

From Epidemiology, Department of Public Health and Clinical Medicine

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Candies in hell

Research and action on domestic violence against women in Nicaragua

Mary Carroll Ellsberg

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ABSTRACT

Candies in hell: Research and action on domestic violence against women in Nicaragua.

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The overall aim of the research was to explore the magnitude and characteristics of domestic violence against women in León, Nicaragua. A cross-sectional survey was carried out among a representative sample of 488 women between the ages of 15-49 years. In-depth interviews were performed with women who had experienced violence. Also, participatory techniques were used in 19 focus groups of men and women from diverse sectors of Nicaraguan society to gain an understanding of how Nicaraguans view social and legal sanctions for domestic violence.

Among ever-married women ($n=360$) lifetime prevalence of physical violence was 52%, and current prevalence (during the last 12 months) was 27%. Seventy percent of the violence was classified as severe. No significant differences were found with regard to women's age, educational attainment, or occupation and the prevalence of partner abuse. Significant positive associations were found between the risk of wife abuse and poverty, number of children, history of violence in husband's family, husband's controlling behavior and lack of social networks. Abused women were six times more likely to present emotional distress than non-abused women. Emotional distress was more related to the severity of the abuse than to how long ago it had taken place. A significant positive association was found between wife abuse and problems among the children, including physical abuse. Nearly half of the abused women reported that their children had witnessed the violence. Both the qualitative as well as the quantitative data indicated that abused women frequently experience feelings of shame, isolation and entrapment, which in turn contribute to their difficulty in recognizing the violence and disengaging from the violent relationship. Women in Nicaragua used a variety of strategies to protect themselves from violence and most abused women eventually did leave abusive relationships. Temporary leaving and help seeking were critical steps in the process of overcoming violence. However, many women indicated that they did not receive support for their situation.

The results of the prevalence survey were compared to findings from two other population-based studies carried out subsequently in Nicaragua. This comparison suggested that under-reporting is a significant threat to the validity of prevalence research on violence, and underscored the importance of incorporating specific measures to enhance disclosure into the research plan, such as providing more than one opportunity to disclose violence and using behaviorally specific language.

Moreover, measures that have been primarily viewed from the perspective of ethics and safety, such as ensuring privacy and confidentiality and providing special training and support for interviewers, may have a significant impact on data quality, due to their effect on the disclosure of violence.

The survey results and the narrative analysis suggest that domestic violence is a serious public health problem in Nicaragua. The focus group research found that opinions regarding domestic violence differed sharply between men and women, but that broad sectors of society felt that psychological violence was as serious as physical violence, and that new laws and programs were needed to punish violent offenders and to prevent future violence.

The results of the research were discussed widely in Nicaragua, and contributed to the debate on the reform of the Nicaraguan Criminal Code with regard to sanctions for domestic violence and protection for victims of violence.

Key words: *domestic violence, partner abuse, Nicaragua.*

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Umeå 2000



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ORIGINAL PAPERS

This thesis is based on the following papers, which will be referred to in the text by their Roman numerals.

- I. Ellsberg M, Peña R, Herrera A, Liljestrand J, Winkvist A. Wife abuse among women of childbearing age in Nicaragua. *American Journal of Public Health* 1999; 89: 241-244*.
- II. Ellsberg M, Peña R, Herrera A, Liljestrand J, Winkvist A. Candies in hell: Women's experience of violence in Nicaragua. *Social Science and Medicine*. In press.**
- III. Ellsberg M, Caldera T, Herrera A, Winkvist A, Kullgren G. Domestic violence and emotional distress: Results from a population based study. *American Psychologist*, 1999; 54:30-36.***
- IV. Ellsberg M, Winkvist A, Peña R, Stenlund H. Women's strategic responses to violence in Nicaragua. *Submitted for publication*.
- V. Ellsberg M, Heise L, Peña R, Agurto S, Winkvist A. Researching violence against women: Methodological considerations of three studies in Nicaragua. *Submitted for publication*.
- VI. Ellsberg M, Liljestrand J, Winkvist A. The Nicaraguan Network of Women against Violence: Using research and action for change. *Reproductive Health Matters* 1997; 10:82-92.**

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ABSTRACT

The overall aim of the research was to explore the magnitude and characteristics of domestic violence against women in León, Nicaragua. A cross-sectional survey was carried out among a representative sample of 488 women between the ages of 15-49 years. In-depth interviews were performed with women who had experienced violence. Also, participatory techniques were used in 19 focus groups of men and women from diverse sectors of Nicaraguan society to gain an understanding of how Nicaraguans view social and legal sanctions for domestic violence.

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Key words: domestic violence, partner abuse, Nicaragua.

GLOSSARY AND DEFINITIONS

| | |
|---------------------------------|---|
| Bias | Errors that may distort the association between exposure and effect observed in a particular study. Bias can be categorized in two general classes, selection bias and information (observation) bias. |
| Confidence Interval (CI) | A range of values for a variable of interest constructed so that this range has a specified probability of including the true value of the variable. |
| Confounding | A situation in which there is mixing of effects between exposure, the disease, and a third factor that is associated with the exposure and independently affects the risk of developing the disease. |
| Cross-sectional study | A study that examines the prevalence of characteristics as they exist in a defined population at one particular time. |
| Domestic Violence | For the purpose of this thesis domestic violence is defined as the range of physically, sexually or psychologically coercive behaviors carried out against adult or adolescent women by current or former male intimate partners. Also referred to as spousal abuse, wife abuse, wife battering and intimate partner abuse. |
| Epidemiology | The study of the distribution and determinants of health-related states or events in specified populations, and the application of this study for the promotion of health. |
| External Validity | A study is externally valid or generalizable if it can produce unbiased inferences regarding a target population. |
| Family Violence | Refers to the range of physically, sexually and psychologically abusive acts that may take place within the family, including violence between husbands and wives, elder abuse and child abuse. |
| Focus groups | A semi-structured group interviewing technique which relies on discussion among participants. |
| Gender-based violence | Gender-based violence, according to the United Nations includes "any act that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion, or arbitrary deprivations of liberty, whether occurring in public or private life." (Art. 1, UN Declaration on the Elimination of Violence against Women, 1993.) |

| | |
|----------------------------------|---|
| Incidence rate | The rate of new cases of a disease occurring in a defined population within a specified period of time. The denominator is the population at risk of experiencing the event during this period, often expressed in person-time of follow-up. |
| Information bias | Bias arising from the misclassification of disease or exposure status (recall bias, interviewer bias, lost to follow-up, misclassification) |
| Intensity sampling | Provides rich information from a few select cases that manifest the phenomenon intensely (but are not extreme cases). |
| Interaction | When two exposures combine to influence the risk of disease. If the effect is enhanced, it is often called synergy, and if it is diminished the appropriate term is antagonism. |
| Internal validity | The extent to which a measure, indicator, or method of data collection has the quality of being true as far as can be judged. |
| Life table analysis | A technique used to estimate patterns of cumulative mortality and survival in populations over time. In this research it is used to estimate the probability of permanent separation of violent relationships within a given period of time. |
| Logistic regression model | Multivariate logistic regression analysis is a statistical technique which allows for the analysis of the relationship between a dichotomous dependent variable and one or more explanatory variables. It can be used to determine the joint effect of the explanatory variables on the dependent variable and to determine the effect of one explanatory variable while adjusting for the confounding effects of the remaining factors. The results of logistic regression are presented in the form of Odds Ratios and 95% confidence intervals |
| Narrative analysis | A qualitative technique which deals primarily with how individuals explain and interpret events in their lives, using narratives or stories in which events are ordered within a time frame. |
| Odds ratio (OR) | The ratio of the proportion of a group experiencing an event to the proportion not experiencing the event. It is frequently used in case-referent and cross-sectional studies to estimate the relative risk. |
| Path analysis | A kind of multivariate analysis in which causal relations among several variables are represented by graphs (path diagrams) showing the 'paths' along which causal influences travel. In path analysis, researchers use data to examine the accuracy of causal models. An advantage of path analysis is that it allows for the calculation of direct and indirect effects of independent variables, which cannot be done in ordinary multiple regression analysis |
| Prevalence | The proportion of a population that is affected by the disease or problem under study at a given point in time. |

| | |
|--------------------------------------|--|
| Proportional hazards model | A statistical model in survival analysis that asserts that the effect of the study factors on the hazard rate in the study population is multiplicative and does not change over time. |
| Qualitative methods | Any research which focuses on the quality and unique characteristics of a phenomenon. Qualitative research is characterized by an approach that seeks to describe and analyze the culture and behavior of humans and their groups from the point of view of those being studied. |
| Quantitative methods | Any research method that results in the data being expressed in numerical form. |
| Relative risk (RR) | The ratio of the risk of disease or death among the exposed to the risk among the unexposed; also called incidence rate ratio or risk ratio. An odds ratio may be a good estimate of the relative risk. |
| Risk factor | An aspect of personal behaviour or lifestyle, an environmental exposure, or inborn or inherited characteristic, which on the basis of epidemiologic evidence is known to be associated with health-related conditions considered important for prevention. |
| Selection bias | Bias arising from the manner in which the study subjects were chosen from the entire population that theoretically could be studied. |
| Structural Equation Modelling | Structural Equation Modelling denotes a multivariate analysis technique that includes as special cases a number of other analysis such as ordinary regression analysis, path analysis, factor analysis and covariance/correlation structure models. |
| Thematized interviews | Interviews without a prepared structured questionnaire. They are open-ended and conversational in character and use specific themes of interest to the research question. |
| Validity | The degree to which inferences drawn from a study, especially generalizations extending beyond the study sample, are warranted when account is taken of the study methods, the degree to which the study sample is representative, and the nature of the population from which it is drawn. Internal validity pertains to inferences drawn on the actual study subjects while external validity or generalizability pertains to inferences involving a target population beyond the subjects in the study. |

Note: most of the epidemiological definitions were derived from JM Last "A Dictionary of Epidemiology", 2nd ed. New York: Oxford University Press, 1988.

*After he beat me up he would try to court me,
and he would buy me clothes... and then my
grandmother would say to me,*

*"Child, what are you going to do with candies
in hell?"*

Ana Cristina



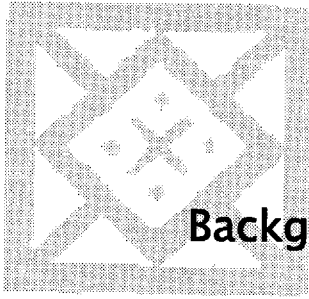
*Women would ask me what this survey was for,
and how it would help them. I would tell them
that we won't see the solution tomorrow or the
next year. Our daughters and granddaughters
will see the fruits of this work, maybe things
will be better by then...*

Interviewer from León survey

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Background

Domestic violence on the international agenda

Global awareness regarding domestic violence has undergone a profound transformation in the recent years [1]. Once viewed as a private problem affecting only a few women, it is now considered a major social and public health concern as well as a human rights issue, in which governments have the right and the obligation to intervene. This growing awareness is largely the result of more than two decades of activism by grassroots women's groups around the world. The success of these efforts are evident in recent international documents, such as the UN Declaration on the Elimination of Violence against Women (1993) and the Declarations and Platforms for Action of the recent United Nations conferences on human rights (Vienna, 1993), population and development (Cairo, 1994) and women (Beijing, 1995).

A review of terminology

There is still no universally agreed-upon terminology to refer to the abuse of women. Many of the most commonly used terms have different meanings in different regions, and are derived from a diversity of theoretical perspectives and disciplines.

One of the more commonly used models to describe partner abuse and sexual abuse of girls is the family violence framework, derived primarily from the fields of sociology and psychology [2, 3]. "Family violence" refers to the abuse of children and elders as well as violence between husbands and wives, regardless of the sex of the victim or the offender. Although it is true that women frequently are victimized by a spouse, parent or other relative, the concept of "family violence" does not encompass the diverse types of violence to which women are exposed outside the home, such as sexual assault and harassment in the workplace. Moreover, feminist researchers find the gender-neutrality of this term problematic because it fails to

highlight that violence in the family is mostly perpetrated by men against women and children.

There is increasing international consensus that the abuse of women and girls, regardless of where it occurs, should be conceptualized within the framework of "gender-based violence," as it is derived primarily from women's subordinate status with regard to men in society (Figure 1). The term "sexualized violence" has also been used, primarily in Scandinavia, to refer to all acts of violence towards women within a framework of unequal power relations between men and women [4, 5]. The official United Nations definition of gender-based violence was first articulated in 1993 when General Assembly passed the Declaration on the Elimination on Violence against Women. According to the Declaration:

The term "violence against women" means any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life. Accordingly, violence against women encompasses but is not limited to the following:

Physical, sexual and psychological violence occurring in the family, including battering, sexual abuse of female children in the household, dowry-related violence, marital rape, female genital mutilation and other traditional practices harmful to women, non-spousal violence and violence related to exploitation;

Physical, sexual and psychological violence occurring within the general community, including rape, sexual abuse, sexual harassment and intimidation at work, in educational institutions and elsewhere, trafficking in women and forced prostitution;

Physical, sexual and psychological violence perpetrated or condoned by the State, wherever it occurs.

Acts of violence against women also include forced sterilization and forced abortion, coercive/ forced use of contraceptives, female infanticide and prenatal sex selection.

General Assembly Resolution 48/104, December 20, 1993

Even after locating the abuse of women by male partners within the theoretical framework of gender-based violence there is still a variety of terms that are not always used consistently. The term "domestic violence" is used in many parts of the world to refer to the abuse of women by current or former male intimate partners [6, 7]. However,

in some regions, including Latin America, "domestic violence" is used to refer to all forms of family violence, including violence against children and the elderly occurring in the home [8, 9]. Similarly, the term "battered women" emerged in the 1970's and has been widely used in the United States and Europe to describe women who experience a pattern of systematic domination and physical assault by their male partners [10].

The terms "spouse abuse," "intimate partner violence", and "wife abuse" or "wife assault" are generally used interchangeably, although each term has weaknesses. "Spouse abuse" and "intimate partner violence" do not make explicit that the victims are generally women, while "wife abuse" and "wife assault" can be read to exclude common-law unions and dating violence.

In this thesis, for the purpose of clarity, the terms "partner abuse" and "domestic violence" are used to refer to the range of sexually, psychologically and physically coercive acts used against adult and adolescent women by current or former male intimate partners.

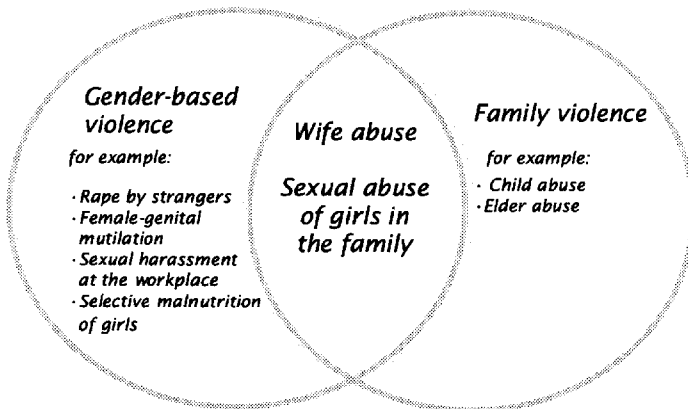
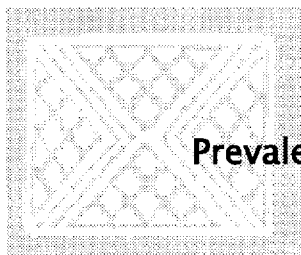


Figure 1. The overlap between gender-based violence and family violence

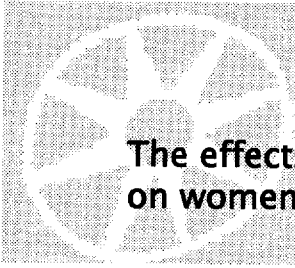


Prevalence of domestic violence

Research has consistently demonstrated that a woman is more likely to be assaulted, injured, raped or killed by a current or former partner than by any other person [11]. However, internationally comparable prevalence data on domestic violence is still relatively scarce. A recent review of 50 population-based studies carried out in 36 countries indicates that between 10-60% of women who have ever been married or partnered have experienced at least one incident of physical violence from a current or former intimate partner (see Table 1)[12].

One of the most comprehensive studies regarding violence against women is a national survey of over 12,000 women carried out in 1993 in Canada by the National Statistics Bureau [13]. This study found that 29% of women had experienced physical or sexual abuse on the part of an intimate partner at some point in their lifetime. A recent population-based survey carried out in the United States similarly found that 25 percent of women over the age of 18 report having been physically assaulted and/or raped by an intimate partner in their lifetime [14].

Considerable variation has been found between countries, and often between studies performed in the same countries. In Bangladesh and India, large variations have even been found in the levels of partner abuse between neighboring villages [15-18]. Unfortunately, in-depth exploration of both the causes and consequences of violence between settings and within settings is hampered by a lack of consistency in study methods, design and presentation of results. Consequently, it is often difficult even to compare results between studies performed in the same country.



The effects of domestic violence on women's health

Domestic violence has been associated with a wide variety of serious health problems affecting both women and children, including injuries due to trauma, gynecological disorders, mental health disorders, adverse pregnancy outcomes, and sexually transmitted diseases. Although violence can have direct health consequences, it also increases women's risk of future ill health. Therefore, like tobacco or alcohol use, victimization can best be conceptualized as a risk factor for a variety of diseases and conditions [12].

Both population-based research as well as studies of emergency room visits in the US indicate that physical abuse is an important cause of injury among women [50-52]. Documented injuries sustained from such physical abuse include contusions, concussions, lacerations, fractures and gunshot wounds. Another study carried out in an emergency room in the United States found a fairly low incidence of acute incidence of domestic violence among women attending the emergency services for any reason, (12%), but a high cumulative lifetime prevalence of exposure to domestic violence (54%) [53]. Recent studies found that partner abuse was an important cause of ocular injuries [54] and in another retrospective study of orbital fractures, domestic violence accounted for one third of the cases among women (n=19) and none of the cases among male patients (n=35) [55]. Population-based studies suggest that 40% to 75% of women who are physically abused by a partner are injured by this violence at some point in their life [14, 34, 49, 56]. In Canada 43% of injured victims of abuse received medical care and 50% of those injured had to take time off from work [49].

In its most extreme form, violence kills women. Worldwide, an estimated 40% to over 70% of homicides of women are perpetrated by intimate partners, frequently in the context of an abusive relationship [57].

Table 1. Physical assault on women by an intimate male partner. Selected population-based studies, 1982-1999.

| Region, Place & Year of Field Work (Ref. No.) | Coverage | Size | Population* | Age | % of adult women physically assaulted by a partner | | |
|---|-------------------|--------|-------------|-------|--|-------------------------|-------------------------|
| | | | | | In previous 12 months | In current relationship | Ever (any relationship) |
| AFRICA, SUB-SAHARAN | | | | | | | |
| Ethiopia 1995 [19] | Meskanena | 673 | 2 | 15+ | 10 ^b | | 45 |
| Kenya 1984-87 [20] | Kisili District | 612 | 7 | 15+ | | 42 | |
| Nigeria 1993P [21] | Not stated | 1,000 | 1 | | | | 31 ^a |
| South Africa 1998 [22] | Eastern Cape | 396 | 3 | 18+49 | 11 ^b | | 20 ^b |
| | Mpumalanga | 418 | 3 | 18+49 | 12 ^b | | 29 ^b |
| | Northern Province | 465 | 3 | 18+49 | 5 ^b | | 20 ^b |
| South Africa 1998 [23] | National | 5,077 | 2 | 15+49 | 6 | | 13 |
| Uganda 1995-96 [24] | Lira & Masaka | 1,660 | 2 | 20+44 | | 41 | |
| Zimbabwe 1996 [25] | Midlands | 966 | 1 | 18+ | | | 17 ^c |
| ASIA & PACIFIC | | | | | | | |
| Australia 1996 [26] | National | 6,300 | 1 | | 3 ^c | 8 ^c | |
| Bangladesh 1992 [18] | National | 1,225 | 2 | <50 | 19 | | 47 |
| Bangladesh 1993 [15] | 2 rural regions | 10,368 | 2 | 15+49 | | 42 ^d | |
| Cambodia 1996P [27] | 6 regions | 1,374 | 3 | | | | 16 |
| India 1999 [28] | 6 states | 9,938 | 3 | 15+49 | 14 ^a | | 40/26 ^f |
| Korea, 1989 [29] | National | 707 | 2 | 20+ | 38/12 ^f | | |
| Papua N. Guin. 1982 [30] | National, rural | 628 | 3** | | | | 67 |
| Philippines 1993 [31] | National | 8,481 | 5 | 15+49 | | | 10 ^d |
| Thailand 1994 [32] | Bangkok | 619 | 4 | | | 20 | |
| EUROPE | | | | | | | |
| Moldova 1997 [33] | National | 4,790 | 3 | 15+44 | 7+ | | 14+ |
| Netherlands 1986 [34] | National | 989 | 1 | 20+60 | | | 21/11 ^{a,f} |
| Norway 1989P [35] | Trondheim | 111 | 3 | 20+49 | | | 18 |
| Switzerland 1994-96 [36] | National | 1,500 | 2 | 20+60 | 6 ^a | | 21 ^a |
| Turkey 1998 [37] | E and SE | 599 | 1 | 14+75 | | | 58 ^a |
| United Kingdom 1993P [38] | North London | 430 | 1 | 16+ | 12 ^a | | 30 ^a |
| LATIN AMERICA & CARIBBEAN | | | | | | | |
| Chile 1993P [39] | Santiago | 1,000 | 2 | 22+55 | | 26/11 ^f | |
| Colombia 1995 [40] | National | 6,097 | 2 | 15+49 | | 19 | |
| Mexico 1996 [41] | Guadalajara | 650 | 3 | | 15 | | 27 |
| Mexico 1996P [42] | Monterrey | 1,064 | 3 | 15+ | | | 17 ^a |
| Paraguay 1995-96 [43] | National | 5,940 | 3 | 15+49 | | | 10 |
| Peru 1997 [44] | Metro. Lima | 359 | 2 | 17+55 | 31 | | |
| Puerto Rico 1995-96 [45] | National | 4,755 | 3 | 15+49 | | | 13 ^b |
| Uruguay 1997 [46] | 2 regions | 545 | 2** | 22+55 | 10 ^a | | |
| NEAR EAST & NORTH AFRICA | | | | | | | |
| Egypt 1995-96 [47] | National | 7,121 | 3 | 15+49 | 16 ^d | | 34 ^b |
| Israel 1997P [48] | Arab | 1,826 | 2 | 19+67 | 32 | | |
| NORTH AMERICA | | | | | | | |
| Canada 1993 [49] | National | 12,300 | 1 | 18+ | 3 ^{c,g} | | 29 ^{c,g} |
| United States 1995-96 [14] | National | 8,000 | 1 | 18+ | 1.3 ^a | | 22 ^a |

(From Helse, Ellsberg & Gottemoeller, 1999)

Percentages rounded to whole numbers

^aP* after year indicates the year of publication for studies not reporting the field work dates.

*Population of respondents:

1 = all women

2 = currently married/partnered women

3 = ever-married/partnered women

4 = married men reporting on own use of violence against spouse

5 = women with a pregnancy outcome

7 = married women; half with pregnancy outcome, half without

**Nonrandom sampling techniques used.

^aSample group included women who had never been in a relationship and therefore were not in exposed group.

^bRate of partner abuse among ever-married/ partnered women, recalculated from author's data.

^c Although sample includes all women, rate of abuse is shown for ever-married/partnered women (N not given).

^dPerpetrator could be family member or close friend.

^eSevere abuse

^fAny physical abuse/severe physical abuse only

^gPhysical or sexual assault

^hIn past 3 months



By contrast, only a small percentage of men who are murdered are killed by their female partners, and in such cases the women often are defending themselves or retaliating against abusive men [58].

Nevertheless, injury is not the most common physical health outcome of gender-based abuse. More common are "functional disorders" - ailments that frequently have no identifiable etiology, such as irritable bowel syndrome, fibromyalgia, gastrointestinal disorders, and various chronic pain syndromes, including chronic pelvic pain. Studies consistently link such disorders with a history of physical or sexual abuse [59-61]. Women who have been abused also experience reduced physical functioning, more physical symptoms, and more days in bed than nonabused women [61-63].

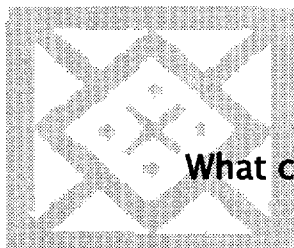
Many women consider the psychological consequences of abuse to be even more serious than its physical effects. The experience of abuse often erodes women's self-esteem and puts them at greater risk of a variety of mental health problems, including depression [64], post-traumatic stress disorder [65], suicide [53, 66-69] and alcohol

and drug abuse [70, 71]. Women who are abused by their partners suffer more depression, anxiety, and phobias than women who have not been abused, according to studies in Australia, Pakistan, and the US [72-75].

Around the world, as many as one woman in every four is physically or sexually abused during pregnancy, usually by her partner [13, 39, 47, 56, 76-80]. Estimates vary widely, however. Within the US, for example, estimates of such abuse range from 3% to 11% of pregnant women and, among teenagers, up to 38% [78]. The differences are due partly to differences in the way women were asked about violence [79, 81].

Violence during pregnancy can have serious health consequences for women and their children. Consequences include delayed prenatal care [78, 82-86], inadequate weight gain [78, 87], increased smoking and substance abuse [67, 83, 84, 88-90], sexually transmitted infections [67] vaginal and cervical infections [78, 83, 84], kidney infections [91] miscarriages and abortions [67], premature labor [91], fetal distress [91], and bleeding in pregnancy [78, 83].

Recent research has focused on the relationship between violence in pregnancy and low birth weight, a leading cause of infant deaths in the developing world [67, 78, 83, 86, 87, 89, 90-94]. Although the research results are inconclusive, findings of six different studies suggest that violence during pregnancy contributes substantially to low birth weight and fetal growth retardation, at least in some settings [78, 83, 86, 92, 94, 95].



What causes domestic violence ?

Researchers from a wide variety of disciplines have attempted during the last twenty-five years to explain the occurrence of domestic violence. Early research focussed primarily on individual risk factors among men and women that predicted either victimization or perpetration of violence. Hotelling and Sugarman reviewed the results of 52 studies representing 97 potential correlates for husband to wife violence [96]. The variables were assessed according to whether they were consistent risk markers (mentioned

in more than one study), inconsistent risk markers, consistent nonrisk markers, or whether there was insufficient data to reach a conclusion. For women, the only characteristic that was consistently associated (in 11 out of 15 studies) with the risk of being a victim of partner abuse as an adult was whether they had witnessed family violence as a child. All other potential risk factors, including women's age, race, education, alcohol and drug use, occupation and income were either inconsistent or consistently non-significant. However, several characteristics were found that consistently predicted physically violent behavior among men, including witnessing violence as a child or adolescent (mentioned in 14 out of 16 studies), alcohol use, educational level, income, violence towards children, and sexual aggression towards the partner. At the level of the couple, the characteristics which were most consistently associated with domestic violence were marital conflict, marital status (violence being less frequent among legally married couples) and family income or socio-economic status.

More recently, cross-cultural research has focussed on the structural and cultural underpinnings of violence, and particularly on the links between violence and patriarchal institutions and cultural norms. Levinson's ethnographic study of 90 primitive societies throughout the world identified four factors that in combination are strongly associated with a high prevalence of violence against women [97]. These are: economic inequality between men and women; a pattern of using physical violence for conflict resolution; male authority and decision-making in the home; and divorce restrictions for women. The relationship between economic dependence and violence is supported by recent research in India indicating that domestic violence is linked to "dowry shortfall" [17] and in Bangladesh, where it was found that women participating in the Grameen Bank and BRAC credit programs were less likely to be beaten by their husbands than women without an independent source of income [18].

Further, the protective effect of the credit programs was found to extend to non-members living in Grameen Bank villages, who also reported lower levels of violence than women from neighboring villages.

Most significantly, Levinson identified 16 societies, such as the Wape of Papua New Guinea, that could be classified as "essentially free of violence against women." Although all of the societies included in this study are pre-industrial, Levinson's findings are still encouraging because they indicate that violence is a learned

behavior rather than an innate feature of human nature, and therefore by implication it should be possible to unlearn.

Counts, Brown and Campbell [98] have conceptualized domestic violence cross-culturally through the "Sanctions and Sanctuary" framework. This framework theorizes that societies where women's status is either very high or very low should have lower levels of violence, because it is not "needed" to enforce male authority, whereas societies where women's status is in transition may have the highest levels of violence. Further, it is argued that societies with the least domestic violence are those where **community sanctions** exist against violence (this may mean legal sanctions, or simply that it is culturally accepted that neighbors should intervene when a woman is being beaten by her husband) and **sanctuary** for battered women, which may take the form of shelters, or family support.

Both the theories that look for the causes of partner violence only at the society level, as well as those that cite only individual psychological factors do not adequately explain the occurrence of violence, since there are some societies where there is no partner violence, and by the same token, even in societies with a high prevalence of partner abuse, not all men are violent.

Several authors have used an ecological model to conceptualize gender-based violence as a multifaceted phenomenon grounded in interplay between personal, situational and socio-cultural factors [99-102]. These factors are nested in four different levels, conceived as concentric circles (see Figure 2). **The inner circle** contains individual level factors that have consistently been associated with partner violence, such as witnessing marital violence as a child or adolescent, alcohol use, educational level, income and violence towards children [96, 99]. **The second circle** of the ecological framework refers to the immediate context in which abuse takes place, in this case, the intimate relationship. Numerous cross-cultural reviews have cited male economic and decision-making authority in the family as strong predictors of partner abuse [97, 99].

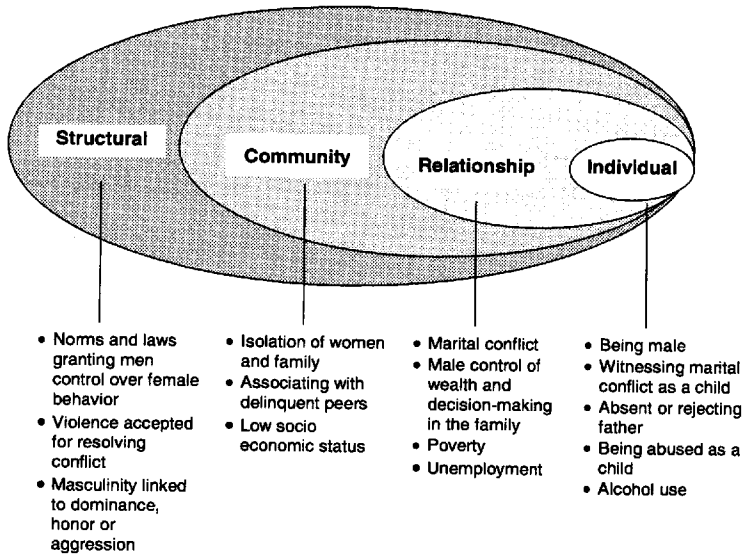


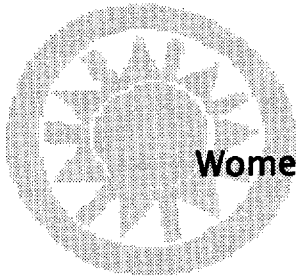
Figure 2. An ecological framework for understanding gender-based violence [99].

The organization of household authority is largely determined by the social and institutional context, represented in the **third circle** of the ecological framework. This contains the world of extended family, work, neighborhood and social networks. Both research in the United States and elsewhere indicate a strong association between domestic violence and women's isolation and lack of social support, at both the individual and society level. Finally, **the outer circle** of the ecological framework includes the dominant cultural views and attitudes that permeate the society at large. It includes laws, social and economic policies and institutions, as well as cultural norms. Numerous studies from around the world have suggested that violence against women is most common in societies where the gendered division of labor is rigidly defined and enforced, and where the concept of masculinity is linked to toughness, male honor, or dominance. Other cultural norms have been associated with partner abuse, such as the acceptance of male entitlement or sense of ownership over women, and the use of violence as a means to settle interpersonal disputes [99].

By combining individual level risk factors with cross cultural comparisons, the ecological framework contributes to understanding

gender-based violence by explaining on the one hand, why some societies and some individuals are more violent than others and, on the other hand, why women are so consistently the victims [99].

It has also been useful for understanding the meaning women themselves ascribe to violent relationships and the way in which the immediate and cultural context of abuse shapes women's strategic responses to violence [103].



Women's experiences of abuse

Although quantitative research has been useful for understanding the magnitude and some of the main features of wife abuse, including its effects on women's physical and mental health, it does not contribute much to the understanding of how women themselves experience violence. This perspective is crucial for developing more effective interventions to protect abused women and to prevent violence. Research indicates that many women endure abuse for many years before leaving or even seeking help. Studies of women who have attended shelters or other services for abused women indicate that women often return to the abusers many times, even after having suffered life-threatening injury [104]. In order to explain a woman's decision to remain in or leave an abusive relationship, it is necessary to understand the meaning that she herself attaches to her experience.

Whereas some researchers have focussed on psychological pathology among abused women [105], most findings indicate that the particular dynamics and circumstances of violent relationships contribute to women's decision to remain with their abusers. According to studies performed in the United States, women who remain with their abusers have suffered less severe abuse [106], are less likely to report child abuse [107] and are more likely to say that they love their abusers. Further, these women have separated from their abusers less often, are less likely to have taken legal action

against their abusers, and are more likely to be financially dependent on their partners [104].

A large body of qualitative research has been carried out during the last 25 years, particularly in the United States and Europe, regarding the characteristics of partner abuse and the experiences of abused women [10, 108-112]. This research has consistently pointed to a series of characteristics that define the experience of battering for women, and conceptualize violent relationships as an ongoing process of entrapment and diminished coping capacity.

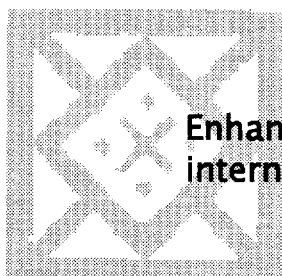
The psychological trauma experienced by victims of sexual abuse and domestic violence has been compared to that of victims of other kinds of violence, including torture [65]. According to Janoff-Bulman and Hanson Frieze, victimization shatters three main assumptions that are commonly held about the world: the belief in personal invulnerability, the perception of the world as meaningful and comprehensible and the view of ourselves in a positive light. By calling these assumptions into question, victimization destroys the stability with which people are ordinarily able to function [113].

Landenburger (1989) presents the complex dynamic by which women become entrapped in abusive relationships and their eventual recovery as a process made up of four stages, which she refers to as **binding**, **enduring**, **disengagement** and **recovery** [109]. During the **binding stage** violence is initially rationalized or denied, while women focus on the positive aspects of the relationship. As violence becomes more acute and progresses into the **enduring stage**, there is a shift in women's perceptions. They often "cover-up" the violence, blame themselves for the abuse, and modify their own behavior in an attempt to gain some control over the situation (e.g. leaving work, not seeing friends or doing things that might make her partner angry). Eventually, many women reach a point where they are able to put a name to what is happening to them, and to identify with other women in the same situation. After women are able to recognize themselves as abused, they are able to seek help from others and to begin the process of **disengagement** and eventual **recovery** from the abusive relationship.

Although this topic has received relatively less attention outside the developed world, qualitative studies in a host of settings suggest that the barriers to leaving abusive relationships are surprisingly similar. Women cite a wide range of reasons for staying, including: fear of reprisals; shame and self-blame; economic and emotional dependence on the abuser; concern for the children; lack of support from

family and friends; and the hope that "he will change." In many countries, the stigma attached to being single is an additional barrier to leaving [10, 12, 17, 110, 114-116].

Research in the U.S. indicates that the majority of abused women do eventually leave their abusers, although they may initially try a variety of other strategies to overcome the violence, such as temporary separations, seeking outside help, and physical self-defense [106, 117]. Qualitative studies performed with women who have left abusive relationships suggest that overcoming violence should be viewed as a process rather than a discrete incident [118-120]. Moreover, it should be noted that ending a relationship does not necessarily reduce a woman's risk, as some partners become even more violent when women attempt to leave [52, 121].



Enhancing the comparability of international violence research

Most international prevalence figures on violence are not comparable due to inconsistencies in the way that violence is conceptualized and measured. Prevalence is defined as the proportion of abused women in a given study population during a specific period of time. Therefore, how to define and measure "abuse" and how to determine the study population are two important methodological challenges facing researchers on violence. These issues have been addressed in a great variety of ways, with little consensus as to the most appropriate method [34, 122-125]. A further complication is presented by the recognition that what we are measuring is not the actual number of women who have been abused, but rather, the number of women who are willing to disclose abuse. Therefore, there is always the potential for bias from either over-reporting or under-reporting. Finally, many researchers have pointed out that research on violence involves a number of inherent risks to both respondents and interviewers, and that addressing these concerns is essential, both for ethical reasons, as well as for ensuring

data quality [126-129]. However, the degree to which these issues have been incorporated into study design and implementation varies a great deal. Following are some of the greatest challenges to comparability between studies.



Selection of study participants. There is great variation in the study populations used for domestic violence research. Many studies include all women within a specific age range (frequently 15-49 or over 18), while other studies interview only women who are currently married or have been married at some point in their lives (Table 2). Because both age and marital status are associated with a woman's risk of suffering partner abuse, the selection of eligible participants can have a great impact on the estimates of prevalence of abuse in a population.

Table 2. Study populations from recent surveys on violence against women.

| Country | Study Population |
|------------------|---|
| Cambodia [56] | Women and men aged 15-49 |
| Canada [7] | Women aged 18 or older |
| Chile [39] | Women aged 22-55 married or partnered for more than 2 years |
| Colombia [40] | Currently married women aged 15-49 |
| Egypt [47] | Ever married women aged 15-49 |
| Philippines [31] | Women aged 15-49 with a pregnancy outcome |
| Uganda [24] | Women 20-44 and their spouses/partners |
| Zimbabwe [25] | Women 18 years and older |

Definitions of violence. A further complication in the comparison of violence prevalence is the use of inconsistent definitions of abuse. For example, some studies present only figures for violent acts occurring in the last 12 months, whereas others measure lifetime experiences of violence. In addition, not all studies separate different kinds of violence, so that it is not possible to distinguish between acts of physical, sexual and emotional violence or between violence committed by different perpetrators [130].



Instruments for measuring violence. The most well known tool for measuring family violence is the Conflict Tactics Scale (CTS). The CTS has several sub-scales which measure acts used in the course of conflict, including negotiating tactics as well as verbal and physical aggression. The physical aggression sub-scale of the CTS (Box 1) measures the frequency and severity of specific acts of physical violence within the family, including husband to wife, wife to husband, and parent to child violence [3, 131]. The CTS can be used to calculate lifetime prevalence of violence, and prevalence during the last 12 months.

The CTS has been shown to have high reliability and construct validity. The behaviorally specific approach is particularly useful for international comparisons as it is likely to detect women who have experienced acts of violence but do not necessarily identify themselves as battered or abused. Although it was designed to measure all kinds of violence between husbands and wives, the sub-scales can be used independently of each other.

As an exclusive measure of partner abuse, however, the initial CTS is limited, as it does not provide any information about the context or consequences of abuse [130, 132]. For example, it cannot distinguish between violence used for self-defense and violence used for the purpose of control or punishment, nor does it measure injury. Therefore, when used to measure both husband to wife and wife to husband violence, the CTS has led to what many researchers consider to be misleading conclusions regarding the supposed symmetry of marital violence [133].

Most international research, on the other hand, has consistently shown that violence used by males and females is both quantitatively and qualitatively different [134]. Whereas female violence is more likely to take place in the context of self-defense, male violence is more likely to occur in the context of coercive control and is more likely to lead to injury [7, 135, 136]. Largely in response to these concerns, a revised version of the CTS has been developed which now includes sub-scales on injuries and sexual coercion [137]. However, the CTS2 introduces a new problem, as it mixes up acts of sexual or physical violence together with items referring to negotiation tactics in order to facilitate use in self-administered surveys. Thus, respondents are asked early on how often "your partner punched you or hit you with something that could hurt" and

"used a knife or gun on you" and later, they are asked how often "your partner said he was sure you could work it out." This has been found to be disorienting to respondents in face-to face interviews.

Box 1
The Conflict Tactics Scale
(Straus, 1979)

No matter how well a couple gets along, there are times when they disagree on major decisions, get annoyed about something the other does, or just have spats or fights because they're in a bad mood or tired, or for some other reason. They also use many different ways of trying to settle their differences. During the last year, in a moment of discussion or conflict with your husband, how many times did he do the following to you?

Has he or another partner ever done these things to you at any time in your life?

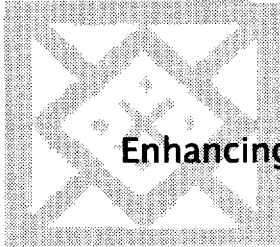
- Threatened to hit you?
- Thrown something at you?
- Pushed or shoved you?
- Slapped you?
- Kicked, bitten or hit you with his fist?
- Beat you up?
- Threatened you with a knife or gun?
- Used a knife or gun on you?

Another criticism of both the CTS and the CTS2 is that they frame the occurrence of violence within the context of conflict resolution, and therefore include a sub-scale of negotiating tactics for resolving conflict. The assumption of gender-neutrality behind the CTS is questioned by feminist theorists, who view male violence as a coercive tactic for maintaining power and domination within a relationship [134]. In an international setting, the assumption that equal partners come together to

"negotiate" conflict is even more problematic, since in many cultures, women are considered perpetual minors, both socially and legally. Men are granted the right to physically chastise or punish their wives in a manner similar to that granted parents over children in other cultures [12, 99].

Many feminist researchers have addressed these concerns by using a somewhat different approach to measuring violence. Although multiple questions regarding behaviorally specific acts of violence are generally considered to be the best way to enhance recall and disclosure, most of these studies do not include questions on negotiating tactics or perpetration of violence by women [7, 22, 34, 130]. Instead of referring to violence as "different ways that couples settle differences," violence is commonly framed in terms of "difficult situations affecting women's health," "events that may occur in your relationship with your spouse," or directly "acts of violence that you may have experienced with you spouse or someone else close to you." In addition most in-depth surveys include a series of questions on other kinds of violence (sexual, emotional, economic), marital control and decision-making, attitudes towards

violence and gender norms as well as information on other contexts and perpetrators (sexual harassment, childhood sexual abuse, sexual assault by non-partners).



Enhancing disclosure

All studies on sensitive subjects, such as violence, face the challenge of how to get people to talk openly about intimate aspects of their lives. The degree to which this is achieved depends partly on methodological issues (for example, are the questions clearly worded and easy to understand, are women given more than one opportunity to disclose violence, etc). Another major issue influencing disclosure is how comfortable women are made to feel during the interview. This may be affected by many factors including the sex of the interviewer, how long the interview is, whether others are present, and whether the interviewer appears to be genuinely interested in her story, and willing to listen without making judgements.

Over-reporting, or the fabrication of acts of violence, is generally felt to be rare in violence research [122, 124, 125, 130]. Because of the stigma that is attached to being identified as a victim of abuse in most societies, women have little motivation for reporting abuse that has not actually occurred. It is much more common for women to deny or minimize experiences of violence due to shame, fear of reprisals, or feelings of self-blame or loyalty to the offender.

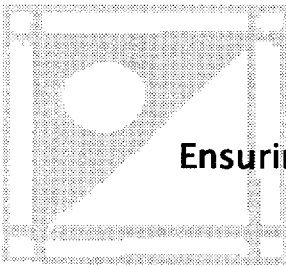
Smith presented a range of reasons that may inhibit women from disclosing violence [130]:

An abused woman may not reveal her victimization to an interviewer for a variety of reasons. She may feel that the subject is too personal to discuss, she may be embarrassed or ashamed, she may fear reprisal by her abuser should he find out about the interview, she may misunderstand the question, or she may think the abuse was too minor to mention. She may even have forgotten about it, particularly

if it was minor and happened long ago. If the abuse was especially traumatic, she may not want, or be able to recall it.

Researchers on violence, and particularly feminist researchers, have proposed a series of strategies to enhance disclosure. Two important strategies are giving several opportunities to disclose violence within the interview, and using behaviorally specific questions, rather than asking women more general and subjective questions, such as, "have you ever been abused?" Providing multiple opportunities to disclose allows women more time to think about their answers, to recall events that may have happened long ago or in different contexts, and to build up enough trust to talk about violence [124]. Another key strategy lies in the selection and training of interviewers who are skilled in developing rapport with respondents. Brush argues,

The most important barrier to adequate assessments of the extent and dimensions of intimate violence through surveys is the context of the interaction between interviewer and interviewee. To elicit adequate information about the highly stigmatized, traumatic phenomenon of battering requires an infusion of trust, safety and intimacy into the interviewing relationship [135].



Ensuring women's safety

A number of researchers have pointed out that violence research entails specific risks that are unlike those posed by most other fields of inquiry [124, 126, 127, 130, 138]. Asking women to disclose experiences of violence may expose them to the risk of retaliation by an abusive partner or family member. Moreover, talking about abuse may cause women to relive painful and scary events, and this in itself can be traumatic if they do not have a supportive environment [126].

Researchers may also be placed at risk of physical harm by abusive partners. However, the most common risk for field workers is the emotional toll of listening to women's repeated stories of despair,

physical pain and degradation. Particularly when field staff have personal experiences of abuse, these can be overwhelming.

The World Health Organization recently published guidelines for addressing ethical and safety issues in violence research [128]. The guidelines were based on the experiences of an international network of researchers on violence, and the authors argue that they are critical, not only to protecting the safety of respondents and researchers, but also to ensuring data quality.

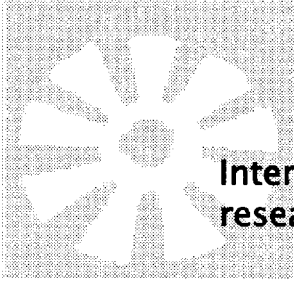
Significantly, the use of methods to maximize disclosure is framed as an ethical issue, as underestimating the extent of violence may harm women by reducing resources available for interventions.

Box 2

Putting Women's Safety First: Ethical and Safety Recommendations for research on Domestic Violence against Women

- The safety of respondents and the research team is paramount, and should infuse all project decisions.
- Prevalence studies need to build upon current research experience about how to minimise the under-reporting of abuse.
- Protecting confidentiality is essential to ensure both women's safety and data quality.
- All research team members should be carefully selected and receive specialized training and on-going support.
- The study design must include a number of actions aimed at reducing any possible distress caused to the participants by the research.
- Fieldworkers should be trained to refer women requesting assistance to available sources of support. Where few resources exist, it may be necessary for the study to create short-term support mechanisms.
- Researchers and donors have an ethical obligation to help ensure that their findings are properly interpreted and used to advance policy and intervention development.
- Violence questions should be incorporated into surveys designed for other purposes only when ethical and methodological requirements can be met.

World Health Organization, 1999



International trends in violence research

As more international data on violence against women become available, two distinct research trends have emerged. Several national studies have produced prevalence estimates on violence. Most of these studies, with a few important exceptions, such as the Canadian and US National Surveys on Violence against Women [7, 14], have been primarily designed for other purposes. For example, recent Demographic and Health Surveys and Reproductive Health Surveys have included a limited number of questions on violence in national surveys in Egypt [47], South Africa [23], Puerto Rico [45], Paraguay [43], Moldova [33], Philippines [31] and Colombia [40]. These surveys typically use aggregate "gateway" questions, such as "have you ever been beaten by anyone since you were 15/were married? By whom?"

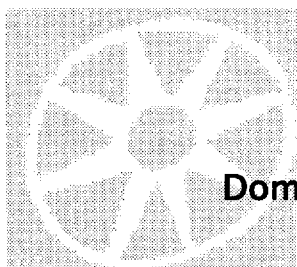
The other trend is represented by smaller, in-depth studies providing more detailed information on women's experiences of violence [12, 19, 22, 38, 56, 122]. Although these studies cover a limited geographical region, they tend to place more emphasis on the interaction between interviewers and respondents and issues of safety.

There are many potential advantages to including violence questions in national surveys designed primarily for other purposes. In many cases, the studies are conducted by national statistical bureaus, thus the results are given the legitimacy of "official statistics." This can be very useful for the purposes of advocacy. Nationally representative data are useful for local program planning, and also permit in-depth analysis of variation between regions. Finally, the large data sets generated by these studies, including many other reproductive and child health outcomes, can be used to deepen understanding of risk factors and health consequences of violence.

However, there are also potential drawbacks to this strategy. In general, prevalence estimates have been higher in the smaller, more

focussed studies than in the national surveys designed primarily for other purposes [12]. One explanation suggested for this is that because the focussed studies place more emphasis on the use of methods for enhancing disclosure they are able to produce more accurate prevalence estimates [128].

Therefore, one tradeoff of using multi-faceted surveys for producing prevalence estimates on violence may be the risk of significant under-reporting. Under-reporting of violence will dilute associations between potential risk factors and health outcomes, leading to falsely negative results. Underestimating the dimensions of violence may also result in violence intervention programs not receiving the priority they deserve in the allocation of resources. Finally, because safety concerns have not been systematically addressed in these studies, women may be placed at risk of retaliation or other harm as a result of their participation in the study.



Domestic violence in Nicaragua

In Nicaragua, violence towards women has only been widely recognized as a significant social problem in recent years. The Sandinista revolution of the 1980's created many opportunities for women, but failed to make substantial progress in overcoming the culture of *machismo* in Nicaragua. Women still experience a high degree of subordination in economic, legal and social spheres [139]. The use of violence by husbands against wives for the purpose of punishment or "correction" is widely accepted, and many women view violence as an expected part of life, referring to it as yet another "cross to bear." Furthermore, the experience of a prolonged war in Nicaragua that involved most of the population in one way or another has resulted in a generalized high tolerance for the use of violence for the resolution of conflicts. Finally, Nicaragua has been immersed in political and economic turmoil for over twenty years, which has led to generalized frustration and an overall increase in social violence. The combination of structural adjustment programs

and widespread corruption during the nineties have contributed to the country's dramatic impoverishment, with the result that Nicaragua is now considered the poorest country in the Western Hemisphere [140].

Paradoxically, Doña Violeta Chamorro's conservative government, which took over in 1990 with the aim of bringing back traditional family values and roles for women, coincided with the growth of women's organizations, collectives, and alternative health centers promoting women's rights [141, 142]. There are Women's Houses in nearly every major city that provide women with legal, health and psychological assistance. Many other organizations carry out educational activities, such as legal literacy courses for community women in order to provide better support for women living with violence, or violence prevention activities for men. Largely as a result of the efforts of these groups, domestic violence has been recognized as a key issue affecting women in Nicaragua.

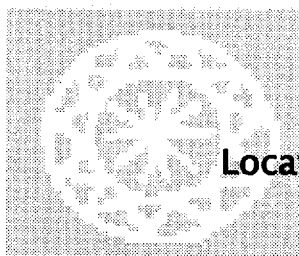
One of the most important initiatives is the *Comisarias de la Mujer y la Niñez*, or the Police Stations for Women and Children, a joint effort between the Nicaraguan Women's Institute, the National Police and numerous non-governmental organizations to create a community based support system for abused women. Among the innovative measures carried out by the *Comisarias* to improve women's access to the justice system was the training of women police officers in domestic violence and crisis intervention, as well as the Supreme Court's appointment of over 30 women physicians nominated by women's organizations to serve as forensic doctors.

The driving force behind the anti-violence movement is the Network of Women Against Violence, which brings together over 150 different groups throughout the country. The network started in 1992, and carries out yearly public awareness campaigns against violence, and has organized other activities such as a national conference on violence and educational materials for women living in violence situations. The network has regional chapters, as well as commissions to reach out to special groups such as churchwomen and adolescents. The network has also established links with researchers in order to develop greater knowledge about violence for use both in advocacy and in program and policy development.

At the time this research began, efforts to improve domestic violence legislation and programs had been constrained by the lack of population-based data demonstrating the magnitude of partner abuse in Nicaragua. Although the reported incidence of partner

abuse had grown in recent years, in the absence of epidemiological research, it was not been possible to determine whether this represented an actual increase or whether, now that services were more widely available, women were more willing to report cases of domestic violence. Therefore this research was initiated to generate population-based data on the magnitude and characteristics of domestic violence against women.

The present research and advocacy project grew out of ongoing research collaboration between Epidemiology the Department Public Health and Clinical Medicine of Umeå University and the Department of Preventive Medicine, UNAN/León, in the field of Reproductive and Child Health. The Nicaraguan Network of Women against Violence also participated in all stages of research planning and follow-up. The Center for Health and Gender Equity collaborated in the analysis and interpretation of results.

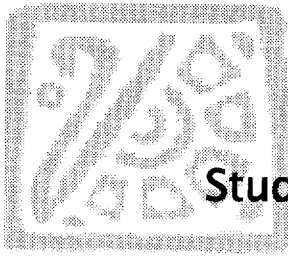


Locating myself

One aspect of this project that contributed to the fluid communication between activists and researchers was that I, as the principal researcher, came from the women's movement rather than an academic setting. I joined the Umeå-León collaboration almost by chance, after attending a meeting in León in 1993 when plans for a household survey on reproductive and child health were being presented. I had already worked for many years in Nicaragua in popular health education and had close ties to the women's movement, although not related to anti-violence work. During the meeting I insisted, more from conviction than from empirical knowledge, that the research team was committing a grave error by not addressing the links between violence and women's health. They graciously responded by inviting me to join the research team, despite the fact that I knew nothing at all about conducting research at the time and not much more about violence.

Fortunately, once I accepted the invitation I found supportive advisors on both sides. I felt intuitively that in order to make a useful

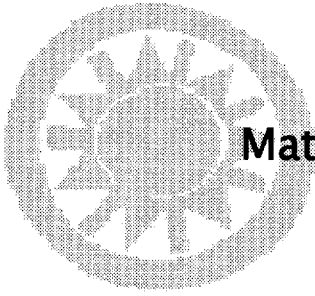
scientific contribution I needed to learn more from those who had been working with battered women for many years and the best way to do this was to become personally involved in their ongoing advocacy work. I joined the Network of Women against Violence and soon became immersed in the organization of a national conference on violence. At the same time I began to travel to León and Sweden to learn about research methods. I expected to work primarily in qualitative, action-oriented research and did not initially even consider studying Biostatistics. However, I was committed to pursuing research that would be useful for advocacy, and therefore my colleagues and I held a workshop in Managua with activists and researchers to help shape the research agenda. The main consensus from this consultation was that "hard numbers" were urgently needed in order to persuade policy makers to reform laws and to provide more resources for victims of violence. The results of this meeting led to our decision to focus on the prevalence of violence and thus, indirectly, to my becoming an epidemiologist.



Study aims

The overall aim of the research was to explore the problem of domestic violence in León, Nicaragua, with emphasis on its magnitude, characteristics and associated factors. The specific aims of the research were the following:

- To measure the prevalence, frequency and severity of sexual or physical violence experienced by Nicaraguan women either currently or at any time in their lives from a current or ex-intimate partner or boyfriend (PAPER I);
- To identify background factors associated with partner abuse (PAPER I);
- To describe the characteristics and circumstances of the abuse, from a quantitative as well as qualitative perspective (PAPER II);
- To measure the physical as well as psychological effects of partner abuse on women and their children (PAPER II, III);
- To describe women's responses to partner abuse and to identify factors that predict whether a woman will leave an abusive relationship (PAPER IV);
- To compare the prevalence data from three population-based studies in order to identify methodological and ethical issues influencing the quality of violence research (PAPER V);
- To describe how epidemiological research can contribute to a participatory process of social change (PAPER VI).



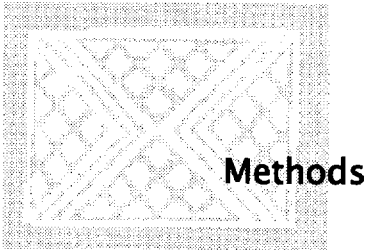
Materials and methods

Study area

The study was carried out in León--Nicaragua's second largest city--with a population of approximately 200,000 inhabitants. León is home to the country's first and largest university and was formerly the hub of the country's cotton production, one of Nicaragua's major export crops. With the collapse of cotton production in 1992, as well as two major natural disasters (the eruption of the Volcano Cerro Negro, and a tidal wave along the Pacific Coast) León had become, by the mid-nineties, one of the regions with the highest unemployment figures nationally.



Map of Nicaragua and León.



Throughout the research process we relied on a participatory, feminist conceptual framework [143-145]. In keeping with this approach, an explicit goal of the research was to produce knowledge that would reveal gender and class inequities in power relations and access to resources, as well as to provide insights into cultural norms and institutions that hold these power imbalances in place.

A second explicit goal was to produce knowledge that would contribute to social transformation. We consciously attempted to ground the research in a respect for women's experiences and to use our own subjectivity as a part of the process. We considered the process to be participatory, not necessarily in terms of the particular research methods used, but rather in recognition of the shared ownership between the researchers and activists who were involved in the process [146, 147].

Some of the methods and instruments used were revised in light of these objectives. One example of this was our reformulation of the introduction to the questions on violence. The standard introduction of the CTS explains that no matter how well couples get along, they sometimes fight, and have different ways to settle their differences. In our introduction, we decided to tell women "Now I am going to ask you some questions regarding different kinds of violence that many of us as women have experienced in some way or another. We know that these are difficult subjects to talk about, however, sometimes talking can be the first step for making changes in our lives."

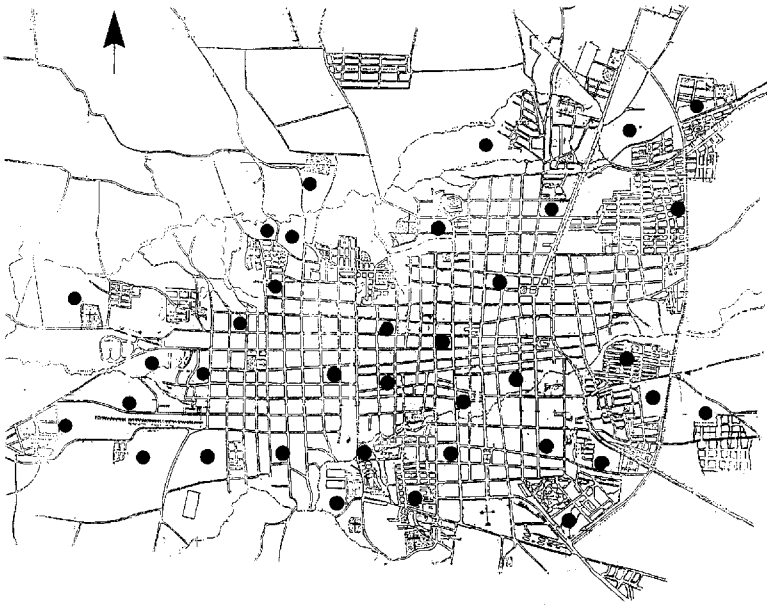
This introduction represents a significant departure from the CTS. The first message is that violence is a part of the lives of most women. This statement aims to break down the perception among many abused women that they are alone in these experiences. It also

helps to bridge the distance between respondents and interviewers by acknowledging that any woman may experience violence, including the interviewers, and that it is therefore nothing to be ashamed of. Secondly, the opportunity to talk about her experience is presented as a potentially beneficial act as it may allow her to think about her life in new ways. Finally in the initial introduction to the survey, women were told that the purpose of the study was to learn from women who had suffered violence in order to help others in the same situation. Thus, women were invited to tell their stories as an act of solidarity with other women in similar circumstances.



The community survey in León (Papers I-V)

The cross-sectional survey was based on a cluster sample frame of 10,867 women 15-49 years old, used for a household survey on Reproductive and Child Health in León in 1993 [148]. A random sub-sample of 591 women was generated representing both the urban and rural regions of León Municipality. This figure was based on an assumed prevalence of domestic violence of 30%, with a 10% margin of error. The sub-sample included 25 pairs of women living in the same household. To ensure confidentiality and the safety of informants, only one woman per household was selected by excluding one woman from each pair, alternating between the older and younger woman. Among the remaining 566 women, 488 were located and interviewed. Whenever possible, women who had moved since the 1993 survey were located at their current residences. Seventy-eight women had left the country or moved without leaving forwarding addresses. No woman refused to be interviewed; in one case the woman's husband refused to allow her to be interviewed in his absence, and this interview was suspended.



Map of León with selected clusters in the urban area indicated by dots.

The physical aggression sub-scale of the Conflict Tactics Scales, with a modified introduction, was used to measure current and past prevalence of physical violence, as well as frequency and severity. Three additional incidents representing acts of verbal aggression (yelling, humiliating, and threatening to hit) were included to facilitate the interview but they were not scored as physical violence. A woman was considered to have experienced partner abuse if she had experienced one or more acts of physical violence in her life on the part of a male partner with whom she was currently or had been intimate.

Emotional distress was measured using a Personal Health Survey (PHS) developed by a team of Nicaraguan and international experts to detect a variety of mental health problems, including depression, anxiety and trauma [149]. The 10-item PHS is scored on a 3-point subscale that measures the frequency of symptoms experienced during the last month (rarely, sometimes, almost always). Six items on the scale refer to somatic and psychological affective complaints (insomnia, fright, nervousness, sadness, tiredness, and indifference). Three items refer to functional problems (difficulties with work, family or social relations) and the final item is a global self-evaluation, "Have you felt you had emotional problems and needed professional help?" The PHS was administered to women after the

general background questions and before asking about experiences of violence.

Once a woman was classified as having experienced physical partner abuse she was interviewed at length regarding the characteristics and circumstances of abuse. All women were asked whether their husbands prohibited them from carrying out six everyday activities (visit family or friends, receive visits, work outside the home, study or use contraceptives.) Women with children were questioned regarding behavioral, emotional, or learning problems among their children and whether any of them had been physically, emotionally or sexually abused. Finally, all women were asked about their access to social support in the form of friends, confidants, family support and material support (someone to lend money or lodging in case of need). Socio-economic status was assessed using the method of Unsatisfied Basic Needs, which measures family access to a series of basic services such as sanitation, education, housing, as well as economic dependency. This method has been adapted and used for socio-economic research in Nicaragua [150, 151]. Women living in households where one or more basic needs were unsatisfied were classified as poor.

Trained female field workers and a supervisor carried out the fieldwork during April-June 1995. The houses of the women in the sample were identified by a coding system and maps, developed during the 1993 reproductive health survey. The field supervisor and one of the main researchers reviewed all the questionnaires. Forms with missing data or visible inconsistencies were returned to the field. Data quality was further controlled through a series of logical data controls performed automatically during data entry. Repeated interviews were performed on a 10% sample. No women reported less violence than in the previous interview although, in a few instances, additional violent events were disclosed during the second interview.

Ethical approval for the study was obtained from Nicaraguan University authorities and a technical advisory committee was set up for the study made up of local women's groups and municipal authorities. Special measures were taken to ensure the safety of the respondents and interviewers. Interviewers received special training on domestic violence and crisis management. All interviews were carried out in complete privacy. Interviewers initially presented the study to the household as a maternal and child health study, and the actual subject of the interview was revealed only to the woman herself. Alternative questions were agreed upon in advance and used

if someone arrived during the interview. If it became impossible to achieve privacy, or if the woman became too distressed to continue, the interview was suspended and resumed at a time and place chosen by the respondent. An educational pamphlet on domestic violence produced by the Violence Network was offered to all informants, and women with violence-related problems were offered referrals for free psychological, health or legal assistance. Over one hundred women were referred for mental health services, and three women for medical or legal services. Extensive observations, including additional relevant information or opinions expressed by the respondents were recorded by the field workers, and later transcribed for further analysis. Weekly debriefing sessions were held with field workers to discuss technical concerns related to the fieldwork and to provide emotional support.



Multivariate logistic regression was performed to test for associations between violence and a series of background factors. Associations were also tested between violence and social networks, marital control, problems in children and emotional distress. Population attributable risk percents were calculated as $([\text{proportion exposed among all cases}] \times [\text{relative risk}-1])/\text{relative risk}$. Additional analysis was performed on the group of women who had experienced partner violence ($n=188$) in order to evaluate factors associated with a woman's likelihood to use any of three coping strategies (help seeking, temporary separations and self-defense). Thereafter, Cox Proportional Hazard Modeling was used to estimate the association between the length of time that women remained in a violent relationship and a series of background and contextual factors.

Both theory and the results of logistic regression and Cox Regression were used to construct a hypothesized path model for predicting how the use of specific coping responses would affect women's likelihood to separate permanently. We hypothesized that women who experienced less severe violence would have greater success in coping with the situation on their own, for example by defending themselves either verbally or physically. In contrast, women experiencing either severe abuse themselves, or whose children were also affected by the violence, would be more likely to seek help outside the home or to leave home temporarily during abusive episodes.

The data were analyzed using Epi Info 6.04 for univariate analysis and SPSS 9.0 for multivariate logistic regression, Chi² analysis, Cox survival analysis and Kaplan Meier life-table analysis [152]. Structural equation modeling was performed using Amos 3.4 [153]. Statistical significance was tested using 95% confidence intervals and p values <.05.



Comparison of León research with other violence studies in Nicaragua (Paper V)

The results of the León survey were compared with two other studies performed subsequently on violence in Nicaragua.¹

One was a study performed in 1997 in Managua, Nicaragua's capital. It was carried out by the Interamerican Development Bank (IDB), together with the International Foundation for Global Challenges (FIDEG) a national non-governmental organization specializing in macro-economic research with a gender focus [154]. The purpose of the study was to measure the impact of domestic violence on women's earnings and use of health services. A random sample of 378 ever-married women representing the municipality of Managua were interviewed regarding household and economic issues, as well as experiences of physical, sexual and emotional abuse by an intimate partner. The questionnaire included household information, with detailed economic and demographic information collected for each member of the family. In addition, women were questioned regarding recent illnesses, use of health services and educational and health information regarding an index child between 5-12 years of age. Experiences of violence were measured using an adaptation of the Revised Conflict Tactics Scale (CTS2) [137].

The second study was a Demographic and Health Survey (DHS) performed on a nationally representative sample of 8507 ever-married women [155]. The survey was carried out in 1998 by the Nicaraguan Institute for Statistics and Census Information (INEC), with technical assistance from MACRO International.

¹ The first author of this paper (ME) was principal researcher in the León study and technical advisor to the FIDEG-IDB study and the Nicaraguan Demographic and Health Survey.

A technical advisory group was established with the participation of relevant government agencies, participating donors and international agencies, and representatives of civil society organizations dealing with reproductive health, children's rights, and violence against women. The technical advisory group participated in the definition of research priorities and the adaptation of the instrument to Nicaraguan conditions.

Data were collected with three questionnaires:

- A household questionnaire that was applied in 11,528 homes.
- An individual questionnaire for all women aged 15-49 years identified in the household questionnaire. The core interview was performed with 13,634 women.
- An individual questionnaire was administered to a random sub sample of 2912 men aged 15-59 years.

The decision to include a special module on violence in the Nicaraguan DHS arose out of joint discussions between MACRO, donors and the technical advisory group. The León study had sparked widespread public discussion of domestic violence and it was felt that nationally representative and official data would be even more useful for both advocates and policy makers. The possibility of linking violence with maternal and child outcomes was another important consideration. A further incentive was the provision of additional funding and technical assistance for this module by the Swedish International Development Agency (Sida), which had supported much of the ongoing research and advocacy work on violence in Nicaragua. This support enabled the DHS process to benefit from the experiences of the León and Managua research, as well as from international experience in violence research.

The module itself was developed jointly between MACRO International and the Center for Health and Gender Equity, and was reviewed by the technical advisory committee. The module collected information on women's status, and access to financial resources, attitudes towards violence and gender roles, as well as experiences of violence. A general question was used at the beginning of the violence section, asking "since the age of 15 has

anyone beaten or mistreated you physically?" Thereafter, women were asked how often in the last 12 months their partner had done any of the acts mentioned on an 11-item list. The items included in the instrument were based on the results of the León and Managua studies, and information provided from in-depth interviews with battered women and focus groups with women activists.

Women identified as having experienced physical violence were questioned regarding characteristics of violence (violence in pregnancy, children witnessing), and whether she told anyone about the violence or sought outside help. Finally, the module collected information on women's experiences of unwanted sexual contact before and after the age of 15 by any person. The violence module was placed at the end of the interview schedule. Interviews were completed with 8508 ever-married women. Analysis was weighted to account for oversampling in some regions and to adjust for respondents living in households with more than one eligible woman.

Secondary analysis was performed on the three data sets with an emphasis on possible sources of variation among the prevalence estimates. Prevalence estimates were recalculated to ensure uniform definitions. The data sets were compared with regard to the characteristics and severity of violence as well as whether violence had taken place within the last 12 months or previously. Multivariate logistic regression analysis was performed on each data set separately to assess the effect of confounding on the risk factors for violence. Thereafter, all three data sets were merged and pooled analysis was performed to assess the combined effect of confounding variables on prevalence estimates. Additional analysis was performed on the DHS data set to evaluate effects on prevalence due to interviewer bias and the presence of others during the interview. Data were analyzed using SPSS 9.0 for logistic regression and Chi² tests. Significance was tested by means of 95% confidence intervals and p values < .05.

After fieldwork was completed in each study focus groups were carried out with fieldworkers and research staff to evaluate the fieldwork. In all, 5 focus group discussions (FGD) were carried out with 36 participants. Two primary themes were covered in all of the FGDs: the success of efforts to ensure the safety of informants and interviewers; and issues affected the validity of the data gathered. All FGD were taped and transcribed verbatim. The material was coded according to predetermined themes as well as new themes

emerging from the data². The material was then reorganized and analyzed according to broader categories using OpenCode [156]. Many of the issues resulting from the focus group discussions (e.g. regarding privacy and disclosure) were used in planning the comparative analysis of the three data sets.



Narrative analysis (Paper II)

Before the survey, semi-structured open-ended interviews were carried out with women who had experienced violence to improve the focus of the survey. Further, the survey questionnaire included many open-ended questions and extensive field notes were made after each interview. Finally, thematized, in-depth interviews were carried out with two additional women who had lived in violent relationships. The women were chosen according to their specific experiences of partner abuse and their ability to describe and interpret their own actions and feelings about the experience (intensity sampling). The in-depth interviews were taped and verbatim transcripts were made of these as well as the interviewers' field notes for further analysis.

Ana Cristina was a 27 year old law student who had lived through several years of abuse until ending her marriage 7 years earlier, and Maria Dolores, a 26 year old nurse, who had been married for 9 years and had separated two weeks before the interview³. Both women shared their experiences in the form of narratives, i.e., their stories described how and when specific events had occurred ("what happened"), as well as informed about the context and meaning that events had for the women ("what it was like").

Narrative analysis deals primarily with how individuals explain and interpret events in their lives [157]. Since the stories are located in time, narrative analysis is useful for understanding the order of events, in this case the events leading up to and ensuing from violent episodes [158, 159]. The narratives were first organized according to the time frame they represented. Since the aim was to understand

² Coding and analysis of focus group results was performed by ME, with the participation of the other authors in the interpretation of results.

³ Names and some identifying characteristics of both women have been changed to protect their identities. Texts were translated from Spanish by the authors.

how women experience and interpret the experience of abuse itself, the analysis concentrated on the period during which the women were living with their abusive husbands. Particular emphasis was placed on women's descriptions of the different kinds of abuse they experienced, and how interactions with their family and friends during this period shaped the way in which they regarded the abuse. The material was coded in OpenCode [156] using codes emerging from the data. These were then organized into central themes, according to the three outer domains of the ecological framework:

- Events and feelings occurring within the context of the relationship itself (i.e. the characteristics of the abuse)
- Interactions with others (extended family, friends, work, community-level organizations)
- Information that provided insights regarding cultural norms and attitudes.

Information pertaining to the inner circle of the ecological model, (i.e. the woman's personal history), was not emphasized in this analysis as, for the most part, it preceded the period under study. The content of the selected texts was then analyzed and compared to the survey results.



Participatory Action Research (Paper VI)

In November, 1995, the Women's Network Against Violence presented a reform bill to the National Assembly which included harsher sentences for offenders, as well as providing restraining orders to protect victims (Red de Mujeres, 1996). Prior to this, the Nicaraguan Criminal Code, which dates back to the nineteenth century, did not criminalize violent acts, but rather the physical injury caused by the assault. In order to be considered a criminal offense an injury needed to be severe enough to require at least 10-15 days to heal. Since Nicaraguan law did not guarantee protection for victims of domestic violence, abused women were often reluctant to report abuse for fear of reprisals. Furthermore, the sentences for injuries due to violence were typically minimal, and even when convictions were obtained, jail sentences were often suspended or commuted to fines as low as ten dollars.

The reform bill was initially sent to the Justice Commission of the National Assembly, which was charged with determining whether the Assembly should vote on the bill and in what form. The Network initiated an intensive lobbying campaign in support of the bill. Recognizing that the resistance in parliament would be great, an action research project was carried out by volunteers from the network, with the technical assistance of the UNAN-León research team. The study aimed to provide legislators with information regarding the political and technical viability of establishing restraining orders, and of criminalizing psychological injuries, which were considered to be the most controversial aspects of the law. Specifically the study aimed to determine the following:

- What kinds of acts are considered violent and, specifically, do people recognize psychological injury as a kind of violence?
- What kinds of protective, punitive, or rehabilitative measures are considered useful for victims and perpetrators of abuse?
- How do people assess the usefulness of current resources available for women living in violent relationships?

The research team was made up of four women from the Women's Network and one man from the Men's Network against Violence, plus two researchers from UNAN-León (ME and AH). The team carried out a total of 19 focus group discussions with the participation of 150 people. Different member organizations set up the groups in order to ensure that the results would reflect diversity between geographic regions as well as educational and professional backgrounds, sex and age. Contacts were made through professional organizations and relevant government ministries in order to obtain the participation of well-respected professionals representing diverse ideological and institutional backgrounds⁴. The research team carried out the focus groups in pairs, one person moderating and the other reporting. Focus groups were conducted with urban and rural men and women, young men and women, abused women, women's rights activists, children's rights activists, children, mental health professionals, forensic doctors, judges and men and women police.

⁴ For example, all judges from Managua were invited to a FGD but only women judges accepted the invitation. In order to obtain a more diverse group, we asked the Director of the National Judicial School, to allow us to carry out a FGD with 19 local judges from all over the country who were attending a national course. Contacts with the Police were made through the Ministry of the Interior, and the mental health group consisted of nationally known mental health experts who participate in a national advisory board for the Ministry of Health. Forensic Doctors were invited through the president of the Association of Forensic Doctors.

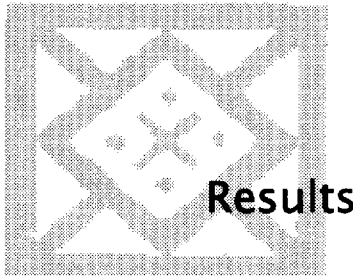
Various participatory techniques were used in the focus groups, including pile sorts, ranking and graphic illustrations. In one exercise, each participant was given a pack of 19 cards, each with a different act written on it.⁵ Participants were asked to rank the acts on the card according to severity and to tape each card on the wall under one of three headings: not violence, moderate violence, and severe violence.

In a similar exercise, participants were given a list of possible things that could be required of or done to a perpetrator.⁶ Each participant was asked to sort the measures according to which they considered appropriate in cases of light violence, which they supported in cases of severe violence, and which they would not support under any circumstance.

In the final exercise, graphic illustrations (Venn diagrams) were used to assess community resources for abused women according to how accessible and helpful they were considered [160]. Large and small cardboard circles were placed on a poster, according to how helpful a person or institution was to abused women. The distance from the center of the diagram (representing the abused woman) indicated whether or not the resource was accessible for women. During each of the exercises participants were asked to explain their reasoning. In keeping with participatory methodology no attempt was made to force consensus on issues, rather the purpose of the sessions was to obtain as wide a diversity of opinions as possible. Extensive notes were taken in each session, which were also taped and transcribed for further analysis. The data were coded according to themes using OpenCode [156]. One member of the team coded each session, and codes were verified by another member (who was not present in the discussion.) The material was organized and interpreted by the research team jointly and peer debriefing was held with other researchers and activists to validate the conclusions.

⁵ For example, acts such as yelling at your wife in public, pushing and shoving, not giving your wife money for the house, beatings that leave scars, beatings during pregnancy, persuading her to have sex when she isn't in the mood, forcing her to have sex by physically holding her down, having sex outside of marriage, etc.

⁶ For example, take away his weapons, force him to get counseling, force him to pay for the damage he caused, charge him a fine, prohibit him from entering his house, throw him in jail overnight, 3-6 months in prison, 2-5 years in prison, etc.



The present thesis is made up of the following papers:

| Title | Methods | Sample | Paper |
|---|--|--|------------|
| Wife abuse among women of childbearing age in Nicaragua | Cross-sectional survey | <ul style="list-style-type: none"> Representative sample of 488 ever-married women between 15-49 years in León | I |
| Candies in hell: Women's experiences of violence in Nicaragua | Cross-sectional survey Narratives | <ul style="list-style-type: none"> 360 ever-married women 2 focus groups discussions: 18 women In-depth interviews: 2 women | II |
| Domestic violence and emotional distress: Results from a population-based study | Cross-sectional survey | <ul style="list-style-type: none"> 488 ever-married women between 15-49 years | III |
| Women's strategic responses to violence in Nicaragua | Cross-sectional survey | <ul style="list-style-type: none"> 188 ever-abused women | IV |
| Researching violence against women: Methodological considerations from three Nicaraguan studies | Three cross sectional studies Focus group discussions | <ul style="list-style-type: none"> 360 ever-married women in León 378 ever-married women in Managua 8507 ever-married women (nationally representative) 5 focus group discussions with 36 participants | V |
| The Nicaraguan Network of Women against Violence: Using Research and Action for Change | Participatory Action Research | <ul style="list-style-type: none"> 19 focus group discussions with 150 participants | VI |



The prevalence and characteristics of domestic violence

"I don't know why I'm still alive. . ."

Ana Cristina was married at the age of 15 to a man in his late thirties. Her husband was a soldier, a *Sandinista*, which in the early days of the revolution carried with it a romantic aura that quickly earned him the respect and approval of Ana Cristina's mother. Shortly after the marriage, he began to beat Ana Cristina savagely and continued to do so regularly throughout the subsequent five years. She learned to listen for him at night and be ready to escape if necessary, with the children.

... I had to sleep in other people's houses to avoid getting beaten when he came home. I would climb over the back wall with my daughters when he arrived, and he would shoot at me. I escaped many times from his bullets. I don't know why I'm still alive...

The results of the community survey indicated that Ana Cristina's experience is far from unique in Nicaragua. Out of the whole sample of women between the ages of 15-49 (N=488) 40% reported having experienced physical violence by a current or former partner at some point in their lives (Table 3).

Table 3. Prevalence of physical violence experienced by women at some point in their lives.

| Selection | Lifetime Prevalence | |
|-------------------------------------|---------------------|-------|
| | % | N |
| Total women 15-49 (n=488) | 40 | (194) |
| Never married with boyfriend (n=79) | 8 | (6) |
| Ever married (n=360) | 52 | (188) |

A description of the 488 respondents is given in Table 4 for the sample as a whole as well as for a subsample of ever-married women and ever abused women. The characteristics of the women with regard to educational attainment, poverty, age groups and current marital status are similar to national figures [155].

The lifetime prevalence of physical violence for women who had been married or lived with a partner ($n=369$) was 52%, compared to 8% among women who had dated but never lived with a man ($n=79$). Given the wide disparity between the two groups, only ever-married women were included in the analysis of risk factors for partner abuse.

Twenty-seven percent of ever-married women reported experiences of physical violence during the last 12 months (Figure 3). Seventy percent of the current and former violence was classified as severe. Among women reporting violence within the last 12 months, a relation between frequency and severity of violence was found, such that women reporting moderate violence reported less frequency of violence, while women who experienced severe violence also reported greater frequency of violence (Table 5).

Table 4. Description of total sample of women aged 15-49 ($n=488$), women who have been in a formal marriage or common-law union at any point in their lives ($n=360$), and women who had ever experienced physical partner abuse ($n=188$).

| <i>Variable</i> | | <i>Total selection (n=488)</i> | | <i>Ever married women (n=360)</i> | | <i>Ever-abused women (n=188)</i> | |
|---------------------------|--|------------------------------------|-------|---|-------|--------------------------------------|-------|
| | | % | (N) | % | (N) | % | (N) |
| Education | None | 8 | (40) | 9 | (31) | 7 | (13) |
| | Primary (complete or incomplete) | 39 | (189) | 45 | (163) | 48 | (91) |
| | Secondary (complete or incomplete) | 53 | (259) | 46 | (166) | 45 | (84) |
| Poverty | Non Poor | 21 | (105) | 20 | (71) | 15 | (28) |
| | Poor | 79 | (383) | 80 | (289) | 85 | (160) |
| Zone | Rural | 18 | (87) | 18 | (66) | 15 | (28) |
| | Urban | 82 | (401) | 82 | (294) | 85 | (160) |
| Age | 15-19 | 23 | (110) | 9 | (31) | 7 | (14) |
| | 20-29 | 37 | (181) | 39 | (140) | 39 | (73) |
| | 30-39 | 26 | (127) | 34 | (121) | 35 | (66) |
| | 40-49 | 14 | (70) | 19 | (68) | 19 | (35) |
| Current Marital Status | Married/ Common-law | 57 | (279) | 78 | (279) | 77 | (145) |
| | Single/ Separated/ Divorced | 43 | (209) | 23 | (81) | 23 | (43) |

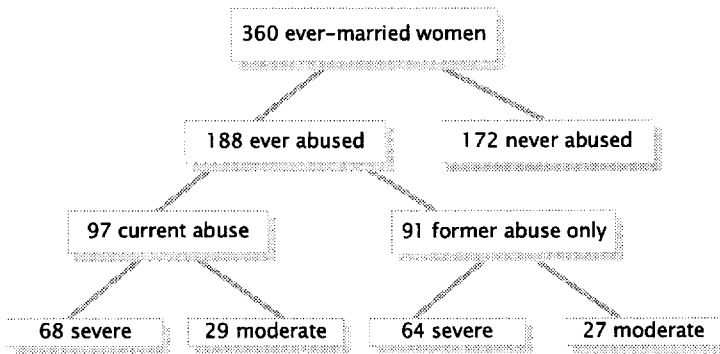


Figure 3. Prevalence of current and former abuse among ever-married women according to severity.

Sixty percent of women abused during the last 12 months experienced more than one event, while 20% experienced severe violence more than 6 times during the previous year.

The acts of violence most frequently mentioned by women were pushing, punches and kicks, followed by slaps and thrown objects (Figure 4). The median duration of violence experienced by women was 5.0 years overall, with women between 35-49 reporting a median duration of 10 years (Table 6). Thirty one percent of abused women reported beatings during pregnancy, of which 70% reported that abuse was of the same intensity or stronger compared to when they were not pregnant. Half of the women who were beaten during pregnancy reported receiving blows to the stomach.

Table 5. Frequency of violence during the last 12 months according to severity (n=97 currently abused women)*.

| Frequency | Moderate Violence | | Severe Violence | | Total | |
|------------------------------------|-------------------|-------------|-----------------|-------------|------------|-------------|
| | % | N | % | N | % | N |
| Once | 18 | (17) | 22 | (21) | 40 | (38) |
| Occasional (3-5 times) | 10 | (10) | 28 | (27) | 38 | (37) |
| Frequent (6-20) | 2 | (2) | 9 | (9) | 11 | (11) |
| Very Frequent (more than 20 times) | 0 | | 11 | (11) | 11 | (11) |
| Total | 30 | (29) | 70 | (68) | 100 | (97) |

* $\chi^2 = 9.53$ df=3 p<0.02

Substance abuse, particularly alcohol use, was apparently related to partner abuse. Fifty four percent of abused women indicated that their husbands were generally intoxicated during the violence, and nearly one third cited alcoholism as the major cause of violence.

Among ever-married women, 71% had experienced acts of emotional aggression from a partner, including insults, humiliations and threats of physical violence. A considerable overlap was found between physical, emotional and sexual violence, with 21% of ever-married women reporting all three kinds of abuse (Figure 5). Nearly all of the women living with physical violence reported that verbal insults and humiliations generally accompanied physical abuse. Thirty six percent reported that they were commonly forced to have sex while being beaten.

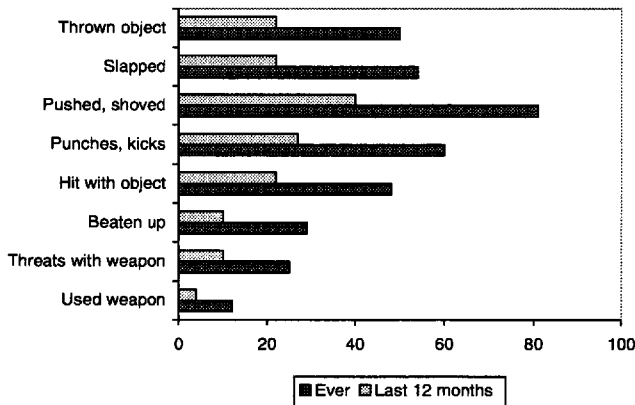


Figure 4. Types of violent acts by a current or former partner, reported ever (includes last 12 months) and within the last 12 months (n=188 ever abused women).



Table 6. Characteristics of partner abuse reported by 188 women.

| <i>Characteristics</i> | <i>Description</i> | <i>N</i> | <i>(%)</i> |
|--|-----------------------------|----------|------------|
| Injuries resulting from violence | None | 53 | (28) |
| | Bruises only | 101 | (54) |
| | Bruises and other injuries* | 34 | (18) |
| Days of week when violence most often occurred | Weekends | 90 | (48) |
| | Any day | 69 | (37) |
| | Middle of week | 18 | (9) |
| | Beginning of week | 11 | (6) |
| Times of day when violence most often occurred | Night | 81 | (43) |
| | Afternoon | 31 | (16) |
| | Morning | 20 | (11) |
| | Anytime | 56 | (30) |
| Use of alcohol and drugs in relation to violence | None | 86 | (46) |
| | Alcohol | 90 | (48) |
| | Other substances | 12 | (6) |
| Witnesses of domestic violence ** | None | 47 | (25) |
| | Children | 97 | (49) |
| | Husband's family | 47 | (25) |
| | Wife's family | 43 | (23) |
| | Wife's friends | 18 | (10) |
| Median duration of abuse by age group (years) | 15-24 | 3.0 | |
| | 25-34 | 5.0 | |
| | 35-49 | 10.0 | |
| | Total | 5.0 | |
| Where does violence take place?*** | Bedroom | 133 | (71) |
| | Living room | 61 | (32) |
| | Kitchen | 24 | (13) |
| | Patio | 38 | (20) |

* Includes wounds (30), fractures, burns (7), head/vision impairment (12), and unspecified pain (20).

***Percentages do not add up to 100 due to multiple responses.

Although through quantitative analysis it was possible to measure different types of abuse as related but distinct phenomena, the narrative analysis indicated that from the perspective of abused women, physical abuse is often so intertwined with acts of psychological and sexual degradation as to be virtually indistinguishable:

...When I didn't want to have sex with my husband he simply took me by force... When he came home drunk he would beat me, and do what he wanted with me. Then I fought with him, but what could I do against a man who was stronger than me? I couldn't do anything, so I had to put up with it and suffer. (Ana Cristina)

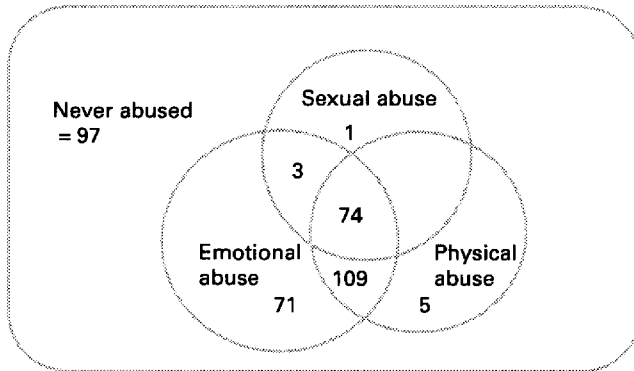


Figure 5. Overlap between sexual, physical and psychological violence experienced by women (n=360 ever-married women).



Violence and emotional distress

"You're an animal, an idiot, you are worthless..."

...He used to tell me, "you're an animal, an idiot, you are worthless". That made me feel even more stupid. I couldn't raise my head. I think I still have scars from this, and I have always been insecure ...I would think, could it be that I really am stupid? I accepted it, because after a point ... he had destroyed me by blows and psychologically... (Ana Cristina)

Women who had received severe abuse during the last year were more than ten times more likely to experience emotional distress than women who had never experienced abuse (Figure 6). Severity of abuse appeared to be a greater predictor of distress than the time period in which the abuse had taken place, with women who had experienced severe violence more than a year earlier presenting

more cases of emotional distress than women who had experienced acts of moderate violence during the previous year.

When ever-married women (n=360) were analyzed for factors related to emotional distress, no associations were found between age, educational attainment, urban-rural zone, current marital status, poverty, number of children, the lack of a friend or confident and the risk of emotional distress. In addition to higher levels of partner abuse, women reporting emotional distress were more likely to lack social support, to experience greater marital control, and to report that their children were suffering from physical, sexual or emotional abuse. Furthermore, they were significantly more likely to report a history of partner violence in either the wife or her husband's family and to have been sexually or physically victimized previously by someone other than an intimate partner. When these variables were analyzed together using multivariate logistic regression, the associations between emotional distress and partner abuse as well as previous victimization remained significant, while all other associations became non-significant (95% confidence interval including 1.0). By calculating the proportion of emotional distress attributable to domestic violence, it was estimated that 70% of all cases of current emotional distress among ever-married women were explained by current or former experiences of partner violence.

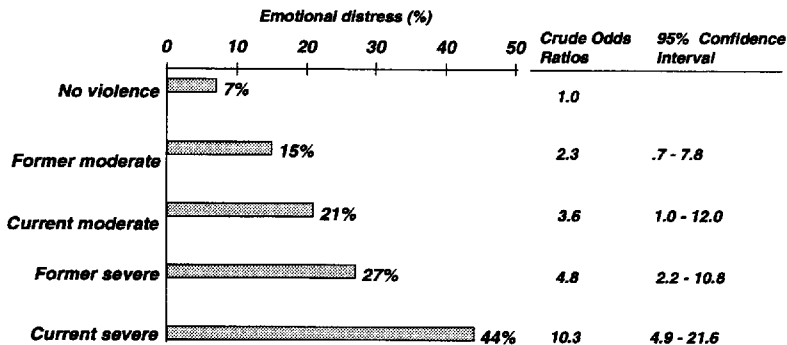


Figure 6. Proportion of ever married women experiencing emotional distress, according to severity and period during which abuse occurred (n=360).

Although violence within dating relationships was found to be less frequent, the latency period between the initiation of marriage or cohabitation and violence was very short. Over 50% of abuse began within the first two years of marriage, while 80% started within 4 years (Figure 7.)

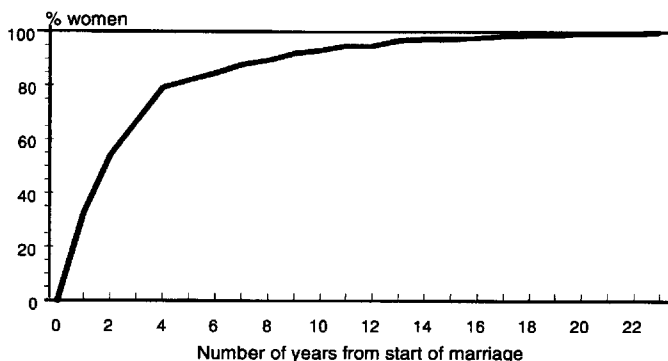


Figure 7. Time from start of marriage to onset of violence: observed latency period for initiation of domestic violence among 188 women who experienced marital violence at least once in their lives.

Wife abuse was significantly positively associated with being poor, the woman having more than 4 children and a family history of domestic violence in either the wife's or the husband's family at the univariate level (Table 7). No significant association was found between the risk of violence and urban/rural zone, age, current marital status, occupational category or educational attainment of women at the univariate level. Also, no significant association was found between the risk of abuse and either the husband's educational attainment or indicators of marital dependence (negative differentials in age or education, or number of children under 7 years). Finally, on the univariate level, no difference was found in the strength of the associations between background factors and physical violence when violence was stratified according to severity and currency of abuse.

At the multivariate level, significant associations were maintained between the risk of violence and poverty, parity and a history of marital violence in the husband's family, even after adjusting for the woman's age and education. Women in the rural area were found to have a lower risk of violence than in the urban area, while the association between violence and the wife's mother having been abused became non-significant. No significant interactions were

found among the independent variables in their effects on the risk of violence.

Table 7. Association between background factors and prevalence of violence among women aged 15-49 who have ever been married (including common-law marriages) (n=360). Odds ratios (95% confidence intervals) for having experienced violence at least once in their lives are given in univariate and multivariate logistic regression analysis.

| <i>Variable</i> | | <i>Univariate OR (95%CI)</i> | <i>Multivariate OR (95% CI)*</i> |
|-------------------------------|-----------------------------------|----------------------------------|--------------------------------------|
| Poverty | Non Poor | 1.0 | 1.0 |
| | Poor | 1.91 (1.12--3.23) | 1.82 (1.03--3.23) |
| Zone | Rural | 1.0 | 1.0 |
| | Urban | 1.62 (.94--2.78) | 2.07 (1.12--3.82) |
| Number of Children | 0-1 | 1.0 | 1.0 |
| | 2-3 | 1.40 (.82--2.39) | 1.34(.74--2.43) |
| | 4 or more | 2.77 (1.59--4.82) | 2.23(1.21--4.15) |
| Family History of Abuse | No history in wife's family | 1.0 | 1.0 |
| | Wife's mother abused | 1.8 (1.24--2.90) | 1.28 (.79--2.09) |
| | No history in husband's family | 1.0 | 1.0 |
| | Husband's mother abused | 3.13 (2.00--4.96) | 2.98 (1.86--4.73) |

*All variables included in the model. Likelihood ratio statistic on 8 df = 44.425, p < .001.



Violence and marital control

“Like a horse with blinders...”

Both the survey data and the narrative analysis pointed to extreme jealousy and control as constant features of the abusive relationship. Nearly one third of women referred to their husband's jealousy as the main cause of violence. Furthermore, abused women were significantly more likely to experience marital control over a series of every day activities, including visiting friends and the use of birth control. The strength of the association increased according to the number of activities prohibited.

Both Ana Cristina and Maria Dolores described the abusive relationship primarily in terms of their husband's jealousy and their own attempts to placate him, rather than the violence itself.

...He was so jealous, my grandmother used to say, “if you stay with him he's going to put blinders on you like the horses that pull carriages.” I couldn't look at anyone on the street, nor have either men or women friends, nor greet anyone. And if a man looked at me, he would smack me right there on the street. (Ana Cristina)

While Ana Cristina's husband terrorized her to keep her from speaking to friends and family, Maria Dolores found that her husband's jealous demands and accusations made it impossible for her to work. Eventually, she was forced to give up her job, thereby losing her social contacts and economic freedom.

...I liked my work a lot, especially in the maternity ward. It was so nice to work where the new-born babies came and I got to bathe them in the morning...But four years ago I had to stop working, because my husband wouldn't let me anymore...He would come to get me and wanted me to leave whenever he said. So I had to hide if I saw him coming. And then he would make a scene...

...Sometimes I would come home from the hospital, exhausted, and maybe he was coming home from a party. I would lie down and fall asleep and then he would put a pistol to my head and say, I heard you were seen with such and such a doctor...

...He didn't always beat me, but he was constantly saying “what man have you been with now” and “where are you coming from”

and he would touch me to see if I was wet, or he would check my underpants from the hamper. I felt really bad but I couldn't tell anyone...

...I said to him 'if you are going to maintain me I'll leave my job,' but then even after that he would only leave me a pittance. I felt awful because I was used to working ever since I was a child, and to depend on what he gave me made me feel bad... (Maria Dolores)



The effect of domestic violence on children

“Mommy you look like a monster...”

Nearly half of the women in the survey reported that their children had witnessed the violence against them (Table 6). The children of abused women were more than twice as likely to suffer from learning, emotional and behavioral problems (OR=2.5 95% CI 1.6, 3.9) and almost seven times more likely to be abused (either physically, emotionally or sexually) themselves than the children of non-abused women (OR 6.8, 95% CI 3.3, 14.1). Whether or not children had witnessed their father's violence against their mothers was found to be highly predictive of children's problems.

The narratives suggest that the involvement of children in the violence is a particular source of anguish for women, possibly more distressing than their own abuse:

...When he beat me, my daughters would get involved in the fight. Then he would throw them around in his fury and this hurt me, it hurt me more than when he beat me...

...Once, when I was recovering, because he had beaten me and he had left my eyes swollen and black, my daughter came up to me and said, “Mommy, you look like a monster” and she began to cry... It hurt me so much. It wasn't so much the blows I had, but what really hurt me were her sobbing and the bitterness that she was feeling. It changed everything for me when I realized that I was hurting my daughters by staying in a marriage with no future. (Ana Cristina)



Women's strategic responses to violence

“Do you think you're the only one?”

Early in the marriage, Ana Cristina had few resources to help her cope with her abusive husband. Barely past childhood herself, she found herself with two small children, no education, no means of support, and in shock that this could be happening to her. Her mother and her mother-in-law were unsympathetic to her plight. Both women treated her situation as though it was nothing out of the ordinary, and that her obligation as wife was simply to endure the abuse. Both women treated her situation as though it was nothing out of the ordinary, and that her obligation as wife was simply to endure the abuse.

...My mother would say to me “Do you think you're the only one to live through this?” She told me not to leave, and my mother-in-law also told me that I should put up with it, ...”You have to maintain your marriage, remember that you are his wife and he is the father of your children.” (Ana Cristina)

On a few occasions she sought help outside the family and once even went to the police, but her failure to get assistance only served to reinforce her feeling that there was no possibility of escape.

...Once I went to the police for help, but since he was in the military they let him go right away and gave him a ride back to my house. That time he kicked down my door...After that, I didn't know what to do. I felt trapped, a prisoner and I couldn't escape... (Ana Cristina)

Although Maria Dolores and her husband lived in her mother's house, she received little comfort from her family.

...At the beginning I didn't tell her anything. Then later I wanted to tell her, because it seemed that she knew something was going on. She would ask me, what happened to you last night? Or what's going on with you two? So I would tell her, but then she would say that it was my fault, so I didn't feel like telling her anything after a while... Of course she knew about the blows, my face was all

bruised and I could hardly open my mouth because it was swollen...(Maria Dolores)

Her mother-in-law gave essentially the same message,

...His mother said that her son wasn't like that before, and that is wasn't until he married me that he became that way....

Throughout the nine years of her marriage, aside from a few unsuccessful attempts to enlist her mother's support, Maria Dolores confided only in one friend about her situation. She also told someone in her church community, who offered to speak to her husband, to no avail. At work, she was always careful not to let anyone else know what was going on at home.

...Once they asked me about it and I said I had hurt myself. They laughed and said it must have been my husband, but I insisted that it wasn't... I didn't want to tell anyone, it made me feel bad, and even to think about it made me want to cry. I felt ashamed...

...I thought that there were just a few people like this, that we didn't all live this way, and that it was something shameful to live with someone like this. I thought it would be embarrassing for someone to find out that a man was hurting me this way. (Maria Dolores)

According to the survey data abused women use a variety of strategies to cope with violence (Table 8). The most common strategy for dealing with violence was physical or verbal self-defense, mentioned by 84% of abused women. Among these women 78% reported that the violence usually ceased as a result, at least temporarily. Forty one percent of women had separated temporarily from their partner as a result of violence, compared to only 20% of women who had ever sought outside help. Only 7% of women had not tried any of the three strategies, whereas 51% had tried only one, and 42% had tried two or more different strategies. Thirty eight percent of women had permanently separated from their partners at the time of the interview, and 62% were still living with the abusive partner.

In the multivariate logistic regression models, a significant negative association was found between effective self-defense and severity of abuse and between self-defense and abuse of children. Temporary separations were positively associated with severity of abuse. Finally, help seeking was significantly associated with severe abuse,

temporary separations, being over 35 years of age, having more than 6th grade education, physical or emotional abuse of children and access to social support. All women who sought help for violence lived in the urban area. No associations were found between age, zone, social support or education with either temporary separation or effective self-defense. No associations were found between poverty, number of children or marital status and any of the three coping mechanisms. No interactions were found between different coping strategies and age or urban/rural residence.

Approximately 25% of the women left the abusive relationship within the first four years after the violence begun (Figure 8.) Overall, approximately 70% of women were likely to separate eventually from their abusive partners while another 30% remained in violent relationships as long as 26 years, which was the maximum extent of follow-up. Women under 25 years of age, with more than a 6th grade education, and women with no history of violence in their own or their husband's families permanently separated from their partner more quickly than women without these characteristics (Table 9). Women who had left temporarily also were significantly more likely to make a final break more rapidly. Women who defended themselves effectively were likely to remain longer in abusive relationships. No associations were found between the rate at which women ended relationships and the severity of violence, help seeking, mental health status, abuse of children, poverty, zone and the existence of social networks or previous victimization.

Table 8. Description of battered women's responses to violence (n=188).

| | | n | (%) |
|----------------------------------|--|-----|------|
| Self Defence | No self-defence | 29 | (16) |
| | Self Defence/Violence is same or worse | 34 | (18) |
| | Effective Self Defence (violence ends) | 123 | (66) |
| Temporary separations | No separations | 111 | (59) |
| | At least one temporary separation | 77 | (41) |
| Help Seeking | Does not seek outside help | 150 | (80) |
| | Seeks outside help | 38 | (20) |
| Visits to institutions for help* | Police | 28 | (14) |
| | Women's House | 11 | (6) |
| | Hospital | 10 | (5) |
| | Health Centre | 4 | (2) |
| Permanent separation | No | 116 | (62) |
| | Yes | 72 | (38) |

*Answers do not add up to 100% because of multiple responses.

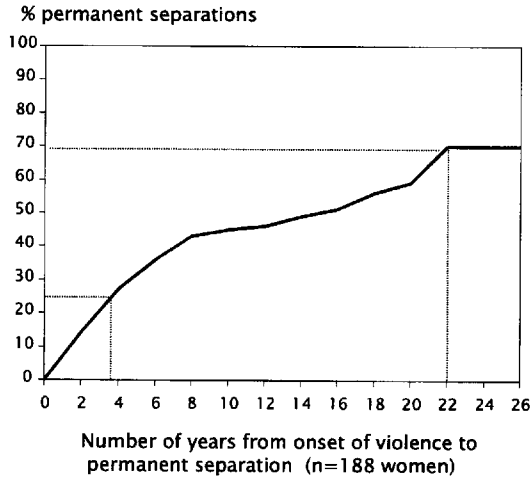


Figure 8. Probability of separation over time in violent relationships, based on Kaplan Meier Life Table Analysis.

Table 9. Factors influencing how long women stay in violent relationships.

In women aged 15-49 (n=188). Univariate and multivariate Hazards Ratios (HR) and 95% confidence intervals (CI) are presented by means of Cox Survival Analysis, indicating the relative risk of leaving a relationship soon after violence begins. Values over 1.0 indicate more rapid separation compared to values under 1.0.

| <i>Variable</i> | <i>Bivariate HR(95%CI)</i> | <i>Multivariate HR (95%CI)</i> |
|--------------------------------|--------------------------------|------------------------------------|
| Age group: | | |
| 15-24 | 1.0 | 1.0 |
| 25-34 | 0.6 (.32-1.1) | 0.5 (.3-.9) |
| 35-49 | 0.4 (.2-.8) | 0.4 (.2-.9) |
| Husbands mother not abused | 1.0 | 1.0 |
| Husband's mother abused | 0.5 (.3-.8) | 0.6 (.4-1.1) |
| Wife's mother not abused | 1.0 | 1.0 |
| Wife's mother abused | 0.6 (.4-1.0) | 0.6 (.4-1.0) |
| Primary or less High School | 1.0 | 1.0 |
| | 1.7 (1.1-2.7) | 1.7 (1.0-2.8) |
| No temporary separation | 1.0 | 1.0 |
| Temporary separation | 1.8 (1.1- 2.9) | 2.0 (1.2-3.3) |
| No self defence | 1.0 | 1.0 |
| Effective self defence | 0.5 (.3-.8) | 0.6 (.4-.9) |

-2 Log Likelihood Statistic on 8 df = 570.386 p<.000

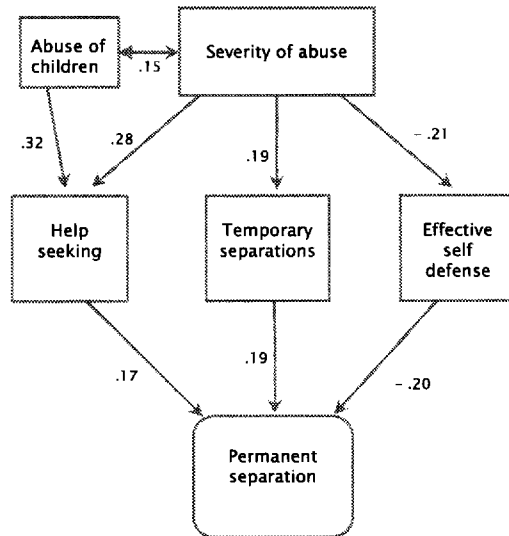


Figure 9. Estimates of path coefficients for simplified model.



Overcoming violence

“A time came when I said to myself: if I don’t love myself, who will?”

The experience with my daughter changed everything. I said, I will get rid of this man for my daughters. One day he came home drunk, making a row, and I had hidden all his guns, and I grabbed a chair and said to him, “now you’re going to hit me and bruise me and break my nose, but I’m not going to let you...I want you to go out the same way you came in, but now you’re going for the last time. So get your bags ready.”

When my mother saw me, ready to fight, she grabbed a machete and helped me get rid of him. Whenever he came back I threw him out. Once I tried to hit him with a hot iron, because even if he killed me afterwards, I wanted him out. (Ana Cristina)

Structural Equation Modeling was used to estimate and to assess the fit of two hypothesized path models relating severity of abuse, women's coping responses and permanent separation. The best fitting model (Figure 9) yielded a fit of $\text{Chi}^2(7) = 5.9$, with a p value of .55. The ratio of Chi^2 to degrees of freedom was .84. All correlations among the variables of the path model were significant and all measures of Goodness of Fit were within the desirable parameters.

According to this model, severe abuse increased the likelihood that a woman will seek outside help and/or leave the home temporarily. The abuse of children also increased a woman's likelihood to seek help. These responses in turn predicted her likelihood to eventually separate from her partner permanently. In contrast, less severely abused women were more likely to defend themselves and to stop the violence. Women, who were able to defend themselves effectively, even temporarily, were more likely to remain with their partners.



Surviving abuse

I miss him still, and sometimes I feel lonely, but now I sleep better at night... (Maria Dolores)

...I was different before. I was happy, friendly, good hearted. The situation made me change. I never dreamed that I would have a marriage like this. You always think you will be married, and have a beautiful love, like in the fairy tales. When everything turns out this way it scares you, and you think, is this what life is like?

...That man left me frustrated and bitter, because even if I would like to have somebody I am always going to be afraid that he will hurt me, or do something to me, for this reason, I can't have a stable relationship...

...I believe that if I had had some help, I would have left my ex-husband earlier, I wouldn't have stayed for 5 years. But I had no place to go then, and no one to tell me what to do. (Ana Cristina)

When asked in open-ended questions what kind of support they would have liked, 40% of survivors of abuse said they would have liked to have had either "psychological counseling", "someone to give me advice" or "someone to stand up for me." An additional 13% desired more family support, and 10% counseling for their husbands. When asked why they didn't receive the help they needed, the most common answer was "because I was alone," or "because I didn't know how to find it." Moreover, 41% of abused women indicated that their husbands threatened to hurt or kill them or to take away their children, if they reported the violence.

Of those women who actually left violent relationships 50% eventually remarried non-violent men. Only 13% of ever-abused women interviewed reported having had a violent relationship with more than one man. When asked, "Do you expect something similar to happen again?" 39% said yes, while 37% said no. Women currently in violent relationships were more likely to respond positively (52%). However, even among women who had permanently separated from their violent spouse, 34% still believed that they would eventually be beaten again.



Comparisons to other research on violence in Nicaragua

The estimated prevalence of partner abuse was significantly higher in both the León study and the Managua study, in comparison to the Demographic and Health Survey. In Managua, lifetime prevalence of physical partner abuse was estimated at 69%, with 33% of women reporting violence in the last year. The DHS study found an overall prevalence of physical violence of 28%, with 12% of women reporting violence in the last year (Figure 10). In the DHS data, some variation was found in the prevalence of violence by geographical region. The prevalence of violence in DHS-León was 25% and in DHS-Managua it was estimated at 28%. However, in analysis stratified by urban/rural residence, no statistically significant differences between the two regions were found with regard to prevalence of violence. Thereafter, comparative analysis was performed on the DHS sample as a whole.

In both the León and Managua studies, no significant difference was found in the proportion of severe violence reported among women who were currently suffering abuse, and those who had experienced abuse more than 12 months prior to the interview (Figure 2). Women in the DHS reported significantly less severe violence during the previous 12 months, compared with reported acts of violence occurring earlier ($p < .000$).

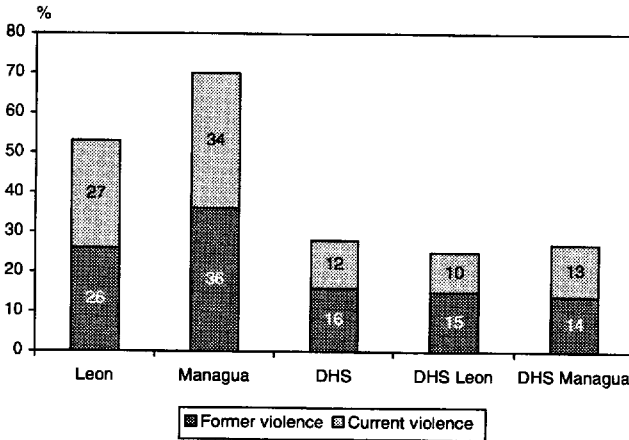


Figure 10. Lifetime prevalence of physical partner abuse (former + current) among ever-married women.

According to DHS interviewer reports recorded in the questionnaire, at least one person was present during 35% of the interviews, and more than one person was present in 9% of interviews (Table 10). The respondent's husband was present in 4% of interviews. A large range was found among interviewers with regard to the presence of others, with some interviewers reporting witness in only 5% of interviews, and others reporting witness in 75% of interviews. Prevalence of violence was significantly lower among those interviews where the husband was present, or where more than one person was present in the interview.

No significant evidence was found to support sampling bias or non-response as the main reason for the variation in prevalence found between the studies.

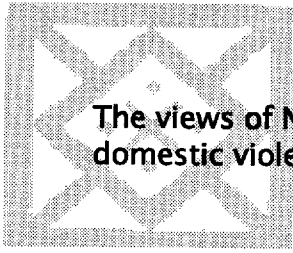
Table 10. Effects of presence of others on reported prevalence of wife abuse (DHS, n=8507).

| | <i>% of interviews present</i> | <i>% violence when present</i> | <i>% violence without presence</i> | <i>P-value*</i> |
|-------------------|--|------------------------------------|--|-----------------|
| Children <10 | 27.6 | 29.0 | 27.5 | ns |
| Other women | 10.5 | 26.7 | 28.8 | ns |
| Other men | 3.2 | 25.1 | 28.7 | ns |
| Husbands | 4.5 | 24.1 | 28.7 | <.05 |
| Only 1 person | 26.3 | 29.2 | 28.9 | ns |
| 2 or more persons | 8.7 | 24.0 | 28.9 | <.01 |

*Comparison of % violence with and without presence of others, Chi² test, one-sided.

The most important differences were found with regard to procedures for guaranteeing privacy, interviewer selection and training, and opportunities to develop rapport with the respondent. Focus group discussions performed with interviewers from the DHS and the León studies indicated that interviewers found listening to women's stories of abuse very stressful, and in the case of the DHS, the lack of support to interviewers may have affected their ability to engage respondents in these discussions. Therefore, it appears that under-reporting in the DHS was probably the main source of variation between the studies.





The views of Nicaraguan men and women on domestic violence

*Chico Perico mató a su mujer
La hizo pedacitos y la puso a cocer
Todos los que pasaban oían que apestaba
Y nadie la quería porque era mujer*

*(Chico Perico killed his wife
He chopped her into pieces and cooked her up
Everyone who passed by could smell the stench
But no one wanted her because she was a woman)*

Nicaraguan nursery rhyme

The focus group study revealed sharp differences according to gender in the kinds of acts that were considered violent. Women of all age groups and social conditions defined violence broadly, and referred to a wide range of acts, including extra-marital affairs, forced sex, humiliations, insults and not giving money for the household as acts of severe violence. In contrast, most men considered as severe violence only physical acts of violence leading to injury or disability. The groups of professionals were closer in their views to the groups of women, with the exception of forensic doctors, who also defined violence almost exclusively in terms of injury.

The majority of groups from judges to rural women to men and women police concurred that the psychological consequences of abuse are often much more serious and long-lasting than physical injuries, and therefore it was important to broaden the concept of injury in the Criminal Code. As one rural woman noted, harsh and demeaning words can make you feel 'like an old shoe,' while a judge acknowledged that 'bruises and cuts will heal eventually, but psychological damage lasts forever.' The mental health experts

further gave a series of recommendations as to how psychological damage might reliably be identified.

One of the most striking findings was that some men explicitly adapted their abusive tactics to avoid legal consequences. One woman mentioned this, explaining,

Sometimes a man will hit a woman where it doesn't show, to keep up appearances, so that her mother will say, 'what a good man she has got'... (rural woman)

The group of rural men, for their part, demonstrated their awareness that the existing Criminal Code only punished injuries leaving visible scars:

...You have to know just how to give it to a woman. If I beat her with the flat end of the machete it may turn over and if she gets the blade, then that's a problem... Women should be hit where it doesn't show, and preferably on the bottom with a belt. This isn't serious because it can't be seen, but if I hit her in the eye, that's a problem ... (rural man)

This type of information provided legislators with a very persuasive justification for the need for broader definitions of injury.

With regard to sexual violence opinions differed, particularly between men and women. The men generally did not recognize forced sex in marriage as rape.

...If it is the husband who forces her it is not rape. Only if he beats her at the same time... (rural man)

In contrast, the majority of women considered coerced sex in marriage to be an extremely serious form of violence:

If he forces me, I make up excuses, my feelings change, and I come to hate what I once loved. (woman activist)

To be forced to have sex is very serious, it makes me feel guilty, especially if I become pregnant (young woman)

...he forces me to have sex, but first he offends me, he beats me, and I have to put up with it because I have nowhere to go, and sometimes I feel like I don't want to go on anymore... (woman activist)

In the discussion of preferable measures to eliminate violence, most groups, including both men and women, considered preventive measures to be preferable to sanctions, particularly because they felt that jail sentences often made men even more violent, and therefore should be reserved only for very serious cases. It was also felt that policies based on sanctions do not encourage women to report violence, especially for women who are financially or emotionally dependent on the offender.

My husband always says to me "if I go to jail, who will maintain you?" (abused woman)

Although confiscating a violent husband's weapons was considered a useful preventive measure by most groups, the abused women thought that it was pointless because,

...they can take away his guns, but then they would also have to take away his coat-hangers, his chairs, and also his rope to keep him from strangling me... (abused woman)

In the exercises to determine what resources were available for women living with violence, most groups considered the police, health centers, and judges to be the least accessible and helpful institutions, while family, friends, church communities, and women's houses were recognized as generally better allies (Figure 12).

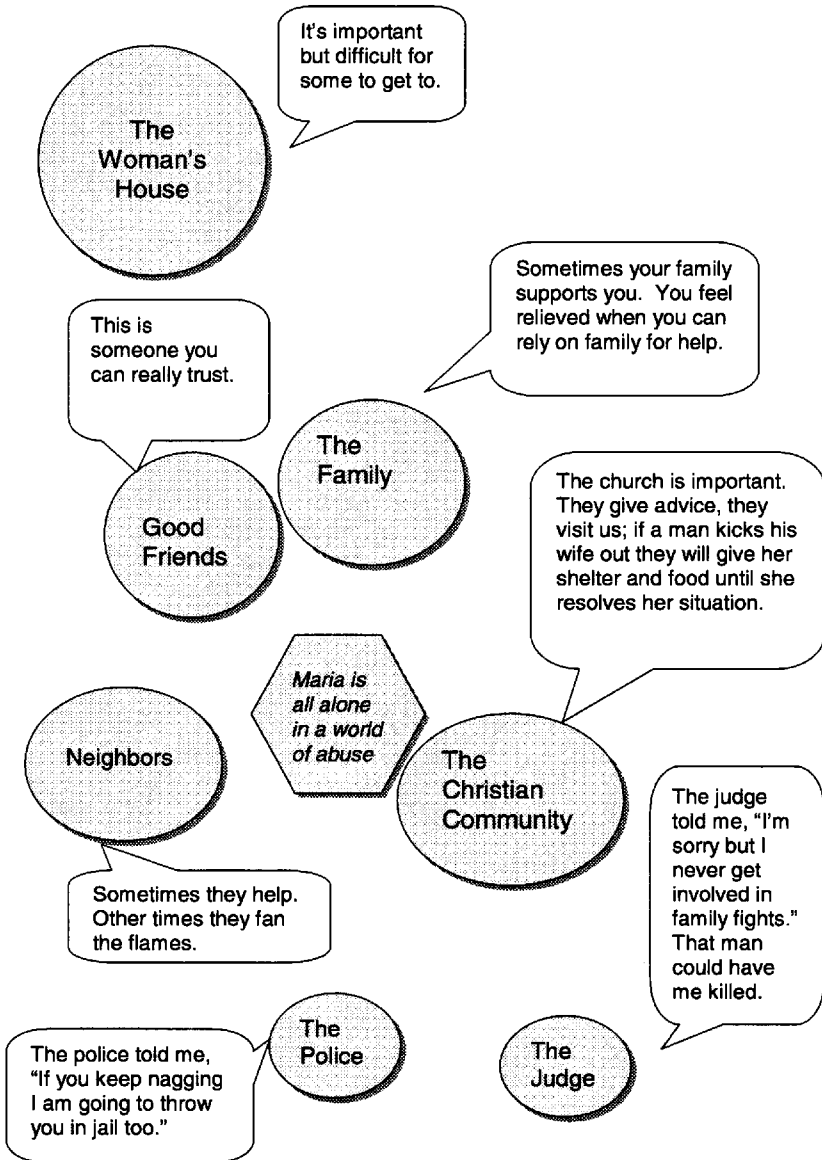
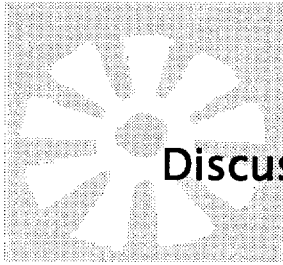


Figure 11. Opinions of rural women on services for battered women presented by means of a Venn diagram. Large circles represent the most helpful institutions or persons. The circles closest to Maria are the groups considered most accessible.

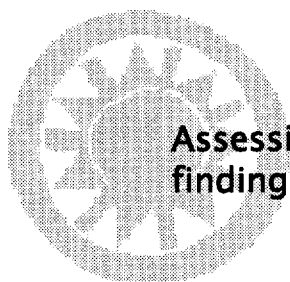


Discussion

According to the results of the survey, one-half of Nicaraguan women experience physical violence from a partner at some point in their lives, and one out of five women are severely beaten every year. These figures are comparable to or even higher than data from other countries [12]. The fact that the prevalence of violence is fairly uniform with regard to age, educational background, occupation and zone suggests that not only is partner violence quite widespread, but also that it is not restricted to specific groups in the population and, to a large degree, crosses social and economic boundaries. Finally, the data on emotional distress suggest that partner abuse is a major risk factor in the epidemiology of mental health disorders among women in Nicaragua.

Most women eventually separate permanently from abusers, although they are likely to try a variety of coping strategies first. In contrast to the common portrayal of abused women as passive victims, most women attempt to "manage" the violence using a variety of strategies, according to how dangerous they perceive the situation to be. When abuse is less severe, women are more likely to defend themselves verbally or physically, and are able to end the violent episode, at least temporarily. These women are likely to remain with a violent partner for a longer period of time. When violence becomes severe, women seek alternative means to manage the situation by seeking help or escaping temporarily. These women were also more likely eventually to separate permanently from their partners.

The associations found between different responses and social and family support, as well as a history of violence in the family suggest the importance of the family and social context for shaping women's view of their options. Women who have witnessed violence against their mothers, or whose husbands were raised in violent homes may be more likely to consider violence as an inevitable part of marital life.



Assessing the trustworthiness of the findings

The use of both quantitative and qualitative methods provides complementary information regarding the magnitude and characteristics of partner abuse, as well as the meaning that women themselves attach to the experience of violence. The combination of approaches enhances truth value through triangulation and lends insight into processes and meanings that cannot easily be accessed through survey data alone [144, 145]. The fact that two very different methods produced such similar results indicates that not only do they capture the experiences lived by a few individual women, but that these findings may be true for many other women living in violent relationships in Nicaragua.

The community survey

Due to the detailed and complex nature of the information asked, it is unlikely that incidents of violence have been over-reported. It is quite possible however that some women have failed to disclose experiences of violence, and therefore the actual prevalence of partner violence maybe somewhat higher than the figures presented in this study. Since the municipality of León shares general demographic and ethnic characteristics with the rest of the Pacific Coast of Nicaragua, in which the majority of the Nicaraguan population is located, it is likely that data are representative of at least the Pacific Coast region.

One of the weaknesses of the cross-sectional study design is that it is not possible to infer causality in the associations found between background factors such as poverty, the number of children and the risk of being ever abused. Family history of violence is the only background factor that clearly precedes partner violence, and thus may be considered as a risk factor for violence.

The strong association found between partner abuse and experience of battering in the husband's family corresponds to international research suggesting that violent behavior is learned from childhood experiences [13, 96, 99]. The fact that nearly half of the abused women in Nicaragua reported that their children were witnesses to the violence is of particular concern in this respect. The results indicate that, not only are the children of abused women being exposed to high levels of physical and emotional abuse themselves, but the boys in particular are at greater risk of becoming abusive husbands as adults.

Given the early onset of violence, it also seems likely that violence occurs prior to a woman's childbearing in many cases, and thus the high number of children among women experiencing violence is probably an effect, rather than a cause of violence, indicating that one of the features of an abusive relationship is male control over women's reproduction. Focus group discussions with men revealed that some men keep their wives deliberately pregnant, to reduce the likelihood of their being unfaithful. A common phrase in Nicaragua says, *"women should be kept like a farm shotgun: always loaded."*

Recall bias may account for part of the significant associations found between violence and both poverty and urban/rural zone. It is not possible to determine from the data whether the differences represent actual variations in the prevalence of violence or simply reflect a greater reluctance of both rural women and women of higher socio-economic status to disclose violence, compared with poor and urban women.

Since information is lacking regarding women's mental health status prior to the abuse, it is not possible to establish from these data that the increased levels of mental distress among abused women is due to the violence. However, the fact that the strong significant associations are maintained even when adjusting for other possible risk factors is highly indicative. Moreover, this finding is consistent with previous research indicating that emotional distress, including anxiety, depression and Post Traumatic Stress Syndrome are common effects of partner abuse [65, 161].

The high correlation between marital control and partner abuse is consistent with qualitative and clinical research that suggest that acts of physical violence do not represent isolated events but rather a relationship based on domination and coercion [65] [111]. Dobash and Dobash (1992) argue that "violence against wives (including common-law unions) is often persistent and severe, occurs in the

context of continuous intimidation and coercion and is inextricably linked to attempts to dominate and control women." Studies in Bangladesh, Cambodia and Zimbabwe indicate that, even in cultures where male dominance is generally accepted, abusive men exert much more control over their partners than men who are not violent [18, 114, 115].

In spite of the constraints associated with the cross-sectional study design, we believe that the findings present a reliable image of the magnitude and characteristics of partner abuse in Nicaragua, as well as its adverse impact on women's physical and mental health.



The narrative analysis

The narratives presented in this thesis illustrate how the meaning of violence is constructed through the interaction of events and circumstances operating at different levels, lending support to the ecological model of partner abuse. The experiences of Ana Cristina and Maria Dolores are consistent with a complex dynamic referred to by international researchers, in which physical abuse is closely linked to abuse of power and control over a woman's daily life, including social contacts. This dynamic results in feelings of shame, fear, isolation, entrapment, lowered self-esteem, and diminished coping ability [109, 118, 161]. These, in turn are reinforced by the negative responses of family, friends and public institutions, including the criminal justice system, and by cultural attitudes that tolerate or even encourage violence against women.

A central question regarding the narrative approach is how to interpret the stories: should they be viewed as truthful representations of what actually happened, or rather of the meaning of the acts to the respondent at that moment in time, in that context? Riessman argues, "when talking about their lives, people lie sometimes, forget a lot, exaggerate, become confused and get things wrong. Yet they are revealing truths. These truths don't reveal the past 'as it actually was' aspiring to a standard of objectivity. They give us instead the truths of our experiences..." [157]. Hence, the stories of Ana Cristina and Maria Dolores should be seen as representing the understanding they had at that moment, which may have changed by the very act of telling.

Since the purpose of narrative analysis is to reveal subjective rather than objective truths, one of the criteria for assessing rigor in narrative analysis is plausibility, or the degree to which stories are recognized as being believable and coherent [162]. Ana Cristina's story was widely publicized in Nicaragua together with the major results of the survey, and was immensely popular among community women. One woman expressed her appreciation of the story by saying, *"I could see myself in the story of Ana Cristina and it made me think about what I could do to change my own life"* [163]. This speaks to the trustworthiness of the narrative analysis, in that it was accepted as a credible and meaningful representation of the experience of many Nicaraguan women.



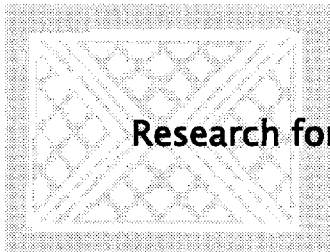
Comparative analysis of three studies

This comparison of three population-based studies in Nicaragua enabled us to explore the effects of a variety of methodological issues on prevalence estimates of violence. The estimated prevalence of violence was significantly higher in both the León and the Managua studies than in the DHS. All three studies interviewed random samples of women of identical age groups and marital status. A similar questionnaire was used, relying on multiple questions and behaviorally specific acts of violence. Further continuity was provided by the participation of the first author of this paper in the design of all three studies. The main differences had to do with the scope and setting of the studies and the preparation and support to interviewers.

Given that no other major sources of variation or bias were found between the studies, it seems likely that under-reporting in the DHS is the main source of variation. There are two plausible explanations for women's relative lack of disclosure. One refers to the skill of individual interviewers in establishing rapport with respondents. For example, a wide range was found between interviewers with regard to the percentage of interviews where a third party was present. Since the presence of others was found to affect disclosure, overall prevalence estimates could be affected by the skill of a particular interviewer in obtaining privacy for the interview.

Another explanation is that disclosure was affected by a combination of organizational and methodological factors, and that this effect is independent of the skill of individual interviewers. The results from the focus group discussion indicate that many other factors may have affected disclosure, such as the length and breadth of the questionnaire and the placement of the violence module in the interview schedule. It is not possible to estimate from available information how much any one factor contributed to under-reporting, but taken as a whole, the effect may have been considerable.

Our findings indicate that the study of prevalence of violence is highly sensitive to a number of methodological factors, and that under-reporting is a major threat to validity. It appears that more focussed studies are more likely to yield more accurate prevalence estimates of violence than surveys primarily designed for other purposes. The qualitative data suggest that the most important factors influencing disclosure seem to be adequate interviewer training and support as well as safety measures, such as guaranteeing privacy during interviews. In light of these findings, we conclude that studies on violence should not be undertaken unless researchers are able to incorporate measures to enhance disclosure and ensure the safety of respondents and field staff into all aspects of the research process.



Research for social change

We must recognize that we [researchers] are as much the focus of social change as we are its advocates. Madine VanderPlaat [164]

The systematic study of psychological trauma depends on the supports of a political movement. Indeed, whether such study can be pursued or discussed in public is itself a political question. The study of trauma in sexual and domestic life becomes legitimate only in a context that challenges the subordination of women and children. Judith Herman [65]

The results of this research were discussed extensively in Nicaragua, and contributed to the public debate around the need to reform the existing Criminal Code. The Preamble of the new law cited the León research on domestic violence in order to justify redefining the crime of injurious assault to include psychological as well as physical injuries. The results of the focus group research were presented in formal testimony to the Justice Commission of the National Assembly and were cited in the internal parliamentary debates around the law.

The Women's Network against Violence lobbied continuously for eight months to ensure the passage of the domestic violence law, and used a variety of strategies to create public support. The findings of the both the survey and the focus group research were highlighted in an international forum on psychological injuries, petitions, letter writing campaigns, TV and radio advertisements, and direct lobbying of parliamentarians. As a result of the lobbying efforts the debate was introduced ahead of schedule as an 'urgent priority.' By this time so much public support had been mobilized for the bill, that to vote against it would have been tantamount to endorsing violence against women, which no politician was willing to do in an election year. The law was passed unanimously in its entirety, including psychological injuries, in August 1996 and took effect on October 9, just eleven days before the national elections.

During the same year, members of the Violence Network decided to create a "Health and Research Commission" in order to encourage new research as well as to use existing research findings for influencing social policy and programs, particularly in the health sector. One of the first projects of the commission was to produce a series of publications based on the León research findings for different audiences. One publication included a full presentation of methods and findings and was distributed throughout the country in police stations, local courts, municipal offices and universities. A training manual for health personnel emphasized how health workers can identify and provide support for women and children living with violence. This manual included a directory of over 70 centers around the country that provide services for battered women. A popular edition of the study, entitled "I don't want any more candies in hell" presented a dramatized story of a woman who overcame a violent relationship with the help of her community and family. The story was based on the narratives of Ana Cristina and Maria Dolores, and included a discussion guide so that women could use the booklet to study in groups. Finally, small pocket sized cards were produced in

Spanish and English (for the English speaking population of the Atlantic Coast). The cards, which were designed to be hidden easily, assured women, "If you are living with violence, there are ways out," and gave basic information about women's legal rights and centers that support victims of abuse.

Members of the health and research commission were invited to participate on the technical advisory board of the Demographic and Health Survey, and were instrumental in questionnaire design and training of field workers. The commission also sponsored the development of a software program for violence surveillance. The program was designed to enable different organizations, including women's centers as well as government agencies to collect information about their services and ongoing activities in a systematic way in order to be able to assess the overall impact of these activities. The commission also actively engaged with the health sector and joined forces with the Pan American Health Organization to persuade the Ministry of Health to formally recognize violence against women as a public health issue⁷. The network was able to build upon this policy statement by offering to help revise the prenatal care norms to incorporate support for women living with violence, and to provide training and materials for health workers.

Both from the perspective of the UNAN-León/Umeå research team, and from the women's violence network, enormous benefits were gained from the joint research venture. Two key features of the collaboration were shared ownership over the process and the results, and clear definitions and respect for the roles of the different partners. Although the research team had primary responsibility for decisions pertaining to methods and analysis, priorities were sometimes dictated by emerging political situations. For example, when members of the Network were unexpectedly invited to testify before the Justice Commission of the National Assembly, the research results from the focus group discussions had to be ready several weeks earlier than planned.

All national publications and presentations of results were carried out jointly between the two universities and the violence network, although the events were tailored for different audiences. The presentation of the research results to the academic community was organized by UNAN-León, whereas the violence network organized a high publicity event with a discussion panel made up of

⁷ Ministerial Resolution 67-96, November, 1996.

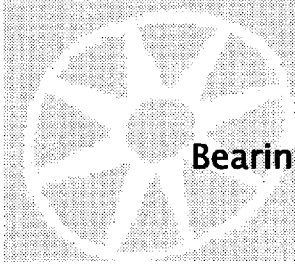
a member of the Supreme Court, The Vice-Minister of Health, the Director of the Government Women's Institute and the Vice-President of the National Assembly. Both presentations were presided over jointly by the President of UNAN-León and the executive secretary of the violence network.

From the perspective of the anti-violence movement, the research findings provided persuasive arguments for legal and policy reform. Through its participation in the research process, the network enhanced its credibility as experts in the field of violence, and individual members developed skills and expertise that strengthened the organization's capacity to engage on an equal footing with government agencies. Together with other organizations of the women's movement, they have succeeded in maintaining sustained public focus on violence against women and women's rights, despite the stated intentions of a conservative government to obscure women's rights under a traditional "family values" approach to social policy.

From the universities' perspectives, the quality of the research was enriched by the knowledge and perspectives of women activists in both the design of the study and the interpretation of the findings. Members of the violence network also provided crucial support for respondents and interviewers during the course of the fieldwork. Finally, the reporting of findings could never have had a similar impact had they been presented solely in an academic forum. Indeed, as Herman points out, it is unlikely that the research could even have been conducted had it not been for the increased public awareness and supportive social context created by the prior work of the women's movement [65].

The research collaboration was also considerably strengthened by the opportunity to participate in an international network of researchers on violence, and to learn how other researchers had dealt with issues of measurement, ethics and safety, and dissemination of results.⁸

⁸ The International Network of Researchers on Violence against Women (IRNVAW) meets bi-annually and is convened by the Center for Health and Gender Equity (CHANGE).



Bearing witness

The image of these stories affects you, to see how these women suffer, and especially the feeling that no one supports them, these are experiences that you never forget... (DHS interviewer)

To study psychological trauma is to come face to face both with human vulnerability in the natural world and with the capacity for evil in human nature. To study psychological trauma means bearing witness to horrible events. Judith Herman [65]

One aspect of the research process for which I personally was unprepared was how emotionally disturbing it would be. In the León study, we often ended up crying during our weekly meetings with fieldworkers as we listened to each other's experiences. Many of the interviewers had been raped, battered by a partner or sexually abused during childhood and they found that the interviews awoke in them many previously forgotten emotions. During the two-month fieldwork period, one interviewer was taken in the middle of the night on two occasions to the emergency room for what turned out to be panic attacks. An interviewer from the Managua study summarized the intensity of the combined pressures on respondents and interviewers in the following story:

[The experience] that most affected me was with a girl my age, maybe 22 years old... She told me all about how her husband beat her while she was washing clothes in the back patio. Her mother in law would spy on her and tell her son things so that he would punish her. She was very afraid, and her voice trembled as she spoke, but she really wanted to tell me about her tragedy. She kept looking over to where her mother-in-law was watching us. She asked me for help and I told her about the Women's Police Station. When her mother-in-law got up to go to the latrine, I quickly gave her a copy of the pamphlet and she hid it. She thanked me when I left and I ended up crying in the street, because I couldn't stand to see such a young girl being so mistreated not only by her husband but by her mother-in-law also." (Managua interviewer)

Although I was not involved in the daily interaction with abused women, even supervising the fieldwork and analyzing the data turned out to be more painful than I could possibly have imagined. Reading scientific literature about violence did not prepare me for listening to stories of unspeakable suffering and anguish, as well as stories of immense courage and hope. It forced me to reach inside myself and confront my own experiences of violence. I found myself in tears as I added up the numbers of women who had been kicked in the stomach during pregnancy, or scrolling down the pages of responses to the question, "how were you affected by the violence?" where the same words were repeated over and over, "I cry a lot," "I am very nervous," "I am always afraid."

Our colleagues were sympathetic although, not being as close to the process, they sometimes found it hard to understand why we seemed to be becoming so unhinged. Herman, in her work on psychological trauma in survivors of political and domestic violence, describes this as a common experience for those who study violence:

Witnesses as well as victims are subject to the dialectic of trauma. It is difficult for an observer to remain clearheaded and calm, to see more than a few fragments of the picture at one time, to retain all the pieces and to fit them together. It is even more difficult to find a language that conveys fully and persuasively what one has seen. Those who attempt to describe the atrocities that they have witnessed also risk their own credibility [65].

In searching to understand the meaning of our results, we sometimes relied on our own experiences of violence. Interviewers who were themselves survivors of abuse often had unique insights, having re-interpreted their own experiences in light of what they had learned by listening to other women. Some of these stories have been included in the presentation of research results, together with the narratives of respondents from the survey⁹.

The main challenge we faced as researchers was how to avoid taking on the role of an advisor or attempting to save the respondents. The interviewers often felt distressed because they were not able to provide more support to the women we interviewed, and trying to deal with this sense of impotence was a constant theme in our reflections.

⁹ These have not been highlighted in the text, to protect the identities of individuals.

...We spent days thinking about that poor girl and how we left her, without being able to help her, all we did was give her the pamphlet and leave, and the interviewers were very upset, because they would think about their daughters, and that tomorrow something could happen to them and there would be no one to help them... (DHS supervisor)

What sustained us through this period was the sense that women had entrusted us with their stories and it was our job to ensure they were used to help others. We reminded ourselves that our main contribution was to bear witness to women's experiences, and that women were also grateful for the chance to be able to tell their stories. Some women found the experience so helpful that they would ask a fieldworker to please "interview" another friend or relative who had a story she needed to tell. According to Herman, "remembering and telling the truth about terrible events are prerequisites both for the restoration of the social order and for the healing of individual victims [65]." A qualitative study of survivors of abuse who had attended a Nicaraguan women's center found that a central part of women's process of recovery and personal and as well collective empowerment, came not only from increased knowledge of their rights, but also from the opportunity to share their experiences and to help other women in similar situations [142].

Many of the fieldworkers also referred to the experience of listening to women's stories, as well as to opportunity to tell their own stories, as having been a profoundly healing experience. One woman who had never before discussed her experiences with anyone said,

[when I joined this study] I felt that I had finally found someone I could tell everything to, someone with whom I could share my burden, because it's horrible to feel so alone. Now I feel that a weight has been taken off me... I feel relieved. I feel much, much better, really good! (León interviewer)

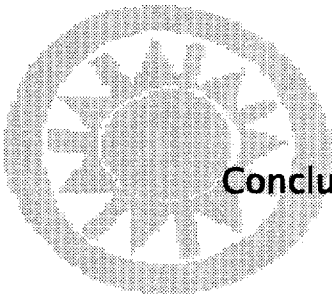
Another woman, who had separated from her abusive husband several years earlier, commented

What has helped me the most was working on this research [on violence]: that helped me to be who I am today....because I have been able to help others. I felt that I could help them because I had lived through it myself, and I didn't like it, and I wouldn't like for anyone, anyone to live through what I have lived through in my life ever. And when a woman told me these things, I could give her advice.

When I was carrying out the interviews, I lived through each experience as if it were my own, and I could say to them “yes, I lived through this also, I know what this is.” I felt a little sad because it was very moving, and I thought that I was the only one who had lived through this. (León interviewer)

We believe that the efforts to forge a sense of solidarity among the research team members and compassion towards respondents also had a positive impact on the quality of the data, by increasing women's willingness to disclose experiences of violence.





Conclusions

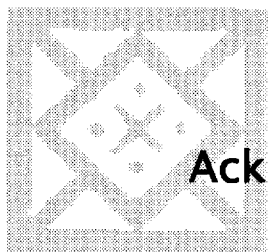
Through the combination of quantitative and qualitative methods, this research presents a compelling evidence of the pervasiveness of domestic violence and its devastating impact on the lives of Nicaraguan women and children. The survey results present the magnitude and characteristics of partner abuse in Nicaragua, and the qualitative data provide insights into the meaning of violence from the perspective of abused women. The findings also lend support to the ecological model of gender-based violence [99] by showing how the meaning of violence is constructed through the interaction of events and circumstances operating at different levels. The descriptions of violence presented in the narratives are consistent with a complex dynamic referred to by international researchers, in which physical abuse is closely linked to abuse of power and control over a woman's daily life, including social contacts. Women living under coercive control and threat of violence experience feelings of shame, fear, isolation, entrapment, lowered self-esteem, and loss of autonomy and diminished functional capacity. These feelings may be reinforced by the negative responses of family, friends and public institutions, including the criminal justice system, and by cultural attitudes towards violence and gender roles.

Our findings indicate that the vast majority of women living with violence do not seek outside help for their situation largely due to shame and fear of reprisals. Those who do reach out for help often do not receive the kind of support they need. Our research is consistent with other studies in highlighting the crucial role that families and the immediate community play by enabling or frustrating women's attempts to overcome violence. Therefore, strengthening community support networks could make an important contribution to preventing domestic violence. Another priority intervention area would be to improve the response of service providers and legal and health institutions so that when women do decide to seek help, they receive appropriate and timely support.

Before initiating this research it was thought, both by researchers and activists, that it would be difficult to get women to talk about such a sensitive issue. The research process revealed that, on the contrary, women were eager to tell their stories, although for many it was the first time that they had done so. One of the most compelling findings of this study might be that women are longing to talk about the violence they experience, which in turn presents a challenge to researchers, policy makers, and service providers to listen more closely to what they have to say.

The present thesis presents the results of the first stage of research on domestic violence in Nicaragua. This stage focussed primarily on the dimensions and characteristics of abuse. In 1996 the Reproductive and Child Health Project UNAN-León-Umeå University conducted a second stage of data collection that is currently under analysis. This phase focuses on the impact of violence on the health of women and children. Several case-referent studies were nested into the demographic surveillance system in León, were performed to explore the links between violence and adolescent pregnancy, child mortality, sexual risk-taking behavior, suicide and low birth weight. Initial findings indicate that the global burden of disease and death among Nicaraguan women and children attributable to violence is considerable [94, 165, 166, 167].

However, many questions are still left unanswered, and these need to be addressed in future research. Our findings were supportive of the ecological framework that views domestic violence as a complex, multi-faceted phenomenon. Thus epidemiological study designs which incorporate ecological data would contribute to deepening our understanding of how these various levels interact. Finally, in order to develop better strategies for helping women overcome violent relationships it is important to evaluate the effectiveness of current programs, from the perspective of survivors of abuse themselves.



Acknowledgements

Taking note of the comments I received on my licentiate thesis, (mainly, that the acknowledgements were almost as long as the thesis itself) I set out this time with the aim of paring it down. I soon realized, however, that the list of people and institutions to whom I feel a special debt of gratitude has grown rather than diminished, so I have decided to err on the side of inclusion (I'm sure those who know me will not be surprised.)

I am deeply grateful to the Department of Public Health and Clinical Medicine, Epidemiology, Umeå University, for their generous financial as well as moral support, and for their commitment to a tradition of collaborative public health research for social change. Particular thanks are due to the Department Head, Stig Wall, for his comments on all the papers and for enthusiastically embracing the concept of feminist epidemiology.

To my friend and advisor, Anna Winkvist, who has been the most tireless and unconditional of allies, who has patiently guided me through seemingly endless stacks of printouts and statistical tables and still manages to look at each revision with fresh eyes. I look forward to many more years of collaboration with you in Indonesia and elsewhere.

To my friend and advisor Jerker Liljestrand, to whom much of the credit for getting me started on this path is due. Your faith in me has often exceeded my own, and I am grateful for your encouragement every step of the way.

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To my friends and colleagues from the Reproductive and Child Health Project: thank you for welcoming me into the research team with open arms. Special thanks to Carina Källestål, Swedish Coordinator of the project, and to Elmer Zelaya, Eliette Valladares, Trinidad Caldera, Ann Olsson, Kajsa Åsling-Monemi and Felix Zelaya. I am especially grateful to Andrés Herrera for his enthusiastic support both in data collection and in the presentation of results in Nicaragua.

The partnership between a feminist and a self-declared Nicaraguan macho was an improbable match from the start, and therefore Rodolfo Peña, the Nicaraguan Coordinator of the León-Umeå collaboration deserves special recognition for his support of the violence project and for teaching me how to perform survey research. Although we have occasionally pulled out our hair and banged our heads against the walls in frustration, we have never given up on each other, and I am immensely grateful for your friendship.

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The research would not have been possible without the generous financial support of as well as the Swedish International Development Cooperation Agency (Sida) and Gruppo Volontario Civile (GVC),

Both new and old friends from three continents have accompanied me at different stages of this journey, and I find that I do not have words enough to thank you for your support and encouragement. In particular, I want to

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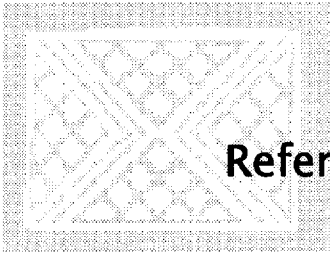
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