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Original article

Motivational interviewing and intimate partner violence: a randomized trial

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ABSTRACT

Purpose: To determine if motivational interviewing (MI) improves self-efficacy (primary outcome), depressive symptoms (secondary outcome), and stage-of-readiness-to-change (secondary outcome) among women in abusive relationships.
Methods: Randomized controlled trial among women who experienced intimate partner violence in a current relationship over the past 12 months. Subjects were recruited from two family planning clinics (December 2007 to May 2010). The intervention included an initial face-to-face session and three telephone sessions administered 1-, 2-, and 4-months postenrollment, each using MI to identify personal goals. Controls were referred to community-based resources. Outcomes were measured by self-administered questionnaires before randomization and 6 months later. Modified intent-to-treat analyses of completed participants were conducted using multivariate analysis of variance for continuous outcomes and polytomous logistic regression for categorical outcomes.
Results: Three hundred six eligible women were enrolled (recruitment rate = 64%); 204 completed the 6-month follow-up (completion rate = 67%). Depressive symptoms decreased to a greater extent in MI than referral women ($P = .07$). Self-efficacy and stage-of-readiness-to-change increased more in MI than referral women, but these differences were not statistically significant.
Conclusions: With a lower than projected sample size, our findings did not achieve statistical significance at the 5% level but suggest a beneficial effect of the MI intervention on reducing depressive symptoms.

Introduction

Intimate partner violence (IPV) against women is a global health problem and human rights issue of critical concern because of its high prevalence, associations with poor physical and mental health outcomes, and potential for serious physical injury, homicide, and suicide [1]. IPV also adversely impacts the lives of children and other household members who are at considerable risk of witnessing the violence, of being abused themselves, and suffering from trauma-related emotional, behavioral, and physical health problems [2].

Although dozens of experimental and quasi-experimental studies have tested judicial intervention programs for male perpetrators of IPV to little effect [3], few studies have rigorously tested interventions to improve the safety and well-being of the women who experience the violence [3–6]. Such studies are a challenge because, unlike male perpetrators identified through the legal system, female survivors are a more difficult population to identify, recruit, and follow due to the often chaotic circumstances introduced by the violence in their lives. Trials that include this vulnerable population need to be careful that study protocols do not introduce additional risks. An additional concern is that many women may not be ready to address the violence in their lives directly, and it is well documented that ending a violent relationship can take a very long time and often not the desired outcome of the victim [1]. Thus, interventions that empower victims, such as improved self-efficacy or reductions in symptoms of depression, have been prioritized [7–11].

Most interventions targeting female survivors have been conducted in urban settings, with half recruiting from domestic violence shelters or women seeking social services or restraining orders [5]. Consequently, interventions are scarce among women from rural areas and those recruited from health care settings, although rural women are at higher risk of IPV and IPV-related

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homicide than their urban counterparts [12]. Because abused women use health care services substantially more often than nonabused women [1,13], clinical settings are well-suited for interventions. Women seeking health care are also more likely to be in an earlier stage or a noncrisis period of an abusive relationship than women identified from shelters.

To address these deficiencies in the evidence-based literature, we conducted a randomized controlled trial within two family planning clinics located in a rural state with the objective of evaluating the effectiveness of an individually tailored intervention delivered through the technique of motivational interviewing (MI). We hypothesized that the MI intervention would increase self-efficacy, stage-of-readiness-to-change, and reduce depressive symptoms among women in abusive relationships. To date, only a handful of clinical trials have evaluated advocacy interventions to improve these outcomes [4–11].

Methods

Setting and participants

This randomized trial is registered with ClinicalTrials.gov, Identifier: NCT01410669. We conducted this study in partnership with Planned Parenthood of the Heartland; Council on Sexual Assault and Domestic Violence of Sioux City, Iowa; Iowa Department of Public Health; and University of Iowa. Ethical approval was received from Siouxland IRB, National Planned Parenthood Federation of America, and University of Iowa.

Women were recruited from two family planning clinics serving primarily low-income populations. Recruitment at the first clinic began December 2007 and January 2009 at the second clinic. Recruitment at both sites continued through May 2010 and all fieldwork ended in December 2010. To be eligible for the study, women had to screen positive for IPV by a *current* partner within the past year and had to be aged 18 years or older, English-speaking, and neither currently pregnant nor incarcerated. One field coordinator at each site administered the screening, consent, intervention, and follow-up procedures. Although blinding of the field coordinator would have been ideal, logistical constraints related to limited clinic space and staffing made this unfeasible.

IPV screening and definitions

We implemented universal IPV screening 2–5 months before recruitment using a computer-based, self-administered screening tool programmed in Microsoft Access. The research team and clinic staff completed 30 hours of domestic violence advocacy training conducted by professional IPV advocates before screening began to facilitate the conduct of sensitive and appropriate clinic-based referrals. All women scheduled to see a medical provider who were English-speaking and aged 18 years or older were asked to complete the three-minute screening survey in a private clinic room.

We screened for the 12-month prevalence of violence [14]. We used a modified Abuse Assessment Screen [15] to ascertain physical, sexual, and threats of IPV and identify the frequency, severity, and perpetrator of the abuse. The modification provided more specific wording of the acts constituting sexual abuse, and the question, "Are you afraid of your partner or anyone else?" was deleted because we used the Women's Experience with Battering (WEB) scale to measure chronic, nonphysical, psychological abuse [16]. The WEB is a 10-item validated scale that has good construct validity and internal consistency [17]. Women rated their agreement or disagreement with each item using a 6-point Likert-type scale. WEB scores of 20 or more are positive for battering [16].

Women who screened positive for any type of IPV within the past 12 months by any perpetrator were identified by the color of their computer screen on finishing the screening questions. All screen-positive women (i.e., positive on the Abuse Assessment Screen for violence by any perpetrator or WEB positive) were automatically routed to complete the Danger Assessment Screen [1] and identify those at heightened risk of severe violence or in immediate need of safety planning or referral to a domestic violence shelter. Women who screened positive on the danger assessment were asked if they wanted immediate assistance; however, as no women made this request, eligible women (i.e., those in an abusive relationship with a current partner) were subsequently invited into the study. All women who screened positive for IPV were provided with information on community-based, domestic violence resources and referrals on request.

Consent, randomization, and safety procedures

After screening, field coordinators introduced the study to eligible women and invited participation. On consent, the field coordinator obtained "safe" contact information for sending generic appointment reminders and phone messages. Participants also provided names of one or more close friends or family members who could be contacted if the field coordinator was unable to reach her. Participants received the study's toll-free number and compensation for travel expenses and completed surveys.

All subjects completed a 20-minute baseline questionnaire that was self-administered and computer-based to collect information on the study outcomes. During this time, the field coordinator randomized the subjects in a 1:1 allocation to the intervention or control group using a simple random sampling program available in SAS software(Cary, NC). Intervention subjects were asked to stay for the baseline MI counseling session or to schedule the MI session for the next week.

Intervention

MI was implemented to guide women in identifying feasible individual goals and small steps that they could safely take to increase their self-efficacy and feelings of control. MI relies on reflective listening and is well suited for women living with IPV because they face many barriers to taking action, which meriting an individualized approach. Over time, victims of IPV lose their autonomy and self-efficacy, often becoming increasingly isolated [18]. This intervention was developed to empower the woman to make choices for herself and her family.

MI encourages active steps toward healthy behaviors by helping individuals to clarify and resolve their ambivalence about behavior change [19]. It has been effective in the areas of substance abuse, smoking cessation, and dietary modifications but had not been tested as an intervention for women coping with IPV at the time we initiated this trial.

The intervention included a 1-hour face-to-face educational session at baseline, followed by three 10- to 15-minute MI telephone sessions conducted 1, 2, and 4 months postenrollment. At each session, the field coordinators used MI techniques to help women identify small steps that they could take to improve their physical health, emotional health, social support, quality of work or home life, or their relationship. Women could self-select areas and were not required to focus on the abusive relationship. Women who participated in the full protocol received approximately 90 minutes of MI counseling.

The field coordinators were trained during two half-day interactive sessions held at the University of Iowa by MI experts. Periodic face-to-face meetings with the study team and the MI experts were