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EFFECTS OF A SOCIAL SUPPORT INTERVENTION ON HEALTH OUTCOMES IN RESIDENTS OF A DOMESTIC VIOLENCE SHELTER: A PILOT STUDY

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This pilot study tested the feasibility and effectiveness of a social support intervention with women (n = 24) while they were in a domestic violence shelter. Health outcomes were examined pre and postintervention using a randomized control design. The intervention group had greater improvement (p = .013) in psychological distress symptoms and greater improvement in perceived availability of social support (p = .016) than the control group. The intervention group showed less health care utilization (p = .032) than the control group. Social support interventions for women in shelters are effective in improving health outcomes. Further research should be aimed at testing the effectiveness of different types of interventions on health and abuse outcomes in women who experience interpersonal violence.

Intimate partner violence (IPV) is a pervasive national problem, with 25% of women represented in national surveys being assaulted physically or sexually by their current or past spouse or partner (Tjaden & Thoennes, 2000b), which national surveys estimate at 1.5 million

Funded by the University of Pittsburgh Central Research Development Fund. Address correspondence to Rose Constantino, University of Pittsburgh School of Nursing, 3500 Victoria Hall, Room 360, Pittsburgh, PA 15261. E-mail: ykk@pitt.edu women are subjected to IPV, and comprise 20% of all nonfatal violent crimes against women (Rennison, 2003). Mandatory reporting laws exist in 26 states for health care providers to report IPV (Houry, Sachs, Feldhaus, & Linden, 2002). Despite public awareness and legal mandates, IPV is increasing (Waters, Hyder, Rajkotia, Basu, & Rehinkel, 2004). Moreover, there is little research on the key components needed for an effective and efficient intervention program. Hence, this pilot study sought to assess the feasibility of providing an individually focused social support intervention for women in a domestic violence shelter.

Defined as intentional violent or controlling behavior by someone (in this paper, a man) who is currently or has been a spouse or intimate partner, IPV does not respect age, ethnicity, religion, class, sex, gender identify, immigrations status, or ability (FVPF, 2004). Women are more likely to be assaulted, injured, raped, or killed by a current or past partner than by any other type of assailant (Seimer, 2004). The pattern of IPV is coercive control consisting of physical, sexual, and psychological assault (Wisner, Gilmer, Salzman, & Zink, 1999).

The pattern of abuse at the hands of someone a woman may depend on financially or for other reasons makes the process of leaving difficult. Compounding the issue further are the negative health repercussions of IPV. Women subjected to IPV report high self-ratings of health care utilization and low general health, and are at risk for poor mental and physical health (Campbell & Soeken, 1999; Constantino, Sekula, Rabin, & Stone, 2000). They have higher medical costs than non-abused women due to the increase in physical health problems (Coid et al., 2003). Abused women are significantly more likely to be hospitalized in the year before filing a protection order for diagnoses ranging from self-injury, poisoning, gastrointestinal disorders, assault injuries, psychiatric disorders, and attempted suicide (Kernic, Wolf, & Holt, 2000). The signs of psychosocial damage from IPV may not be as obvious as physical injury, but may have more profound effects (Mayer & Coulter, 2002). The significance of various long-term health problems and the associated financial cost are clearly addressed in the literature and indicate a need for development of appropriate interventions and their evaluation (Acierno; Resnick, & Kilpatrick, 1997; Aclerno, Resnick, Kilpatrick, Saunders, & Best, 1999; Coker, Smith, McKeown, & King, 2000; Crandall, Nathens, & Rivara, 2004; Kerouac, Taggart, Lescop, & Fortin, 1986; Tjaden & Thoennes, 2000a, 2000b; Vogel & Marshal, 2001; Walker, 1979; Waters et al., 2004; Wisner et al., 1999).

Evidence of the suffering from IPV may span a lifetime and have critical effects on families. One third of all female murder victims were murdered by a current or past intimate partner, a number that remained virtually unchanged from 1993 to 2000 (Rennison, 2003). Also, women who experience IPV were more likely than those who did not to attempt suicide (26% versus 8%) (Abbot, Johnson, Koziol-McLain, & Lowenstein, 1995).

In the US, IPV costs \$12.6 billion annually, inclusive of legal and medical services, judicial system cost, and lost productivity (Waters et al., 2004). Violence prevention and intervention are considered to be cost-effective, a benefit to the safety of the public, and economically sound (World Health Organization [WHO] 2004).

LITERATURE ON INTERVENTIONS

Interventions include screening interventions in acute and primary care settings, referrals, and various treatment interventions for abused women and their perpetrators. A brief look at the current interventions for IPV follows.

Screening interventions are a professional responsibility of health care providers (HCP). It is not known if screening reduces abuse, but women considered screening for abuse to be an acceptable process when provided in health care settings. Ironically, few HCPs do it even though it is mandatory in almost all states. A 2004 review of screening and interventions for women assessed how well they worked, adverse effects, and how effective these interventions were at reducing harm or future abuse (Nelson, Nygren, McInerney, & Klein, 2004). The authors reviewed 806 abstracts, but only 14 studies were discussed in the article. None evaluated instrument performance or procedure by using verified abuse outcomes. The studies compared instruments, compared instruments and interviews, and measured interrater methods of administering questions. Out of 667 abstracts only two fair quality studies were found. They evaluated interventions and the subsequent reduction in abuse. Neither of the two studies had a non-intervention control group. Interventions included wallet cards, counseling, and outreach. The severity of violence was lower after two months in the outreach group, but not the counseling or brief intervention groups. However after 6, 12, and 18 months follow up, abuse scores were lower for women in all intervention groups (Nelson et al., 2004). The second study used counseling and wallet cards with community resources listed. Less violence at 6 and 12 months was reported by the women in the counseling intervention group.

Nelson and colleagues (2004) noted that no studies provided information on the adverse effects of screening or intervention. None addressed the effectiveness of screening instruments at reducing harm, and none evaluated whether interventions improved violence or health outcomes. The data on detection and management of abuse is needed to guide clinicians in practice.

Another review of IPV interventions was aimed at prevention strategies from a primary care perspective, as opposed to screening interventions for detection of IPV (Wathen & MacMillan, 2003). A total of 2,185 abstracts were reviewed with 22 articles meeting the reviewers' criteria. The goal of the review was to assess the effectiveness of prevention strategies, usually measured by ongoing abuse, counseling, further visits to the hospital, and improvements in mental health (Wathen & MacMillan, 2003) Interventions for abused women in the reviewed studies included advocacy with a shelter stay, effectiveness of staying in a shelter, prenatal counseling, and personal and vocational counseling. Four of the articles were given a fair rating and none received a good rating, primarily because of the use of self-reports of violence as an outcome with measures not tested for validity. Half of the articles were on batterer or couples interventions. The reviewers also presented social and policy interventions and the potential harms of abuse (Wathen & MacMillan, 2003). No studies evaluated the effectiveness of screening to reduce violence or improve women's health. In addition no evidence exists to evaluate shelter stays as a means of decreasing violence, but there is some evidence that advocacy counseling programs decrease abuse longitudinally. The reviewers summed up their review with a call for research using rigorous methods to test the effectiveness of screening coupled with treatments and the reduction of injury and psychological abuse.

One experimental study, included in the above review, assessed the role of social support in the lives of women exiting domestic violence shelters and examined their satisfaction with a social support intervention (Tan, Basta, Sullivan, & Davison, 1995). Women (n = 141) were interviewed immediately upon their exit from a domestic violence shelter and weekly by telephone for ten weeks thereafter, for approximately four to six hours each week. Women who were assigned to advocates for the telephone intervention obtained needed resources and social support more successfully than those not assigned to advocates. Satisfaction with social support was highly related to women's overall psychological well-being.

Tailored self-help print or web-based interventions for behavior change also can be effective and focuses on individual needs and interests, resulting in positive changes for a variety of behaviors (Strecher, Wang, Derry, Wildenhaus, & Johnson, 2002). Effective interventions are more likely if self-identified social support resources reported by women in shelters can be determined and provided as part of an intervention (Crane & Constantino, 2003). Methods of providing these types of social support may include printed materials, telecounseling, and writing about their experiences (Smith, 2003).

In summary, seeking safety away from the abuse is an extremely courageous step for a woman to take, and may signify a readiness to change, often referred to as the open window phase in the IPV continuum of abuse (Cumow, 1997). The open window is a time when women may be the most influenced by interventions of any kind. There is a paucity of studies that evaluate effectiveness of various therapeutic interventions that incorporate social support. Research offers evidence that a woman's perceived availability of social support plays a crucial role in the response to IPV, while actual availability of a supportive environment improves health and well-being and interpersonal relationships with others (Campbell & Soeken, 1999).

PURPOSE

The purpose of this pilot study was to test the feasibility of an intervention comparing post treatment improvement in health outcomes between subjects in the Social Support Intervention (SSI) group and No Treatment Control (NTC) group. The three research questions in this study are: (1) Does the SSI group show greater improvement in psychological distress symptoms as measured by the Brief Symptom Inventory (BSI) than the NTC group post treatment? (2) Does the SSI group show greater improvement in perceived availability of social support as measured by the Interpersonal Self Evaluation List (ISEL) than the NTC group post treatment? and (3) Does the SSI group show less health care utilization as measured by the Health Screening Questionnaire (HSQ) than the NTC group post treatment?

METHODS

Design

In a pilot study for feasibility of the intervention, two-group by tworepeated measures randomized control design was used to evaluate the effects of a group intervention program (SSI) for women experiencing IPV.

Sample and Setting

The women (n = 24) were first time residents of a domestic violence shelter for abused women in Western Pennsylvania. It is a non-profit, domestic violence agency that provides 24-hour services for abused women and their minor children seeking safe temporary residence.

Most women were white (70.8%, n = 17) not Hispanic, and the rest were African Americans. The women were from 28 to 43 years of age. Most of the women completed high school, and three women had college degrees. There was a similar distribution between the types of relationships they had with their assailants: never been married, cohabitating, married, divorced, separated, and widowed (see Table 1).

Recruitment and Consent

Women were recruited from a population of women who sought temporary residence at the shelter. The Medical Advocate of the shelter directed recruitment and retention to assure that the health, safety, anonymity, and confidentiality of the women and their children were not compromised. Recruitment was complete within four months, during which time the shelter was occupied at full capacity. Recruitment was done in groups of ten. During the first month of recruitment, ten subjects were recruited, and two dropped out. During the second and third months, ten subjects were recruited and two dropped out; in month four, ten subjects were recruited, and two dropped out. This resulted in an overall dropout rate of 18%.

Women's entry into the study was comprised of three steps. First, women were provided with a brief informational flyer about the study upon entry into the shelter, and provided with a telephone number to call for information if interested in participating. The Principal Investigator (PI) answered the phone calls and explained the study. The second step was a scheduled meeting at the shelter with the PI and the woman, at which time the study was explained further. Questions about the study were encouraged, after which the women were asked to read and sign the IRB approved consent form. Upon signing the consent form, a second appointment was made. The third step was the second appointment with the PI and a nurse practitioner at the shelter for baseline data

TABLE 1. Baseline Characteristics of the Entire Group and Treatment

 Assignment

	Total $(n = 24)$	SSI (<i>n</i> = 13)	NTC (<i>n</i> = 11)	Comparsion statistics	р
Age	35.45 ± 7.25	36.2 ± 6.9	34.7 ± 7.6	.483	.634
Race				.035	.851
White, n (%)	17 (70.8%)	9 (69.2%)	8 (72.7%)		
Black, n (%)	7 (29.2%)	4 (30.8%)	3 (27.3%)		
Income				2.335	.506
<0 \$10,000, <i>n</i> (%)	14 (58.3%)	8 (61.5%)	6 (54.5%)		
\$10,000–\$19,999, n (%)	4 (16.7%)	1 (7.7%)	3 (27.3%)		
\$20,000-\$29,999, n (%)	5 (20.8%)	3 (23.1%)	2 (18.2%)		
>\$30,000, <i>n</i> (%)	1 (4.2%)	1 (7.7%)	0 (0.0%)		
Education				3.441	.632
Jr. High school, n (%)	3 (12.5%)	2 (15.4%)	1 (9.1%)		
High school, n (%)	16 (66.7%)	9 (69.2%)	7 (63.6%)		
Trade school, n (%)	1 (4.2%)	0 (0.0%)	1 (9.1%)		
Associate degree, n (%)	2 (8.3%)	1 (7.7%)	1 (9.1%)		
BA degree, n (%)	1 (4.2%)	0 (0.0%)	1 (9.1%)		
MA degree, n (%)	1 (4.2%)	1 (7.7%)	0 (0.0%)		
Marital status				3.457	.630
Married, n (%)	4 (16.7%)	3 (23.1%)	1 (9.1%)		
Divorced, n (%)	5 (20.8%)	2 (15.4%)	3 (27.3%)		
Separated, n (%)	4 (16.7%)	3 (23.1%)	1 (9.1%)		
Widowed, n (%)	1 (4.2%)	0 (0.0%)	1 (9.1%)		
Cohabitating, n (%)	5 (20.8%)	3 (23.1%)	2 (18.2%)		
Single (never	5 (20.8%)	2 (15.4%)	3 (27.3%)		
married), <i>n</i> (%)					
Employment status				1.846	.605
Employed full	10 (41.7%)	5 (38.5%)	5 (45.5%)		
time, <i>n</i> (%)					
Employed part	1 (4.2%)	1 (7.7%)	0 (0.0%)		
time, <i>n</i> (%)					
Unemployed, n (%)	12 (50.0%)	6 (46.2%)	6 (54.5%)		
Retired, n (%)	1 (4.2%)	1 (7.7%)	0 (0.0%)		

collection. An honorarium of \$20 was distributed to each participant at the completion of the baseline data collection.

Randomization

Randomization to two groups (SSI vs. NTC) was done after baseline data collection using a permuted block randomization scheme with a

ratio of 1:1 (SSI: NTC) (Glassnap & Poggio, 1985). As soon as small groups of participants were randomly placed in the SSI or the NTC groups, SSI group intervention was initiated (one session a week for eight weeks).

Intervention Groups

Social Support Intervention (SSI)

The interventions was planned as an eight-week, once every week 90-minute program led by a trained nurse. The intervention was designed to provide resources to women and included information on resources, time to access resources when available, and environment to chat with counselor and friends. Perceptions of stress, if not addressed, may become overwhelming, and women's ability to function and health may diminish (Cohen & Herbert, 1996; Cohen & Hoberman, 1983; Cohen & Syme, 1985). There are four separate functions of social support belonging, evaluation, self-esteem, and tangible support (BEST). Therefore the BEST concept was addressed in the social support treatment modality. Belonging was done through listening and responding to others in similar IPV circumstances. Evaluation or appraisal was incorporated into the sessions, helping women to see themselves as others see them. Selfesteem was promoted by focusing on each woman's strengths and accomplishments in surviving IPV. Tangible support included discussion of resources in the community for financial assistance, transportation, food, clothing, and health care. Different aspects of SSI were focused on during each session in a private and safe environment. No one was present but the nurse and the women, since women reported that staff and strangers inhibited their ability to speak freely and be themselves.

One way to test whether social support is the cause of the recipient's improved health outcomes is by experimental manipulation of social support as an independent variable. Maximum control is provided by the random assignment of subjects to "high" and "standard" social support conditions of the shelter (Dooley, 1985). Therefore, we provided structure to the SSI group. The control group was not provided with structure SSI treatment.

No Treatment Control (NTC)

The NTC group gathered in a room with the PI for a free-flowing chat session with no structure. The women in the NTC group continued to receive the standard shelter services provided to all residents: meals, shelter, transportation to and from work, school or health and social services appointments.

Instruments

The Interpersonal Self Evaluation List (ISEL)

The 16 item adult version of the ISEL measures perceived availability of four separate functions of social support as well as overall perceptions of support. The ISEL has high internal consistency with alpha coefficients of .88 and .90. Test-retest reliability coefficients for intervals of two days, six weeks, and six months were r = .87, r = .70, and r = .74, respectively (N = 2387) (Cohen & Williamson, 1988). Discriminate validity coefficients revealed that the ISEL was negatively correlated with measures of depressive symptomatology (r = -19 to -21), psychological symptomatology (r = -.52 to -.60), and physical symptomatology (r = to -34) (Cohen, Mermelstein, Kamarck, & Hoberman, 1985). These psychometric data are based on a forced dichotomous response format. It is generally accepted that increasing the item response format, similar to that employed in this study, improves the psychometric properties of the instrument. Thus the internal consistency of the ISEL, using the four-item response format, may yield a larger reliability coefficient. The ISEL can be completed in 3-5 minutes. Another study of 42 abused women, found the total scale coefficient of .94 and .76, .81, .86, and .87 for the tangible, belonging, selfesteem, and appraisal subscales, respectively (Constantino & Bricker, 1997).

The Brief Symptom Inventory (BSI)

The BSI was used to measure psychological distress. BSI is a selfreport inventory designed to reflect psychological distress symptom patterns. Adapted from the SCL-90 the BSI is a 53-item rating scale with nine major symptom constructs: somatization, obsessive-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. Three global indices were included to provide flexibility in assessment of the individual's psychological status: Global Severity Index (GSI), Positive Symptom Distress Index (PSDI), and Positive Symptom Total (PST). It is self-administered and usually can be completed within 6-9 minutes. Typical time for administrative instructions is 1-2 minutes. Internal consistency reliability using Cronbach's coefficient alpha, for all nine dimensions of the BSI ranges from a low of .71 on the psychoticism dimension to a high of .85 on depression (Derogatis & Spencer, 1982). Using Cronbach's alpha internal consistency reliability of the BSI total score was .86, while reliability for all nine subscales showed a low of .76 for the paranoid ideation and a high of .96 for the depression in our study of 47 spousal suicide survivors (Constantino & Bricker, 1997).

The Health Screening Questionnaire (HSQ)

The HSQ (Constantino & Bricker, 1997; Constantino et al., 2000) was used to measure health care utilization and general health. The HSQ is a 21-item self-report of medical and surgical history, visits to health clinics, health providers, hospital emergency, inpatient and outpatient departments, and a general health assessment (Constantino et al., 2000).

Statistical Analysis

Categorical data are reported as percentages and continuous variables are reported as means and standard deviations. Health outcome variables are reported as both mean and median. Comparisons between two treatment groups were made with chi-square test for categorical variables; Fisher's Exact Test was used if a cell in a two-way contingency table contained less than five subjects. Normally distributed continuous variables were compared by Student's *t*-test Non-normally distributed data were compared by the Mann-Whitney U test. All analyses were performed with SPSS (version 10.0, SPSS, Chicago, IL).

RESULTS

Since sample size of the two groups were small and uneven, and all three health outcome scores were non-normally distributed, Mann-Whitney U test was conducted to compare two intervention groups using difference (change) scores. Group comparison results showed that the SSI group had greater improvement (p = .013) (Table 2) in psychological distress symptoms as measured by the BSI than the NTC group post treatment. Specifically, the SSI group showed pre to post intervention BSI means of 152.15 to 108.38, while the NTC group showed pre to post BSI means of 159.73 to 151.36. Secondly, the SSI group had a greater improvement (p = .016) in social support (belonging subscale) as measured by the ISEL than the NTC group post treatment (Table 2). Specifically, the SSI group showed pre to post intervention means of 4.54 to 7.54 and the NTC group showed pre to post intervention means of 6.00 to 4.82. Thirdly, the SSI group showed fewer health care utilization (p = .032) as measured by the HSQ than the NTC group post treatment. Specifically, the SSI group showed pre to post intervention means of 0.82 to 0.21 and the NTC group showed pre to post means of 0.36 to 0.29.

		Baseline		Post-intervention	ntion	Change from baseline	baseline	
Health						0		
outcomes	и	Mean (SD)	Median	Mean (SD)	Median	Mean (SD) Median Mean (SD) Median Mean (SD) Median p^*	Median	p^*
Psychological distress								
ISS	13	152.15 (48.28)	137.00	108.38 (60.62)	73.00	$13 \ 152.15 \ (48.28) \ 137.00 \ 108.38 \ (60.62) \ \ 73.00 \ -43.77 \ (43.28) \ -37.00 \ $	-37.00	
Control	11	159.73 (47.73)	176.00	151.36 (54.40)	174.00	$11 159.73 \ (47.73) 176.00 151.36 \ (54.40) 174.00 -8.36 \ (55.93)$	2.00 .013	013
Belonging/social support								
ISS	13	4.54 (3.20)	4.00	7.54 (3.53)	9.00	9.00 3.00 (4.16)	3.00	
Control	Π	6.00 (2.32)	6.00	4.82 (2.6)	5.00	5.00 - 18.16 (3.34)	-2.00.016	016
Health utilization								
ISS	13	.82 (.93)	.50	.21 (.24)	.14	.14 -61 (.99)	38	
Control	1	.36 (.25)	.38	.29 (.25)	.29	.29 –.08 (.19)	04 .032	032

TABLE 2. Significant Outcomes at Pre and Post Intervention by Group Assignment

*Comparison of change over time between the two treatment groups using Mann-Whitney U test. All p-values are one-tailed, and a value of p less or equal to .05 was considered statistically significant.

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The total ISEL score (tangible, belonging, self-esteem, and appraisal subscales) showed a trend toward significance (p = .060) in pre to post mean differences (19.54 to 29.00) for the SSI group and pre to post mean differences (20.64 to 21.91) for the NTC group. The social support (tangible subscale) also showed a trend (p = .084) in pre to post mean differences (4.31 to 7.23) for the SSI group and (4.82 to 5.55) for the NTC group. No trends were found with other ISEL scores (appraisal and self-esteem), perhaps because of too few subjects.

DISCUSSION

Social support interventions can be provided to women experiencing IPV while in shelters in small groups with beneficial health effects. Groups may validate the IPV experience, reduce the associated stress, improve health outcomes, and contribute to the adaptation process (Cohen & Hoberman, 1983). Regarding research question number one, the women in the SSI group had fewer psychological distress symptoms, as measured with the BSI, than the women in the NTI group. Despite the small groups and short shelter stay, a structured SSI provided while women stayed at the shelter was effective in reducing psychological distress symptoms. The Shelter is a safe place, or escape from the stressful IPV situation in their life. The SSI and NTC group differences were significant, indicating there was something more beneficial taking place in the SSI group, than in the NTC group. These findings confirm what researchers suggest. That is, a stressful and disruptive life event may be less so when social support is perceived to be available (Cohen & Hoberman, 1983).

Regarding research question number two, perceived social support scores as measured by the ISEL (total score) showed a trend toward being significantly different between the SSI and the NTC groups, and it is possible that with a larger group of women in the sessions this trend would result in significance. However, the ISEL (belonging subscale) scores were significantly different between the SSI and NTI groups. With women in a shelter who may be isolated from other social support, identification of a sense of belonging may be possible in a structured SSI group. The perception that they are not alone, that there is someone there for them, and that they are able to be there for someone else may be very beneficial.

The perception of the availability of social support is significant to women experiencing IPV. Campbell and Soeken have found abused women to be socially isolated and withdrawn from friends and family members, fearing that their abuser may unleash his aggression on them also (Campbell & Soeken, 1999). They also might distance themselves from their only source of support (family or friend) due to shame and guilt (Constantino & Bricker, 1997). In a study comparing abused and nonabused women, the abused women tend to be depressed, aloof, and have difficulty expressing feelings appropriately and have multiple and nonspecific health care seeking behavior (Constantino et al., 2000).

In regards to research question number three, which addresses differences in the health care utilization, the differences between SSI and NTC groups were significant, indicating that perceptions of social support reduced health care issues reported in the HSQ to a greater extent in the SSI group of women. The IPV and stress-induced health care problems compromise women's ability to attenuate the unhealthy effects of living with IPV (Campbell & Soeken, 1999; Constantino et al., 2000; Kaslow, Thompson, Meadows, & Al, 1998).

This feasibility study demonstrated the acceptability of SSI as a treatment modality. However, some limitations also should be mentioned. Eight weekly SSI sessions may not be feasible when women have four week time-limits to shelter stays. Providing sessions twice every week to complete the eight sessions of the SSI remedied this time limitation. Although the women were permitted to return to the shelter to complete the group sessions, some were unable to return to complete treatment due to transportation, altered living conditions, and child care issues. Four women asked if they could use the computer via email to continue individual treatment. This was not in the intervention protocol for this study, hence intervention by the computer was not provided. Individual SSI sessions using the computer as a continuation of the sessions in the shelter is planned in future studies.

Several questions remain unanswered by this study, however. Research has not yet addressed differences in outcomes if women choose different types of intervention modes, and if ongoing abuse or health outcomes would be significantly different if they receive their preferred intervention. Others have suggested that women's specific needs can be addressed with tailored interventions to meet their specific needs (Crane & Constantino, 2003; Strecher et al., 2002). Research has yet to address whether the abuse and health outcomes would be different with this type of tailored intervention.

Findings in small studies should be viewed with caution with an eye toward replicating studies with diverse and larger samples of women. Conversely, larger groups may limit what researchers learn from women participating in research. R. Constantin et al.

CONCLUSION

Research is needed that is longitudinal and can incorporate women's input, so that the interventions that are needed by women are the ones that are evaluated. In addition, with health issues such as IPV, it is important to recognize that only women who report IPV can be involved in intervention research. Ongoing efforts at screening interventions in all health care settings must continue by health care providers. Different types of interventions and options for providing them are in need of evaluation by women experiencing IPV. Research also must address abuse and health care outcomes for women experiencing IPV, in addition to interventions. Health care professionals expect the vulnerable victims of IPV to participate, evaluate, and mobilize resources to cope with the stressful experience. More importantly for the researchers is to mobilize all efforts and modalities of screening and intervention for women experiencing IPV.

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