Candies in hell: women’s experiences of violence in Nicaragua

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Abstract

The aim of this study was to describe the characteristics of domestic violence against women in León, Nicaragua. A survey was carried out among a representative sample of 488 women between the ages of 15–49. The physical aggression sub-scale of the Conflict Tactics Scale was used to identify women suffering abuse. In-depth interviews with formerly battered women were performed and narratives from these interviews were analysed and compared with the survey data. Among ever-married women 52\% reported having experienced physical partner abuse at some point in their lives. Median duration of abuse was 5 years. A considerable overlap was found between physical, emotional and sexual violence, with 21\% of ever-married women reporting all three kinds of abuse. Thirty-one percent of abused women suffered physical violence during pregnancy. The latency period between the initiation of marriage or cohabitation and violence was short, with over 50\% of the battered women reporting that the first act of violence act took place within the first 2 years of marriage. Significant, positive associations were found between partner abuse and problems among children, including physical abuse. Both the survey data and the narrative analysis pointed to extreme jealousy and control as constant features of the abusive relationship. Further, the data indicate that battered women frequently experience feelings of shame, isolation and entrapment which, together with a lack of family and community support, often contribute to women’s difficulty in recognizing and disengaging from a violent relationship. These findings are consistent with theoretical conceptualisations of domestic violence developed in other countries, suggesting that, to a large degree, women’s experiences of violence transcend specific cultural contexts. © 2000 Elsevier Science Ltd. All rights reserved.

Keywords: Domestic violence; Women; Abuse; Nicaragua; Qualitative

…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

Background

Gender-based violence is increasingly receiving global attention as a significant public health and human
One of the most common forms of gender-based violence is domestic violence or wife abuse, which is defined in this paper as a series of coercive behaviours, including physical abuse towards adult and adolescent women, by current or former male intimate partners. It has been estimated that in most countries between 10–50% of women have experienced wife abuse (Heise, Ellsberg & Gottemoeller, 1999).

Physical and sexual assault by partners has been associated with a wide variety of serious health problems affecting both women and their children, including injuries due to trauma (Grisso, Schwarz, Miles & Holmes, 1996; Abbott, Johnson, Koziol-McLain & Lowenstein, 1995; McLear & Anwar, 1989), low birth weight (Bullock & McFarlane, 1989; Parker, McFarlane & Soeken, 1994; Curry, Perrin & Wall, 1998), chronic pelvic pain and other gynaecological problems (Schei & Bakketeig, 1989; Golding, 1996), depression (Roberts, Lawrence, Williams & Raphael, 1998; Campbell & Lewandowski, 1997; Danielson, Moffitt, Caspi & Silva, 1998), suicide (Walker, 1994; Amaro, Fried, Cabral & Zuckerman, 1990; Stark & Flitcraft, 1996; Counts, 1987), unwanted pregnancy and sexually transmitted diseases (Gazmararian, Adams, Saltzman, Johnson, Bruce, Marks & Zahniser, 1995; Campbell, Pugh, Campbell & Visscher, 1995; Heise, et al., 1999; Handwerker, 1993). Although violence can have direct health consequences, it also increases women’s risk of future ill health. Therefore, like tobacco or alcohol use, victimisation can best be conceptualised as a risk factor for a variety of diseases and conditions (Heise, et al., 1999).

A large body of research has been carried out during the last 25 years, particularly in the US and Europe, regarding the characteristics of wife abuse and the experiences of battered women. Qualitative research has consistently pointed to a series of characteristics which define the experience of battering for women, and conceptualise violent relationships as an ongoing process of entrapment and diminished coping capacity (Walker, 1979; Ferraro & Johnson, 1983; Landenburger, 1989; Kirkwood, 1992; Smith, Earp & DeVellis, 1995).

However, knowledge on the characteristics of abuse is limited by two important methodological constraints. The first weakness is the relative scarcity of population-based data. The majority of research has been carried out on non-representative samples of battered women, often women who have attended shelters or other services for violence. Comparatively little is known about those women who do not seek shelter or services who, according to most estimates, greatly outnumber those who do seek help (Strube, 1988; Sorenson & Saflas, 1994).

The second weakness has been the lack of cross-cultural research. Although culture is known to have an effect on the magnitude and characteristics of abuse in different societies as well as the meaning ascribed to different acts (Heise et al., 1999; Levinson, 1989; Torres, 1991; Counts, Brown & Campbell, 1992), there have been few systematic attempts to compare these issues in different settings. Thus, it is not clear to what degree theories about women’s reactions to violence based on the experiences of US and European women may be generalised to other cultures.

Several authors have used an ecological model to conceptualise gender-based violence as a multifaceted phenomenon grounded in an interplay between personal, situational and socio-cultural factors (Heise, 1998; Belsky, 1980; Corsi, 1994; Dutton, 1995). These factors are nested in four different levels, conceived as concentric circles (see Fig. 1). 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 (Hotaling & Sugarman, 1986; Heise, 1998). The second circle of the ecological framework refers to the immediate context in which abuse takes place, in this

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**Fig. 1.** An integrated framework for understanding violence against women (adapted from Heise, 1998).
case, the intimate relationship. Numerous cross-cultural reviews have cited male economic and decision-making authority in the family as strong predictors of wife abuse (Heise, 1998; Levinson, 1989).

The organisation 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, neighbourhood and social networks. Both research in the United States and elsewhere indicate a strong association between 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 cultural norms. Numerous studies from around the world have suggested that violence against women is most common in societies where gender roles are rigidly defined and enforced, and where the concept of masculinity is linked to toughness, male honour, or dominance. Other cultural norms have been associated with wife 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 (Heise, 1998).

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 (Heise, 1998). 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 abuse shapes women’s strategic responses to violence (Dutton, 1996).

In Nicaragua, violence towards women has become a major concern in recent years. Both policy makers and activists have acknowledged the need for reliable data on wife abuse. The present research arose as a collaboration between Swedish and Nicaraguan researchers and a national network of women’s organisations that carry out advocacy on domestic violence (Ellsberg, Liljestrand & Winkvist, 1997). Its main purpose was to describe the magnitude, characteristics and circumstances of intimate partner abuse in León, Nicaragua, as well as the way in which women experience domestic violence.

Methods

The study was carried out in the municipality of León, Nicaragua’s second largest city, with a population of 195,000 inhabitants. A combination of quantitative and qualitative methods was used. A survey was carried out to determine the magnitude and characteristics of wife abuse on a representative sample of women, whereas interviews and discussions were used both to design the survey and to interpret its results as well as to examine the significance of violence in women’s lives.

The community survey

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 (Peña, Liljestrand, Zelaya & Persson, 1999). From this, a random sub-sample of 591 women was generated representing both the urban and rural regions of León Municipality. This 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.

A questionnaire was developed in Spanish that included the following instruments:

- The physical aggression scale of the Conflict Tactics Scale (CTS) was used to determine the existence of physical abuse (Straus & Gelles, 1979, 1986). The CTS lists eight acts of physical aggression in order of severity, ranging from throwing objects to the use of a weapon. It measures current (within the last 12 months) and lifetime prevalence of physical violence, as well as severity of abuse and frequency during the previous year.
- Some aspects of a questionnaire used in a population-based survey of wife beating in Mexico (Valdés & Shrader Cox, 1992) were used to describe the characteristics and effects of physical and psychological abuse.

Once a woman was classified as having experienced wife 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 behavioural, 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 (Renzi & Agurto, 1998; Zelaya, Peña, Berglund, Persson & Liljestrand, 1996). 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 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 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 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.

The data were analysed using Epi Info 6.04 for univariate analysis and SPSS 7.0 for multivariate logistic regression analysis. Statistical significance was tested by means of 95% confidence intervals.

Collecting women’s stories about violence

Semi-structured interviews were carried out initially with women who had experienced violence to help focus the content and wording of the survey instrument. To help interpret the survey results two focus group discussions (FGD) were held with 18 additional women with experience of domestic violence issues, some of whom had been closely involved with the research process itself.

Finally, thematised, in-depth interviews were carried out with two additional women who had lived in violent relationships and had since left their partners. The women were similar to women in the survey population in terms of age, education and economic conditions and the general characteristics of their experiences of wife abuse. They were chosen because of their willingness and ability to describe and interpret their own actions and feelings about the experience (intensity sampling). Both the in-depth interviews and FGD were taped and verbatim transcripts were made for further analysis.

Ana Cristina was a 27-year-old university student who had lived through several years of abuse until ending her marriage 7 years earlier. Maria Dolores, a 26-year-old nurse, was married for 9 years to an abusive husband, from whom she had separated 2 weeks before the interview. 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 had for them (“what it was like”).

Narrative analysis deals primarily with how individuals explain and interpret events in their lives (Reissman, 1993). 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 (Mishler, 1991; Sandelowski, 1991). The narratives were first organised according to time frame, with emphasis placed on the period when both women were living with their partners. The central themes of the narratives were organised according to the three outer domains of the ecological framework:

- events and feelings occurring within the context of

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1 Names and some identifying characteristics of both women have been changed to protect their identities. Texts were translated from Spanish by the authors.
the relationship itself (i.e. the characteristics of the abuse); • interactions with others (extended family, friends, work, community-level organisations); • information providing 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 emphasised in this analysis as it mainly preceded the period under study. The content of the selected texts was analysed and compared to the survey results and to international research.

As the themes explored in the narratives provided a coherent representation of violence against women in Nicaragua, they are presented as the framework within which the quantitative data are structured. In this sense the quantitative data may be seen as one of many threads adding texture to a tapestry of stories, represented in the voices of two women.

Results and discussion

I. Characteristics of abuse

“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 5 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 have to 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 488 women interviewed, 360 were identified as having ever been married or living with a male partner. Of these, 188 women (52%) reported having experienced physical violence at some point in their lives, while 20% reported experiencing severe violence during the previous 12 months (Ellsberg, Peña, Herrera, Liljestrand, & Winkvist, 1999). The general characteristics of the ever-married women, as well as

Table 1
Description of the women interviewed

<table>
<thead>
<tr>
<th>Age</th>
<th>Ever-married women (n = 360)</th>
<th>Ever-abused women (n = 188)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>(%)</td>
</tr>
<tr>
<td>15–19</td>
<td>31</td>
<td>(9)</td>
</tr>
<tr>
<td>20–29</td>
<td>140</td>
<td>(39)</td>
</tr>
<tr>
<td>30–39</td>
<td>121</td>
<td>(34)</td>
</tr>
<tr>
<td>40–49</td>
<td>68</td>
<td>(18)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>31</td>
<td>(9)</td>
</tr>
<tr>
<td>Primary</td>
<td>163</td>
<td>(45)</td>
</tr>
<tr>
<td>Secondary</td>
<td>166</td>
<td>(46)</td>
</tr>
<tr>
<td>Zone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>294</td>
<td>(82)</td>
</tr>
<tr>
<td>Rural</td>
<td>66</td>
<td>(18)</td>
</tr>
<tr>
<td>Poverty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non poor</td>
<td>71</td>
<td>(20)</td>
</tr>
<tr>
<td>Poor</td>
<td>289</td>
<td>(80)</td>
</tr>
<tr>
<td>No. of children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0–1</td>
<td>90</td>
<td>(25)</td>
</tr>
<tr>
<td>2–3</td>
<td>139</td>
<td>(39)</td>
</tr>
<tr>
<td>4 or more</td>
<td>131</td>
<td>(36)</td>
</tr>
<tr>
<td>Current marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married/common-law union</td>
<td>279</td>
<td>(78)</td>
</tr>
<tr>
<td>Single/separated/divorced</td>
<td>81</td>
<td>(22)</td>
</tr>
</tbody>
</table>
the women experiencing spousal violence are presented in Table 1. The characteristics of the women with regard to educational attainment, poverty, age groups and current marital status are similar to national figures (Rosales, Loaiza, Primante, Barbarena, Blandón & Ellsberg, 1999). Women who experienced abuse were more likely to live in the urban area, to be poor, and to have more than 4 children than women not experiencing abuse. They were also more likely to report that their mothers or their mothers-in-law had been physically abused by partners (Ellsberg et al., 1999).

The acts of violence most frequently mentioned by women were pushing, punches and kicks, followed by slaps and thrown objects (Table 2). The overall median duration of abuse was 5 years, although women between 35–49 years had experienced a median duration of 10 years of abuse at the time of the interview. Thirty-one percent of women reporting violence described being beaten during pregnancy, of whom 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. Seventy-two percent of women reported being injured on at least one occasion as a result of violence.

Nearly all 188 battered women reported having been beaten within the house, usually in the bedroom, while 22% reported beatings also outside the house, most frequently in the streets (Table 3). Substance abuse, particularly alcohol use, was related to wife abuse. Fifty-four percent of battered women indicated that their husbands were generally intoxicated during the violence, and nearly one-third cited alcoholism as the major cause of violence.

Although battering was less frequent during courtship (8% of women reported violence during a dating relationship), the latency period between the initiation of marriage or cohabitation and violence was very short. Over 50% of the battered women reported that the initial violent act took place within the first 2 years of marriage, with 80% beginning within 4 years (Fig. 2).

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

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 and only 1 woman reporting sexual abuse without physical or

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Table 2
Types of violent acts by a current or former partner, reported ever and within the last 12 months (n = 188 ever abused women)

<table>
<thead>
<tr>
<th>Type of violent act experienced</th>
<th>Last 12 months (n = 188)</th>
<th>Ever (n = 188)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (%)</td>
<td>N (%)</td>
</tr>
<tr>
<td>Moderate violence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thrown object</td>
<td>40 (22)</td>
<td>94 (50)</td>
</tr>
<tr>
<td>Slaps</td>
<td>40 (22)</td>
<td>101 (54)</td>
</tr>
<tr>
<td>Pushed, shoved</td>
<td>76 (40)</td>
<td>152 (81)</td>
</tr>
<tr>
<td>Severe violence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Punches, kicks</td>
<td>50 (27)</td>
<td>112 (60)</td>
</tr>
<tr>
<td>Blows with objects</td>
<td>41 (22)</td>
<td>91 (48)</td>
</tr>
<tr>
<td>Beaten up</td>
<td>18 (10)</td>
<td>54 (29)</td>
</tr>
<tr>
<td>Threatened with weapon</td>
<td>18 (10)</td>
<td>47 (25)</td>
</tr>
<tr>
<td>Used weapon</td>
<td>7 (4)</td>
<td>22 (12)</td>
</tr>
</tbody>
</table>

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

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Fig. 2. Time from start of marriage to onset of violence: cumulative incidence of domestic violence over time among 188 women who reported having experienced marital violence at least once in their lives, by means of Kaplan Meier Life Table Analysis.
emotional violence (Fig. 3). Nearly all of the women living with physical violence (94%) 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. Although through quantitative analysis it was possible to measure different types of abuse as related but

Table 3
Characteristics of wife abuse reported by 188 women

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

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

\(b\) Percentages do not add up to 100 due to multiple responses.

![Fig. 3. The overlap between sexual, physical and emotional abuse in 360 ever-married women.](image)
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.

...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).

"Mommy, you look like a monster..."

Nearly half of abused women reported that their children were usually present during the violence (Table 3). Logistic regression analysis further revealed that the children of women who had been abused were almost seven times more likely to be abused themselves (either physically, emotionally or sexually) than children of non-battered women and they were more than twice as likely to suffer from learning, emotional or behavioural problems. Those children witnessing violence experienced the greatest risk: they were nine times more likely to have reported problems than children of non-abused women, while children of abused women who had not witnessed violence were not significantly more likely to present problems (Fig. 4).

The narratives suggest that the involvement of children in the violence is a particular source of anguish for women, possibly more distressing than her 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 realised that I was hurting my daughters by staying in a marriage with no future. (Ana Cristina).

"...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

![Fig. 4. Problems among children of battered women. Percentages and Crude Odds Ratios (95% CI) are given for the risk of children having learning, behavioral or emotional problems or being physically or sexually abused according to whether they live in families with domestic violence and whether or not they have witnessed violence against their mothers.](image)
control over a series of every day activities, including visiting friends and the use of birth control (Table 4). 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 terrorised 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...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 overall characteristics of violence described in the survey data and the narratives are consistent with international research. Studies in the United States and elsewhere indicate that between 4–8% of women are physically abused during pregnancy (Gazmararian, Lazorick, Spitz, Ballard, Saltzman & Marks, 1996). There is also considerable evidence regarding the links between alcohol consumption and men’s abusive behaviour (Rao, 1997; Hotaling & Sugarman, 1986; Leonard, 1993).

The findings regarding the associations between problems in children and witnessing abuse of their mothers have been documented in many studies. Witnessing marital abuse as a child has been significantly linked to later abusive behaviour in adult men (Hotaling & Sugarman, 1986). These findings have been replicated in population based studies in Cambodia (Nelson & Zimmerman, 1996), Canada (Johnson, 1996) and Chile (Larrain, 1994). The Nicaraguan survey also found a significant association between a family history of abuse and wife abuse (Ellsberg et al., 1999).

To our knowledge, this is the first time that the latency period between marriage and violence has been measured on a population based group of abused women. Our finding of such early onset of abuse may shed light on the positive association between partner abuse and parity which has been reported in many international studies, as well as in the Nicaraguan survey.

### Table 4

<table>
<thead>
<tr>
<th>Variable</th>
<th>Univariate OR^a (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital control^b</td>
<td></td>
</tr>
<tr>
<td>No control</td>
<td>1.0</td>
</tr>
<tr>
<td>Control over 1–4 activities</td>
<td>4.3 (2.7–7.0)</td>
</tr>
<tr>
<td>Control over 5 or more activities</td>
<td>11.9 (5.0–28.3)</td>
</tr>
</tbody>
</table>

^a Odds ratios (95% confidence intervals) for having experienced violence at least once in their lives are presented.

^b Women who report that their partner prohibits them from one or more of six possible activities (work, study, receive visits, visit family, visit friends, use contraceptives).
(Ellsberg et al., 1999; Larrain, 1994; David and Chin, 1998; Martin, Tsui, Maitra & Marinshaw, 1999; Tjaden & Thoennes, 1998). Researchers have long assumed that having many children increases the risk of battering, perhaps by increasing stress or by providing more causes for marital disagreement. However, our findings indicate that the reverse may be true, as apparently for many women, violence begins before childbearing; thus violence may be a risk factor for large families rather than the opposite. The association found between physical violence and sexual coercion, as well as marital control over the use of contraceptives lends support to this interpretation. Moreover, focus group discussions revealed that some men deliberately kept their wives pregnant to reduce the likelihood of their being unfaithful. A common saying in Nicaragua is “women should be kept like a farm shot-gun: always loaded.”

The strong association found between marital control and physical abuse is consistent with international research suggesting that acts of physical violence do not represent isolated events but rather a relationship based on domination (Heise, 1998; Levinson, 1989). Dobash and colleagues 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” (Dobash, Dobash, Wilson & Daly, 1992). 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 (Zimmerman, 1995; Armstrong, 1998; Schuler, Hashemi, Riley & Akhter, 1996).

II. The social context of domestic violence

“Do you think you’re the only one?...”

Cross-cultural comparisons of data on domestic violence suggest that the social isolation of women and families is both a cause and a consequence of wife abuse (Heise, 1998). Counts, Brown and Campbell (1992) found that one of the strongest predictors of societies with low levels of violence is whether family and community members would intervene if a woman were being beaten or harassed. Numerous studies have found that battered women have less interaction with friends, neighbours and relatives (Nielsen, Russell & Ellington, 1992; Cazenave & Straus, 1979).

Moreover, many researchers have found that the responses of community, family and friends contribute greatly to shaping how battered women themselves recognise and cope with the abuse (Dutton, 1996; Landenburger, 1989). Social support also plays a vital role in the recovery and readjustment of victims of violence. When friends or family are unavailable or indifferent, this may be more distressing than the initial victimising experience, because it reinforces the victim’s perception of deviance and self-blame (Janoff-Bulman & Frieze, 1983; Andrews & Brewin, 1990).

In Nicaragua, both the narratives and the survey data indicated that battered women are less likely to have access to social support than non-battered women. Although the abused women in the survey did not report less access to friends and confidants, they were significantly less likely to report access to family or material support (defined as having someone to lend money or lodging in case of need) (Table 5). Further, the lack of social support was linked to marital control, in that women who experienced one or more prohibitions also were more likely to report lack of family support (univariate logistic regression OR 2.4, 95% CI 1.4, 4.1) or material support (OR = 1.8, 95% CI 1.1, 2.7).

Eighty percent of women reported that they had never sought help for their situation. The three main reasons given for not seeking help were “shame” (18%), “fear of reprisals” (17%) and “it didn’t seem necessary” (30%). Although the last response was more common among women who had experienced less severe violence, it is noteworthy that 26% of women who had suffered severe violence felt that they did not need help.

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.

...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 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…

“I thought it was something shameful…”

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…

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

…His mother said that her son wasn’t like that before, and that it wasn’t until he married me that he became that way…

Throughout the 9 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 is 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.

The experiences of Ana Cristina and Maria Dolores may shed light on how marital control, physical abuse and the lack of social support interact to maintain women in abusive relationships. The isolation experienced by Ana Cristina and Maria Dolores resulted from the interplay between two related phenomena. On the one hand, both partners deliberately limited their wives contacts with friends and family, thereby isolating them from potential sources of support. However, when Ana Cristina and Maria Dolores eventually confided in family or friends or tried to seek help outside the family, the reactions they met, which ranged from denial or minimising the abuse to ridicule and accusations of blame, reinforced both women’s feelings of shame and isolation. By implying that the abuse must be their own fault and that there was simply no way out of the relationship, the responses of family and friends diminished both women’s ability to recognise and to cope effectively with the abuse.

These examples suggest that the stigmatising nature of wife abuse distinguish it from other kinds of victimisation, e.g. crimes committed by strangers. Wife abuse strikes at the core of a woman’s social identity as wives and mothers, which makes it especially devastating to her self-esteem. This is consistent with research which suggests that shame and self-blame are powerful mechanisms keeping many women entrapped in violent relationships (Landenburger, 1989).

…After the blows he always came back to court me, bought me clothes and afterwards he always said, forgive me, I won’t do it again, but then he always did the same afterwards. And then my grandmother would say to me “Child what are you going to do with candies in hell?” (Ana Cristina).

The feelings of despair, shame, fear and entrapment expressed by Ana Cristina and Maria Dolores have been referred to by numerous researchers as a central theme in the experience of wife abuse (Ferraro & Johnson, 1983; Landenburger, 1989; Smith et al., 1995; Stark & Flitcraft, 1996; Walker, 1994). Landenburger presents the complex dynamic by which women become entrapped in abusive relationships and their eventual recovery as a four-stage process. This process includes periods of denial, self-blame and endurance.

Table 5
The association between wife abuse and social networks among ever-married women 15–49 years old (n = 360)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Univariate ORa</th>
<th>(95% CI)a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family and material support</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Family or material support</td>
<td>1.8</td>
<td>(1.1–2.8)</td>
</tr>
<tr>
<td>Neither kind of support</td>
<td>3.4</td>
<td>(1.7–6.7)</td>
</tr>
</tbody>
</table>

a Odds ratios (95% confidence intervals) for having experienced violence at least once in their lives are presented.
before eventually they are able recognise the abuse and to identify with other women in the same situation, thereby beginning the process of disengagement and recovery from the abusive relationship.

III. The cultural context of 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

One of the strengths of narrative analysis is the access it provides to the cultural context surrounding events (Steffen, 1997). As Riessman has pointed out, “Culture speaks itself through an individual’s story. It is possible to examine gender inequalities, racial oppression and other practices of power that may be taken for granted by individual speakers” (Reissman, 1993). In this sense, the message which both Ana Cristina and Maria Dolores heard repeatedly from friends, family and even the police that, “He is the father of your children, and it is your duty to put up with the abuse and keep your family together,” represents not only the social context of the abuse. It also represents the broader cultural context within which wife abuse in Nicaragua takes place.

The socialisation of men and women in Nicaragua is heavily influenced by the bipolar concept of Machismo and Marianismo, which is common throughout Latin America (Bunster, 1991; Rivera, 1996; Lancaster, 1992). Machismo as an ideology exaggerates the differences between men and women, emphasising male moral, economic and social superiority over women. It is a cult to virility, in which male aggressiveness and sexual prowess are supremely valued. In contrast, Marianismo refers to spiritual devotion to the Virgin Mary, who is considered simultaneously to embody the ideals of maternity and chastity. Latin American woman are expected to emulate the Marian model of spiritual perfection and purity, although women are valued primarily for their ability to become mothers (Larrain & Rodriguez, 1993).

Like many other Latin American countries, Marian devotion is strong in Nicaragua. The Feast of the Immaculate Conception (la Purisima) is a national holiday and altars are set up in homes throughout the country to honour the Virgin Mother. The Virgin’s imagery was even borrowed successfully in the 1990 presidential elections, when Doña Violeta Barrios de Chamorro campaigned dressed in white on floats resembling religious processions, and was referred to by many as “the Mother of all Nicaraguans” (Kamp-wirth, 1996).

While the tradition of Machismo defines masculine identity in terms of dominance and aggression, Marian devotion encourages women to be dependent and submissive. This is particularly significant for women living in abusive relationships. Rather than taking active steps to change her situation, a devout woman is expected to hold the family together at all costs, to endure abuse patiently and to pray to the Virgin for her husband’s conversion.

The traditional view of womanhood expressed in the narratives is somewhat striking in light of the fact that both Ana Cristina and Maria Dolores experienced their adolescence in the midst of the Sandinista revolution of the 1980s, when women’s opportunities for education and employment were greatly expanded. However, to a large degree, the revolution failed to make substantial progress in overcoming the culture of machismo in Nicaragua (Babb, 1996; Lancaster, 1992). Although women participated in greater numbers than ever before in virtually all aspects of social, economic and political life, few explicit efforts were made to transform discriminatory laws and policies, or to challenge the cultural norms that tolerate or even encourage violence against women. Issues such as sexual and reproductive rights or domestic violence were largely dismissed as “feminist concerns” which were not relevant to the great majority of Nicaraguan women (Criquillion, 1992; Ellsberg et al., 1997).

Both of the conservative governments elected since 1990 have expressly attempted to bring back traditional roles for women, as reflected in reductions in women’s employment and day care services, and the promotion of textbooks which emphasise traditional “family values”, e.g. the importance of legal marriage and discouragement of abortion, contraception and premarital sex (Babb, 1996; Berglund, Liljestrand, Marín, Salgado & Zelaya, 1997; Chinchilla, 1994). Although, in recent years, the Nicaraguan women’s movement has grown to be one of the most dynamic social forces in the country, it has not yet managed to uproot the well-entrenched attitudes regarding women’s subordinate status.

Battered women in Nicaragua often are condemned no matter how they respond. If a woman leaves her husband, she risks not only economic hardship, but also dealing with the social stigma of having failed as a wife and mother. On the other hand, if she doesn’t leave, it may be assumed that she is somehow to blame for provoking her partner’s violent behaviour, or that she actually derives a perverse pleasure from the abuse. “If he loves you he’ll beat you,” is a popu-
lar Nicaraguan saying, and it is commonly expressed that women feel more secure when they are beaten by their husbands. This duality was expressed publicly in a forum on domestic violence legislation sponsored by the Nicaraguan Supreme Court, where a Supreme Court Justice offered his opinion that, “If a man beats his wife, he must have a good reason. Surely she did something to deserve it.” Concurrently, an Appellate Court Judge and dean of a prestigious law school argued that “A man who beats his wife for many years should be jailed, but so should the woman for putting up with the abuse so long and setting a bad example for her children” (Ellsberg et al., 1997). Given the prevailing attitudes towards violence, it is not surprising that battered women are reluctant to disclose their situation to anyone. However, silence, while protecting the woman from social stigmatisation, is likely to reinforce her sense of isolation and shame.

IV. Assessing the truth value of the results

The use of both quantitative and qualitative methods provides complementary information regarding the magnitude and characteristics of spousal 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 (Berman, Ford-Gilboe & Campbell, 1998; Ford-Gilboe, Campbell & Berman, 1995). 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.

Truth value of the survey results

Since the municipality of León shares general 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. Due to the detailed and complex nature of the quantitative information asked, it is unlikely that incidents of violence have been over-reported. It is possible however that some women have failed to disclose experiences of violence, and that the actual prevalence of spousal violence maybe somewhat higher than the figures presented in this study.

Truth value of the narratives

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? Reissman (1993) argues that, “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 do not reveal the past ‘as it actually was’, aspiring to a standard of objectivity. They give us instead the truths of our experiences...”. The stories of Ana Cristina and Maria Dolores, therefore, 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 recognised as being believable and coherent (Sandelowski, 1986). Ana Cristina’s story was published, under the title “I don’t want Candies in Hell” together with the major findings of the survey research, in a Nicaraguan journal for community women with an estimated readership of 100,000 women. At the end of the year, the article was selected by a readership poll as one of the most popular articles. 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” (Puntos de Encuentro, 1997). Eventually, the two stories of Maria Dolores and Ana Cristina were presented in a dramatised form, and used widely in community education. We believe that the acceptance of these narratives by so many Nicaraguan women as a believable and meaningful representation of their own experiences speaks to the credibility of the narrative themselves.

Conclusions

The results of the research indicate that wife abuse is a serious public health problem in Nicaragua, with devastating consequences for women and children. The data suggest that a significant proportion of the female population is currently experiencing severe physical violence from their intimate partners, often accompanied by emotional and sexual abuse.

The fact that children are so often witnesses to violence against their mothers is of particular concern, not only because it exposes them to the risk of abuse themselves but also, in the case of boys, to the risk of becoming battering husbands as adults (Heise, 1998; Johnson, 1996; Hotaling & Sugarman, 1986).

The survey results present a reliable image of the magnitude and characteristics of wife 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 (Heise, 1998; Dut-
ton, 1996) 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. This dynamic results in feelings of shame, fear, isolation, entrapment, lowered self-esteem, 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.

Moreover, the core themes which emerged in the descriptions of women’s experiences of battering are all consistent with theoretical conceptualisations of domestic violence developed in other countries (Smith et al., 1995; Counts et al., 1992; Landenburger, 1989; Kirkwood, 1992; Walker, 1994). This suggests that these experiences, to a large degree, transcend specific cultural contexts and are common to women around the world.

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References


Combining Stories and Numbers: A Methodologic Approach for a Critical Nursing Science

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Outline

Abstract

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ON METHODS AND METHODOLOGY
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Aims of this approach
An illustration
Stories and numbers with equal emphasis
An illustration
BEYOND METHODS
OVERCOMING CHALLENGES
REFERENCES

Abstract

The critical paradigm is increasingly being recognized as an appropriate perspective for the development of nursing knowledge. While different research approaches including feminist, neo-Marxist, and participatory research have been described, all share the goals of empowerment, emancipation, and change. As a relatively new world-view for nursing, the concept of a critical nursing science faces much the same resistance as the interpretive paradigm did a decade ago.
This article reviews the aims and assumptions of the critical paradigm; discusses the merits of combining stories and numbers for the agenda of change; and, using examples from our research, describes three strategies for combining stories and numbers in the critical paradigm.

Key words: critical nursing science, critical paradigm, methodology, methods

Early efforts in the development of nursing knowledge were shaped almost exclusively by the assumptions and methodologies of positivism and its postpositivist successor. In recent years, researchers have broadened their scope and have begun to examine the relevance of other paradigmatic perspectives for the development of nursing science. Qualitative methodologies emanating from the interpretive or constructivist paradigm, considered to be the "cutting edge" alternative to postpositivism in the not-so-distant past, are now well-accepted and respected ways of developing in-depth understandings about phenomena of interest to nursing. Today there is a growing cadre of nursing scholars with expertise in interpretive research, and qualitative methodologies are an integral component of many graduate nursing programs.

Interest in developing a critical nursing science with its own paradigmatic perspective is on the rise. Scholars have argued that a critical perspective has much to offer in the development of nursing knowledge, and have examined the fit of this perspective with nursing philosophy, ethics, agenda, and research traditions. [1-5] Yet, proponents of this emerging paradigm find themselves in much the same position as interpretive scientists did a decade ago. There is caution and confusion and a need to demystify the essence of a critical nursing science. Similarly, it is incumbent upon researchers to clarify how scientific norms of postpositivist and interpretive research pertain to this new perspective.

Thus, as new paradigms evolve, existing methodologies must be transformed and new approaches developed that fit the aims and assumptions of the emerging paradigm.

Openness to the possibilities that newer perspectives have to offer provides an opportunity to look at existing tensions in a new light. There have been spirited debates about whether paradigmatic assumptions dictate the use of particular research methods, and hence, whether the combination of quantitative and qualitative methods in a single study represents "good science." [6-8] While this discourse has been informative and stimulating, much of it has focused on the relative merits of various methods. In an earlier issue of this journal, [9] we argued that there is an important distinction to be made between "methods" and "methodologies"; that failure to acknowledge this distinction has contributed to a dichotomized view of nursing research; that methods are not paradigm specific; and, ultimately, that a combination of methods may be used to achieve the purposes of research in any paradigm without violating paradigm assumptions. At the same time, we acknowledged that combining methods is most easily accomplished in the critical paradigm.

In this article, we extend the discussion by examining how it is possible, even advantageous, to employ the use of different research methods within the critical paradigm while remaining faithful to paradigmatic assumptions, agenda, and methodologic principles. A brief overview of the critical paradigm is presented; key assumptions and their relationship to the agenda of change are addressed; and three broad approaches to combining "stories" and "numbers" in critical research are described. Examples from our research are used to illustrate each approach. Finally, we address inherent challenges faced by those who are attempting to use multiple methods in new and evolving ways.
Many schemata have been put forth to distinguish between the epistemologic and ontologic assumptions and goals of differing paradigms. Within the social sciences, Guba and Lincoln [10] depicted four inquiry paradigms: positivist, postpositivist, "critical theory et al," and constructivist, previously referred to by these authors as the "naturalistic" or "interpretive paradigm." The use of the phrase "critical theory et al" reflects Guba and Lincoln's [10] inclusion of multiple approaches, namely neo-Marxism, feminism, materialism, and participatory research under a single mode of inquiry because they share common goals and assumptions. In a similar vein, Coyne and associates [11] described an "emancipatory paradigm" that includes at least seven distinct modes of inquiry, all of which share an interest in sociopolitical or structural change. Since these modes of inquiry are evolving, different terminology is used to describe them depending on the source consulted. The phrase "critical paradigm" as used in this article, is similar to these conceptualizations. It refers to multiple perspectives that differ on certain dimensions but that share as a goal the generation of knowledge, which contributes to emancipation, empowerment, and change.

From the critical perspective, knowledge is not something that stands alone or is produced in a vacuum by a sort of "pure" intellectual process. Instead, all knowledge is value laden and shaped by historic, social, political, gender, and economic conditions. [10,12,13] Ideology—the taken-for-granted assumptions and values that usually remain hidden and unquestioned—creates a social structure that serves to oppress particular groups by limiting the options available to them.

A fundamental assumption among critical researchers is that knowledge ought not be generated for its own sake but should be used as a form of social or cultural criticism. [14] Critical scholars hold that oppressive structures can be changed by exposing hidden power imbalances and by assisting individuals, groups, or communities to empower themselves to take action. [15] The notion of research as praxis, or the combination of research and action, is a basic tenet embraced by researchers working within any of the critical approaches. A critical "agenda" then focuses on creating knowledge that has the potential to produce change through personal or group empowerment, alterations in social systems, or a combination of these.

Implicit in this view is a valuing of people as the experts in their own lives, who have an important stake in how issues are resolved. Critical researchers acknowledge the value of both causal explanation, characteristic of the postpositivist paradigm, and interpretive understanding, characteristic of the constructivist paradigm, as legitimate types of knowledge. [5] However, critical scholars are not content with the goals of either the postpositivist or the constructivist paradigms. They do not wish to control and predict, or to understand and describe, the world; they wish to change it. Hence, the type of knowledge sought must be capable of meeting this challenge.

ON METHODS AND METHODOLOGY

The distinction between method and methodology is a thorny issue that has been seriously misunderstood by many both in and out of nursing. As we noted in our earlier article, [9] Harding [16] had delineated several important and insightful distinctions between these terms. Accordingly, methodology refers to a set of principles for conducting research that evolve from and operationalize paradigm assumptions by guiding decision making in several areas: the relationship between the researcher and research participants; epistemologic assumptions about the nature of knowledge and who are legitimate knowers; the extent to
which subjective meanings are valued and incorporated into the research; and how participants are, or are not, incorporated into the process of analysis and dissemination of results. Specific decisions about the design and conduct of a particular study are usually a trade-off between adhering to methodologic principles of the paradigm guiding the study, achieving the specific study purposes, and attending to the many practical considerations of conducting an investigation.

Methodologies for particular critical approaches, such as feminist or participatory research, have been discussed at length and principles guiding these forms of scholarship continue to evolve. [10,13,17-22] Across different critical perspectives, common methodologic themes can be identified, although the extent to which each theme is emphasized, and how it is typically enacted, may differ. The following core methodologic characteristics are common to all critical approaches:

* The study addresses an issue that is of concern to a group that is disadvantaged, oppressed, or marginalized in some way.

* The research process or results have the potential to benefit the group, immediately or longer term.

* The researcher's assumptions, motivations, biases, and values are made explicit and their influence on the research process is examined.

* Prior scholarship is critiqued in an attempt to elucidate the ways in which biases, especially those related to gender, race, and class, have distorted existing knowledge.

* Interactions between the researcher and participants convey respect for the expertise of the participants.

In contrast to the array of methodologic decisions researchers confront in designing and conducting critical research, there are fewer choices regarding methods. Methods refer to the ways in which data are collected of which there are only three: posing verbal or written questions to individuals or groups; observing; or reviewing records. [16] Any of these methods may yield qualitative or quantitative data, stories or numbers. Similarly, any method has the potential to be used in exploitive or empowering ways. A paramount issue that critical researchers confront, then, is how to use the chosen methods in a manner that is consistent with the paradigmatic methodological assumptions.

STORIES AND NUMBERS AS PERSUASIVE EVIDENCE

Another fundamental consideration is to select methods that will yield the most persuasive evidence to bring about change. In studies that aim for some degree of both personal empowerment and social or political change, the most compelling evidence arises from a combination of stories and numbers. [9] However, the relative weighting of each method may vary and is determined by the type of change sought. When social or political change is a primary goal, numbers are most appropriately in the foreground, with stories in the background. In contrast, when personal growth or individual or small group empowerment is the central aim, stories may be situated in the foreground, with numbers placed in the background. Alternatively, there may be times when stories and numbers merit an equal place in the study design.

There has been little practical examination of the ways in which stories and numbers can be used together to achieve different purposes in critical research. Methodologic triangulation can be one way that stories and numbers are combined,
but generally this terminology is used to describe combining methods in order to
enhance the validity or comprehensiveness of findings, rather than enhancing
their empowerment potential. [23,24] "Multimethod research" is another phrase
used to describe combining methods, but usually refers to the integration of
methods without paradigmatic or methodologic considerations. [25] The following
sections elaborate on the three basic approaches in some depth.

Numbers foreground, stories background

Aims of this approach

In this approach researchers use the tools of traditional quantitative science
to develop or test explanations or interventions that have the potential to
empower disadvantaged groups. A qualitative component is included, but it is
less central to the overall project. The emphasis on quantitative approaches is
predicated on a belief in the inherent power of numbers and on the familiar and
well-accepted model of science by which they are generated. A fundamental aim is
to influence those in positions of power, as well as the general public. Thus,
when the primary purpose of a study is to document the need for social or
political change, to evaluate the effectiveness of particular actions, or to
influence and challenge widely held attitudes and social norms, numbers (ie,
"hard evidence") may be the most persuasive form of data. As Milio stated,
"Constituencies of the poor and powerless must prove their case for change; the
rich and powerful do not need hard data to maintain the status quo." [26] (p22)

When designing primarily quantitative studies, critical researchers must ensure
that the approaches are congruent with the agenda and methodologic principles of
critical scholarship. For example, Reinharz [27] described how both experimental
and survey research approaches can be adapted in the service of a feminist
research agenda. Examplars include Romkens' [28] feminist survey research of
domestic violence in the Netherlands and Allen's [29] critical program
evaluation research. Critical researchers are less concerned with objectivity
and control than their postpositivist counterparts. Instead, they "push the
limits" of traditional quantitative designs by maximizing the involvement of
stakeholders to whatever extent possible. Participants and grassroots
stakeholders,
including community organizers and service agencies, are consulted regarding the
relevance of research questions, the interpretation of data, or strategies for
dissemination of findings. [13,30-32]

At the most basic level the critical researcher acknowledges a tension between
the need for scientifically sound research on the one hand and the need to
minimize the "distance" between the researcher and participants on the other.
Methodologic decisions most likely to contribute to the overriding goal of
change may simultaneously compromise objectivity and control in the traditional
postpositivist sense, but may also actually enhance the quality of the research
by more clearly acknowledging all sources of bias, including those that remain
hidden from the postpositivist. Such decisions are an important mechanism for
validating that participants see the issue as important and for establishing
collaborative, respectful, and less hierarchical relationships between
researcher and participants. It is possible that some degree of personal
empowerment may also ensue, but this level of change is not the primary focus.

The use of stories as an adjunct to the quantitative data may serve several
purposes. Most commonly, stories "put a face" on numbers, allowing the reader or
listener to consider the meaning of the numbers in new and often more meaningful
ways. They add the context that is so often missing in purely empiric research
reports. At the same time, stories allow the voices of participants to be heard,
contributing to personal as well as broader social change. Stories offer access
to information not readily elicited in numbers, including structural and
situational barriers that limit life choices available to participants, as well
as individual and collective strengths needed to counteract these forces. These insights can be used to develop alternative explanations that better reflect the experiences of disadvantaged groups.

When critical studies are conducted primarily to test theories, qualitative data can enhance the processes of theory critique and refinement in several ways:

* by providing new or additional explanations for relationships between concepts in the theory;
* by identifying problems in the fit of the theory with the experiences of a particular group;
* by identifying exemplars or illustrations of particular concepts within a specific context; and
* by examining the validity of existing measures of theory concepts by considering the consistency between items on these measures and participants' descriptions of their experiences.

Sandelowski [33] has provided a thoughtful analysis of the uses of qualitative approaches in interventions studies, three of which are most relevant to the aims of critical research. First, qualitative data may provide in-depth descriptions of the process of change, with emphasis on how variations reflect cultural, racial, social, economic, or gender issues. Second, participants' experiences are essential for understanding the extent to which an intervention may burden or further oppress, rather than empower, participants. Information about the relevance and helpfulness of particular aspects of an intervention may be used to critique and revise the approach used. Finally, participants' reflections may help to identify positive outcomes that were either nonsignificant in quantitative analyses due to insensitivity of measures or not anticipated and therefore not measured. These efforts and crucial aspects of designing programs and interventions that are relevant to participants, facilitate empowerment, and have the potential to influence both practice and policy development.

Because sample sizes for quantitative studies may be large, it is neither feasible nor practical to collect substantial amounts of qualitative data from all study participants. Hence, two general approaches tend to be used to collect qualitative data. In the first approach in-depth interviews are conducted with a small subsample of participants, who are most often purposively selected so that the voices of people who experience differing cultural, social, economic or gender realities are heard. Although the scope of this strategy is typically limited, it affords the researcher and participants an opportunity to engage in dialogue, to critically reflect on their experiences, and ultimately, to achieve at least some degree of personal empowerment. This strategy contrasts with the tendency among postpositivist scientists to interview a randomly selected subsample of participants in order to enhance generalizability of findings.

The second strategy used to integrate stories with numbers involves asking a limited number of open-ended questions to all study participants, using written questionnaires or interviews. Although in general this approach may be more feasible and less costly, it is often more structured, with limited opportunities for dialogue and reflection, and thus, less likely to contribute to the aims of critical research. A variation of this approach is Romkens' [28] survey on wife abuse in which all participants (n = 1,016) were asked open-ended questions. The data were submitted to manifest content analysis and interviews were conducted with a small subsample in order to determine motives for survey refusals and to obtain more information on abused women.
A previous study conducted by Ford-Gilboe [34,35] illustrates some of the principles and challenges in conducting a primarily quantitative study with a critical perspective. Conducted within a feminist perspective, the investigator sought to move beyond a problem-oriented view of single-parent families (SPFs) to examine the health promotion efforts of SPFs and the strengths, motivations, and resources that influence these processes. A critique of nursing literature revealed that SPFs were most often viewed from a problem-oriented or deficit perspective, and that research had failed to consider the strengths and diversity of this group, contributing to their marginalization. [36] The study tested hypotheses derived from the Developmental Health Model (DHM) [37,38] a nursing model grounded within a family "strengths" perspective, respecting diversity in individuals and families and emphasizing abilities as well as needs and issues in the quest for healthy living. Thus, use of the model as a guide for practice has the potential to facilitate empowerment of disenfranchised groups, such as SPFs. The decision to include both SPFs and two-parent families in the study was a conscious effort to dispel negative stereo-types about SPFs by comparing them to the two-parent family "gold standard."

Two data collection approaches were used. Mailed surveys consisting of established measures of study variables that were critiqued for bias were completed by 138 families (68 single-parent, 70 two-parent). Using information provided on the demographic questionnaire, in-depth home interviews were conducted with a purposive subsample (n = 16) of families, selected to represent diversity in socioeconomic status, ethnicity, and other relevant factors. A semi-structured interview guide was used with flexibility to facilitate dialogue as the interviewer and family explored family capabilities and health promotion behavior, as well as topics that families considered to be relevant to the discussion. Interview data were transcribed, submitted to content analysis, and used to confirm quantitative findings and to enrich these by providing illustrations of study findings, revealing unique strengths of SPFs, and serving as a basis for further critique and refinement of the DHM. Study findings provided the basis for an interview published in a local newspaper and were used to obtain funding for a larger extension study, the first in a program of research addressing health promotion in SPFs.

Stories foreground, numbers background

Aims of this approach

The second broad approach entails the use of stories as the primary source of data. Numbers, or quantitative data, are also incorporated into the study design, but they are accorded a peripheral place in the project. Both sources of data, however, contribute to the overall strength of this design. This combination of stories and numbers is less prevalent in the literature and is presumably less widely endorsed than the approach previously discussed. The reasons for this are not entirely clear. However, it has been suggested by some qualitative researchers that the use of numbers in qualitative studies violates the assumptions of the interpretive paradigm; thus, the numbers are considered to be incompatible with the aims of the research. [39] This viewpoint would seem to account for at least part of the reason that few studies using this approach could be located. Despite the lack of widespread support for the approach, it remains one with considerable potential merit.

It was stated that a primary purpose of placing "numbers foreground and stories background" in the critical paradigm is to shed light on sources of injustice, to challenge taken-for-granted attitudes and behaviors, and to further the agenda of social and political change. A secondary purpose is to foster personal growth and empowerment. The approach described in this section, using stories and numbers as the primary and secondary sources of data respectively, shares
similar aims with the first approach. The emphasis, however, is different.

When stories comprise the primary source of data in critical research, their purpose is to provide a basis for researcher and research participants to engage in dialogue, reflection, and critique related to the phenomenon under investigation. These activities are the cornerstones of research grounded in a critical, theoretical and methodological perspective. According to Freire, [15] the process of facilitating empowerment begins with helping individuals gain a critical awareness of their situation. This process is akin to consciousness raising, or conscientization.

In essence the telling of the story enables the research participants to "name their reality" and to examine strategies for changing that reality. The researcher in this context is not a passive listener but is actively engaged with the research participants in a dialogic exchange. Thus, in this approach the emphasis is on personal change, growth, and empowerment. However, the critical researcher recognizes that individual consciousness and reality are the result of socially and historically created conditions. Individual problems and concerns do not occur in isolation and are often beyond one's individual control. Substantial and lasting change must occur on many levels, not only the individual.

The use of narrative storytelling is a methodologic approach used both in the interpretive paradigm and the critical paradigm. However, the use of stories in each paradigm differs in the purpose of the telling, the process by which stories are elicited, and the way in which the analysis is carried out. Within the interpretive paradigm the purpose of the story is to describe and understand the phenomenon under investigation. As the story unfolds the researcher may ask probing questions to gather additional information about the phenomenon, but the purpose is solely to gain additional descriptive insights. In contrast, the elicitation of stories in the critical paradigm is explicitly related to a desire to reveal hidden power imbalances and, thus, for researcher and research participants to achieve new understandings about the topic of interest, and to use those new understandings to bring about growth and change. Where researchers grounded in the interpretive paradigm claim to have no preconceptions about the particular phenomenon, critical researchers state their biases, and use these in the coconstruction of meaning with participants.

An important aim of critical researchers who use stories as a primary source of data is to create a collective awareness of one's situation. Therefore, one strategy that is often used is to conduct interviews in groups. Stevens [40] used this approach in her research about the health of lesbian women. As the women in her research came together to tell their stories, they began to see that many of the challenges they faced were not the result of individual deficiencies or weaknesses, but were due to inherent barriers and inequities in the existing structures and system. Thus, the group provided a context for collectivizing their individual experiences, for drawing strength from one another, and for examining strategies for change. This approach bears some similarity to focus group research, but the methodology and aims are different.

The use of numbers as a secondary source of data in critical studies may serve several functions. First, numbers can be persuasively used to document the significance of a particular issue or event. Because critical researchers often study the experiences of traditionally understudied or overlooked groups, numbers can draw attention to the magnitude of important issues. For example, a very brief population-based survey could be used to establish prevalence of a problem. This survey could also be used to identify which subsample of participants should be approached for more in-depth interviews.

Numbers can also be used to provide additional descriptive data. Because sample
sizes are typically small, it may not be possible to generalize from the statistical findings. However, it may be possible to examine differences between subgroups of participants. Elucidation of such differences, and important associations, may then be further explored in larger survey studies. In addition, the use of numbers in this sense may yield insights into the ways in which diverse subgroups experience the same phenomenon. Underlying causes for noted differences may then be considered. Finally, this approach may also provide an opportunity to critique existing measures for completeness or relevance.

An illustration

Berman's [41] work with children who had witnessed violence is an example of how this approach may be used. In this critical narrative study, children of war and children of battered women were asked questions designed to elicit stories about the violence in their lives. The overall purposes of the study were to examine how children who have grown up amid violence "make sense" of their experiences and to understand the meaning of health when violence has been a part of the child's everyday reality. The study design was primarily qualitative; the children's stories comprised the main source of data. A secondary quantitative component of the study consisted of the administration of a standardized instrument to evaluate the degree of posttraumatic stress disorder (PTSD) among the study sample.

Although the term "interview" is used here, the encounters with the children were more dialogic than is customary in more traditional narrative approaches, and included the processes of reflection, listening, collaboration, and critique. Throughout, the participants were encouraged to reflect on parts of their lives that they might not have previously paid attention to, often in new and unfamiliar ways. As they contemplated the reasons for violence in their own lives, and for violence in society more generally, and the relationship between violence and health, they began to see their own realities differently, that is, more critically.

Recognizing that children express themselves in many ways, they were also given an opportunity to draw pictures or to write poems to help tell their stories. During a second interview 2 weeks later, emerging themes were shared, discussed, and modified, thereby involving the children actively in the construction and validation of meaning. Further discussion occurred about the meaning of violence in their lives. Thus, while subjective experiences were valued, they were examined within the context of broader social and political structures that allow and perpetuate the use of violence.

All participants were given the choice of meeting alone with the researcher, or in a small group with about two other children. The group interviews fostered a sense of solidarity and connection that would not have been possible through individual interviews. Thus, the group provided a context in which participants were able to analyze the struggles they had encountered, simultaneously begin to collectivize their experiences, and develop a sense of empowerment as they began to see the possibilities for change.

The quantitative findings in this study at times seemed inconsistent with the qualitative findings. Many of the children who appeared to be doing quite well and who revealed remarkable insights into the violence they had witnessed had high scores on the posttraumatic stress reaction index. The collection of both types of data provided a basis from which to critique the instrument and the conceptualization of PTSD. The findings lent support to the notion that posttraumatic stress responses are "normal" expected responses to abnormal situations.

The contributions that stories and numbers bring to the goal of change in this
study are clear. If we wish to convince policy makers that children who witness violence are at risk for adverse sequelae, we can document that a high percentage of children demonstrated moderate to severe levels of posttraumatic stress symptomatology. Similarly, we can put forth a persuasive argument that such instruments only yield a partial picture of the way children make sense of their lives amid violence.

Stories and numbers with equal emphasis

A single research endeavor or an overall program of research can give equal attention to quantitative and qualitative data. In an enterprise that is attempting to foster empowerment of individual participants in equal measure to system change, a full range of methods and types of data can be incorporated. Quantitative data are typically generated using standardized instruments, while any combination of structured, semistructured, or open-ended interview techniques may be used to tap different qualitative aspects of the study.

The equal emphasis approach may be used to accomplish a variety of study aims:

* simultaneously or sequentially testing, adding to, or further specifying a theory through quantitative (eg, structural Equation modeling or qualitative (eg, grounded theory) analysis of data;

* establishing the prevalence of a phenomenon;

* fully exploring and contrasting the context of a particular phenomenon, including implicit or explicit power imbalances based on gender, ethnicity, ability, or sexual orientation; and

* using participatory experimental methods to plan and then test a nursing intervention or community program.

Separate sets of in-depth interviews and observations could be used to explore the impact of the intervention on the system, intervenors, and clients.

A frequent criticism of purely quantitative data is that it lacks or strips the findings of context, which is germane to a holistic perspective. [23] Qualitative data, including observational data, can provide the context for quantitative findings, but the opposite is also true. Quantitative findings can help establish the status of those whose perceptions and realities are being analyzed qualitatively. For instance, participants' scores on a history of victimization instrument or the relative violence of their neighborhoods can help establish if their perceptions of increased risk for victimization are at least partly a reflection of internal or external realities.

Sample size is usually large enough to provide adequate power and cell sizes for multivariate analytic techniques. With sufficient sample sizes, apparent differences in ethnic, sexual orientation, or gender group responses, suggested by qualitative or quantitative analysis, and their underlying causes, can be examined to determine the relative influence of other structural factors (eg, income or neighborhood housing differences) on variables of interest. Throughout data collection, attention is paid to quantitative measurement of variables to establish aspects of oppression that could not be captured by qualitative findings alone. For instance, variables reflecting relative in-equality of income between groups, rather than absolute income, measures of neighborhood structural disintegration from governmental neglect, or combinations of variables representing community strengths can quantitatively represent important aspects of context that policy makers may see as more "objective" than individual perceptions alone. In combination with narratives, these quantitative contextual data are particularly persuasive.
In studies employing a more balanced mix of stories and numbers, at least some qualitative data are typically collected from all participants. In addition, a smaller subsample of participants may be invited to provide in-depth data on specific issues. Such research endeavors result in large, complicated datasets and must often be published in separate articles or book form in order to fully present the results. They often require diverse data analytic and methodologic expertise and are best undertaken by a research team that brings an understanding of the community interests, as well as the academic skills needed to carry out the project.

An illustration

An illustration of an equal emphasis approach can be found in Campbell and associates' investigation of women's responses to battering over time. [42-44] A volunteer sample of 164 battered women from the community were interviewed three times over 4 years. Normed instruments were used as well as an interview protocol that was administered in a dialogic manner. It was made clear at the onset that both participants and researchers were to ask questions of each other. The first and last questions of the interview schedule were open ended. Responses to these two questions formed the primary base for the qualitative analysis augmented by other semistructured interview responses. There were several opportunities for participant commentary within the interview process and additional open-ended questions within the interview protocol.

The interview ended with a participant-administered "danger assessment" [45,46] and advocacy protocol that included safety planning and referral. If desired, the interviewer initiated phone calls to other resources. The women were given an opportunity to choose the ethnic background of the interviewer and their preferences were honored whenever possible. An effort was made to conduct all three interviews with the same interviewer. However, because some women were late or came for appointments on unscheduled days, they often chose to complete the interview with an alternate interviewer rather than return at another time. Other emancipatory strategies included sharing the interpretation of their current and prior instrument scores with the women and asking for their perceptions of or validation of these results. Preliminary analysis of quantitative and qualitative data was also shared with study participants.

Analysis so far has consisted of (1) structural Equation modeling and multiple regression analysis, both augmented by qualitative data to help interpret results; (2) an analysis of participant change over time, which uses both quantitative instrument data and content analysis of semistructured questions responses; and (3) a primarily qualitative thematic analysis of a randomly selected subsample, which is augmented by some of the quantitative data to establish context for the qualitative findings (eg, the relative severity of abuse experienced by women expressing similar themes). The findings have been used in many policy-level meetings and forums to help establish the strengths of battered women and to improve health care system responses to their issues.

BEYOND METHODS

Kuhn [47] wrote that scientific revolutions occur and new paradigmatic perspectives evolve as new types of knowledge are needed, and as gaps or limitations in dominant perspectives become evident. The growth of interest in a critical nursing science may be viewed as a logical evolution in the development of nursing science. As nursing knowledge has grown exponentially in the last 20 years, we have become increasingly attuned to the ways in which social, cultural, and political realities influence health and illness experiences. As Meleis [48] has so often and eloquently insisted, issues and concerns related to health cannot be adequately understood or addressed as individual problems,
apart from the broader social and political world. Similarly, researchers now recognize that constructs such as race, gender, age, or ability are not simply neutral variables to be isolated and controlled, but are influenced by conditions that are socially and historically produced, by the larger context in which they are situated. In essence, we have become increasingly critical.

Still, as often occurs with new ideas or approaches, there is caution and skepticism. While the idea of combining stories and numbers is by no means revolutionary, using them to further the agenda of action and change, within the framework of a critical nursing science, is quite new. Just 10 years ago, knowledge generated in the constructivist, or interpretive, paradigm was viewed as "cutting edge." There were many who questioned the scientific merits of interpretive methods. Today, qualitative methods are widely accepted and integral to the development of humanistic nursing science. We envision that this will be the case for critical methods in the not-too-distant future.

The approaches described in this article differ in their use of methods, but the broad aims are similar and congruent with the critical paradigm. This delineation of approaches is not intended to be the definitive word on critical research; many combinations and designs are possible. Decisions regarding choice of methods and how those methods are used stem from the type of change or action desired.

**OVERCOMING CHALLENGES**

Beyond decisions regarding research design, nursing scholars who choose to place their work within the rubric of a critical paradigm are likely to encounter many challenges. The first challenge pertains to the formation of research teams. Bringing about change necessitates active involvement of those toward whom change is directed. Participatory or action research is appropriate. However, this type of research requires the inclusion of community representatives in the development, implementation, and evaluation of a particular project. Unfortunately, the many strengths and insights community leaders bring to the project are often neither valued nor recognized by potential funding agencies. A compromise that has worked for us is to form teams comprising both individuals with the academic credentials and track record for research, and community members with an in-depth understanding of the phenomena under investigation. [32]

A related challenge concerns funding for critical research. Because reviewers are typically unfamiliar with the aims or assumptions of the critical paradigm, descriptions must be explicit, with sufficient methodologic explanations to enable reviewers to fairly evaluate the scientific merits of this approach. Many aspects of a proposal may differ from more traditional research grants, and the rationales for methodologic decisions must be clearly articulated. The benefits of combining stories and numbers may not be evident to reviewers. Thus, researchers must clearly describe the contribution of each type of data. Criteria for evaluating critical research are different from those used in the postpositivist or interpretive paradigm. [9] Lather [49] has put forth the notion of "catalytic validity" to refer to the extent to which the project has resulted in change. Although Lather's discussion of this concept pertains to individual change, we prefer to think of it more broadly to include the idea of systemic change as well. Similarly, the criterion of "cultural competence" has been suggested by Meleis [50] and Fontes. [51] How a particular study attends to these hallmarks of "good science" needs to be fully explained in proposals for funding. In addition, dissemination of research findings in the critical paradigm is not limited to presentations to academic conferences or publications in scholarly journals. One aspect of the agenda of change is to return research findings to the community. Thus, dissemination may include presentations or workshops in the community, or development of literature in a format that is
readily accessible to the public. Costs of these less traditional dissemination strategies should be included in grant applications and justified using methodologic principles. At all stages, it is incumbent upon the researcher to assist reviewers to understand the essence of critical research, to appreciate its scientific merits, and to see its importance.

The merits implicit in a critical paradigm for nursing are many and varied. Endowed with diverse sources of information, it is possible to use this information in multiple ways. In essence, critically grounded researchers are pragmatists. Decisions regarding what type of data to collect and how to use it are determined by the researchers' central goals related to action, change, and empowerment. Opportunities to pursue and test novel approaches require that we remain open to new ways of looking at old issues. As new paradigms gain credibility and acceptance, the boundaries of our knowledge broaden. Nursing scholars who are interested in pursuing the possibilities of a critical nursing science face many challenges, but these are by no means insurmountable. In fact, because of its roots in praxis and activism and its acceptance of both quantitative and qualitative methods, nursing is well positioned to provide leadership in the development of new ways of combining stories and numbers to foster the agenda of empowerment and change.

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