dependent variables

Variable	WEB		DAC	
	Coefficient	*p*	Coefficient	*p*
Income	—	—	0.042	.26
Relationships	−0.60	**.00**	−0.53	**.000**
Anger state	0.271	**.00**	0.123	**.001**
STAXI-R	—	—	0.039	.27
Life events	−0.032	.359	−0.013	.744
OSSS	−0.015	.64	−0.065	.077
BSI	0.035	.284	—	—
Family structure	−0.098	**.002**	−0.11	**.001**

All variables used for multiple regression are given; significant variables are in bold.
Abbreviations: BSI, Bradford Somatic Inventory; EBS, Evaluative Belief Scale; OSSS, Oslo Social Support Scale; STAXI, State Trait Anger Inventory; WEB, Women's Experience with Battering.

For rate of violence, we compared women from private sector clinics and voluntary sector clinics. We combined the women from 2 groups for regression analysis. We believed that this would increase the power of the study to detect common factors associated with violence in both groups. If there were factors associated with violence in different ways within the 2 groups, then a combined analysis would compromise the power of detection of those factors. A combined analysis meant a reduction in the number of tests and hence of the false-positive associations.

Against our expectations, there was no difference in the level of monthly income between 2 groups. The majority of the women in both types of the facilities came from relatively low income groups. The specialist health care in private sector is accessible without a referral from primary care services and anecdotally it is known that people with better incomes go directly to specialists. It is likely that the women in both the groups are from the income group who cannot go directly to the specialist health care providers.

In terms of battering and violence, the 2 groups seem to have some similarities as well as some differences. The rates of battering and violence are very high in both the groups, but violence is significantly higher among women attending voluntary sector facilities. Almost all the women in the study have no independent means of income and would rely on the family to pay for the treatment. Those who are in abusive relationships are less likely to get the support to go to clinics where they have to pay for the service. For many of these women, the voluntary sector may be their only option for help.

Second, almost all the women presenting in voluntary sector clinics live in nuclear families, which is associated with higher rates of violence. Living in extended families is protective against battering and violence in our sample. Studies from neighboring India indicate that, for married women living in extended families, the relatives of husband can contribute to the violence against the wife (Fernandez, 1997) . We only looked at violence from husbands. In a study from Bangladesh, living in extended families was protective against violence (Koenig et al., 2003). We can speculate that the extended families provide sanctions against violence. A community's response to partner violence may affect the overall levels of abuse in that community. Counts, Brown, and Campbell (1992) compared 16 societies with either high or low rates of

partner violence. Societies with the lowest levels of partner violence were those that had community sanctions against partner violence and those where abused women had access to sanctuary, either in the form of shelters or family support (Counts et al., 1992; Krug, 2002). Community sanctions could either be formal legal sanctions or the moral pressure. This "sanctions and sanctuary" framework suggests that intimate partner violence will be highest in societies where the status of women is in a state of transition. Where women have a very low status, violence is not needed to enforce male authority. On the other hand, where women have a high status, they will probably have achieved sufficient power collectively to change traditional gender roles.

Partner violence is thus usually the highest at the point where women begin to assume nontraditional roles or enter the workforce. This framework explains the high rate of violence in our group as well as the protective role of the extended family (Counts et al., 1992; Krug, 2002). Satisfaction with intimate partner relationships was negatively associated both with battering and violence The relationship between domestic violence and poor quality of relationship has been described in the literature (Rose et al., 2000). Poor relationships can be result of violence and battering; they can also cause violence and battering. In a cross-sectional, enquiry it is not possible to tease this out.

The state anger subscale of STAXI measures the feeling of anger experienced recently as opposed to lifelong tendency to feel angry. Women who reported battering and violence experienced feelings of anger on this subscale. It is very likely that the feelings of anger result from being a victim of violence as they are appearing in state anger subscale as opposed to trait anger subscale (which measures the anger as a personal trait). Although the literature frequently reports on anger among men who abuse their partners, we are not aware of any study that has reported on anger among victims of abuse. This is because the theories of causation have focused on psychological or personality factors in perpetrators. The literature about women victims is informed by the psychodynamic tradition and has looked at the past history of abuse and resulting vulnerability (Coid et al., 2001).

A lack of a significant association with a number of variables needs explanation. Most studies worldwide have found an association between lower socioeconomic status and domestic violence. In a WHO, multicenter, international study, lower income and lack of education are associated with domestic violence (Koenig, Stephenson, Ahmed, Jejeebhoy, & Campbell, 2006; WHO, 2005). Our sample is of women seeking help and may have selected themselves for various characteristics, including education and economic status. It is possible that women who are most deprived in this group and are isolated as a result of domestic violence are unable to access any help and are underrepresented in this group.

The stressful life events and psychiatric symptoms did not predict violence in the final model. A number of studies have reported association between domestic violence and psychiatric symptoms. Similarly, stress has been shown to be associated with violence in the literature. It is known that women in psychiatric distress present to the health care facilities for help. The distress can be because of domestic violence or other reasons. The help-seeking behaviors in this group are likely to be influenced by many factors, including social isolation, economic status, and hostile environment of violent relationships. There is an established association between stressful life events and psychiatric distress (Paykel, 2003). The sampling from health care facilities may not be the best way to study the complex interactions between these variables in Lahore. Women with psychiatric distress may be less inclined to report the violence because they would see no point in doing so.

The Evaluative Belief Scale is a well-known measure of how women see themselves and others. Two of its subscales—Self—self and Others—self—measure self-esteem, which is associated with anxiety and depression; the Self—others subscale measures traits more often associated with anger. Low self-esteem is well known to be associated with domestic violence (Griffing et al., 2006; Zlotnick et al., 2006). We suspect that our sample was not big enough or too heterogeneous to detect this effect. The other possibility is that women with low self-esteem did not report the violence even if it was occurring because they were likely to see no point in doing so.

The high rates of reported battering and violence suggest that women are willing to report this problem. The training of local doctors in detection of violence and encouraging them to screen women for presence of violence would increase the rate of detection of the problem. What happens after the violence is reported needs to be addressed through further service development and research.

The main source of help for women in abusive relationships in Lahore is still their parents and family of origin. The number of refuges is very small. For women living away from the family of origin, psychological support may be crucial to seek help to address the abuse. For willing husbands, counseling may help. For those women whose husbands do not agree to accept help and who are living away from families of origin, support systems are currently nonexistent. This can be addressed through the public policy change. Educating the public organizations like police may be effective in addressing the issue in some situations.

Replication of the variables associated with violence would be important. Community studies may be more appropriate for studying some of the variables that were not associated with violence in this study.

Conclusions

The rate of battering and violence is very high in our sample. Women who experience abuse are more likely to be unhappy with their relationship. Living in extended families is protective against violence.

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Author Descriptions

Farooq Naeem graduated from King Edward Medical College, Lahore. He later on trained as a psychiatrist initially in Pakistan and then in England. He is a member of the Royal College of Psychiatrists UK. His research interests include psychiatric epidemiology, cognitive behaviour therapy and trans-cultural psychiatry.

Muhammad Irfan has a Masters Degree in Economics from Punjab University Lahore. His skills are in development and management of research projects, data management, and data analysis.

Qaisar A. Zaidi graduated from King Edward Medical College, Lahore in Medicine. He then trained as psychiatrist in the United Kingdom. His area of research is translation of instruments for measurement of psychopathology into Urdu. He currently works in the United Kingdom as Consultant Psychiatrist.

David Kingdon is Professor of Mental Health Care Delivery at the University of Southampton, UK, and honorary consultant adult psychiatrist for the Hampshire Partnership NHS Trust. He has previously worked as Medical Director for Nottingham Health Care Trust and Senior Medical Officer (Severe Mental Illness) in the Department of Health. He is visiting Professor at State University of New York and has given many invited workshops and lectures nationally and internationally.

Muhammad Ayub is Consultant Psychiatrist in National Health Service in England. His research interests include genetics of mental disorders, stress and mental health and development of instruments for assessment of psychopathology in Pakistan. He graduated from Nishtar Medical College, Multan, Pakistan in Medicine and then trained as a psychiatrist in Lahore and Edinburgh.