Improving Readiness to Manage Intimate Partner Violence in Family Medicine Clinics by Collaboration With a Community Organization

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Abstract

**Background and Objectives:** Primary care clinicians are in a unique position to address intimate partner violence (IPV) in routine clinical practice. The purpose of this study was to improve clinician readiness to identify and manage IPV in four family medicine residency practice sites on the west side of Chicago by partnering with a local domestic violence organization.

**Methods:** Practice sites included three federally qualified health centers and one hospital-based office. Eligible clinicians included resident and faculty physicians, nurse practitioners, and certified nurse midwives. We assessed readiness using the validated Physician Readiness to Manage Intimate Partner Violence Survey (PREMIS). We used initial survey results (n=53, 73%) to develop a targeted clinician educational intervention by a community organization. We administered the PREMIS tool postintervention at 1 and 6 months, measuring perceived and actual knowledge, preparedness, and practice issues. We performed comparison statistics to assess aggregate change.

**Results:** PREMIS response rates were n=53 (72%), n=32 (47%), and n=36 (49%), for preintervention, 1, and 6 months postintervention, respectively. Mean clinician preparedness score improved significantly at 1 and 6 months (P<.001, P<.009). Mean self-perceived knowledge score improved significantly at 1 month (P<.001) and trended toward improvement at 6 months (P=.07). Actual knowledge trended toward improvement at 1 month (P=.07) and after 6 months (P=.05). Mean practice issues scores did not improve significantly.

**Conclusions:** Participation in a 45-minute targeted educational intervention improved clinician readiness to manage IPV. Collaborating with a community partner builds a relationship for further referrals and advocacy for patients.

Introduction

Intimate partner violence (IPV) is defined as “any behavior within an intimate relationship that causes physical, psychological, or sexual harm to those in that relationship.”¹ Consequences beyond immediate harm to the
victim include an increased incidence of chronic pain, sexually transmitted infections, depression, posttraumatic stress disorder, and suicide.\(^2,3\) Those affected by IPV often do not openly disclose issues around personal safety unless directly asked.\(^4\) However, research demonstrates that victims often access medical services for related concerns such as chronic pain or depression.\(^5\) Despite the availability of abbreviated screening tools, such as the Woman Abuse Screening Tool (WAST) and the more gender-neutral “Hurt, Insult, Threaten, Scream” (HITS) surveys, adoption of routine screening in clinical practice is not universal.\(^6,7\) Barriers to routine screening may include lack of clinician knowledge, experience, and time.\(^8-11\)

With over 299 million primary care office visits per year in the United States, primary care clinicians have the opportunity to play a pivotal role in the screening and management of IPV.\(^12\) The American Academy of Family Physicians and the United States Preventive Services Task Force both recommend that clinicians routinely screen for IPV in women of reproductive age and offer those who screen positive with referral services.\(^12,13\) The Physician Readiness to Manage Intimate Partner Violence Survey (PREMIS) is a 67-item, comprehensive screening tool developed to assess the preparedness of physicians to manage IPV and to evaluate the effectiveness of physician IPV education and training. PREMIS demonstrates strong internal reliability and validity to evaluate (1) perceived knowledge, (2) actual knowledge, (3) preparedness, and (4) practice issues surrounding IPV.\(^15\) Studies using this tool have found similarities as most clinicians report a lack of knowledge, skills, and confidence to address IPV routinely.\(^16-18\) The purpose of this study was to assess clinicians’ readiness to identify and manage IPV at baseline and identify potential change after exposure to a targeted educational intervention prepared by a community organization with expertise in management.

**Methods**

Study sites included four residency training clinics at a community-based urban family medicine residency in Chicago: three federally qualified health center (FQHC) practices (Sites A, B, and C) and a non-FQHC hospital-based practice (Site D). Resident and faculty physicians, nurse practitioners, and midwives who actively practiced at Sites A-D were eligible for participation. We distributed the PREMIS tool by email to all participants at baseline, 1 month and 6 months postintervention. Clinicians were given a 2-week time period to complete the survey, with a total of three reminders for each survey (see Figure 1 for a timeline of survey and educational intervention implementation).

We analyzed data using the PREMIS syntax and codebook provided by Short et al. We calculated means and standard deviations for each of the outcome variables of interest and conducted unpaired \(t\) tests to assess differences between intervals of administration of the survey. Clinician response rates for baseline, 1 month, and 6 months postintervention surveys were aggregated values stratified by clinician type, and we assessed aggregate change. We analyzed all data using Stata v13.1 (Stata Corp, College Station, TX). This project was determined to be exempt from institutional review board review.

Researchers collaborated with an IPV trainer from a community organization that was a referral source for Sites A-D. Utilizing baseline data from the PREMIS, the IPV trainer prepared a targeted 45-minute educational training intervention and comprehensive handout (specific community resources, dynamics of IPV, legal rights, safety planning options). Specific content in the intervention is outlined in Figure 1. Clinicians had the opportunity to attend the intervention at three separate days and times. This intervention was given at regularly scheduled clinic practice management times that had built-in space available for guest lectures from the community or hospital.

**Results**

Study participants included a total of 73 clinicians: 58 family physicians (27 resident and 31 faculty physicians),
six midwives, and nine nurse practitioners (Table 2). Clinicians at Sites A-C represented 77% of the study population, whereas the remaining 23% of clinicians were based at Site D. Clinicians who did not attend the training were not included in the postintervention surveys.

Survey results demonstrated a significant improvement in the mean preparation score both at 1 month ($P<.001$) and 6 months ($P=.009$) postintervention (Table 3). Mean scores for clinician self-perceived knowledge improved at 1 month postintervention ($P=.001$), but only trended towards improvement at 6 months postintervention ($P=.07$). The mean actual knowledge score trended toward improvement 1 month postintervention ($P=.07$), with improvement becoming statistically significant 6 months postintervention ($P=.05$). There was no significant change in the mean practice issue score, although there was a trend toward improvement at both 1 month and 6 months postintervention.

**Conclusions**

This study demonstrates that a brief, clinician-targeted intervention facilitated by a community partner can contribute to improve clinician readiness to recognize and initiate steps in addressing IPV in clinical practice. Strengths of this study include the customization of the educational intervention through use of the preintervention PREMIS results, as well as emphasis on specific, actionable clinic policies and procedures, are believed to have contributed to clinicians’ increased confidence. Given that clinicians have limited capacity for specialized IPV training, this process of preassessment and focused intervention could be adapted to other settings and achieve positive results.$^{10,11}$ Regardless of the clinical practice setting (private, FQHC, employed), practices should seek out existing organizations within their community for resources surrounding IPV training and services for patients. Additionally, using the validated tool PREMIS, to evaluate clinician readiness to manage IPV provides another strength to future practices.

Limitations to this study include the possibility that the participants consisted of predominantly young, early-career female physicians, although more women graduate from family medicine programs than men. Additionally, decreased attendance at the training could have been due to those with lack of interest in IPV. Using aggregated data as opposed to linked responses from clinicians did not allow us to draw comparison of individual clinicians’ preparedness over time. We also recognize potential scrutiny over a single 45-minute training as our intervention, although this opened a relationship with a community partner that extended beyond one session, as it made this organization visible, and opened communication for clinicians and staff as patient resources.

We can equip clinicians with knowledge and confidence to manage IPV, but ultimately there is a need for more approaches that connect patients in a timely way with resources in their community. Building clinician advocacy skills and teaching the importance of community partnerships is a crucial lesson for physicians in training.$^{20}$ Future research should aim to test other comprehensive approaches to preparing clinicians and clinics to better address IPV in routine care.

**Tables and Figures**
Figure 1: Readiness to Manage Intimate Partner Violence: Timeline of Survey and Intervention

- **Pretest:** PREMIS Survey distributed by email to eligible clinicians
- **Intervention:** IPV Training
  - PREMIS Survey Pretest results reviewed by IPV trainer; IPV training developed
- **Post Test (1 month):** PREMIS Survey distributed by email to clinicians who attended intervention
- **Post Test (6 months):** PREMIS Survey distributed by email to clinicians who attended intervention

### 45 minute Intervention: IPV Training Content

**PowerPoint**
- Reviewed Pretest Results highlighting deficits
- Reviewed Community Concerns
  - Prevalence of violence surrounding clinics
- General risk factors for violence
- Signs and symptoms of IPV
- Screening strategies
- Creating a safety plan
- Stages of change for IPV victims
- Legal reporting requirements
- FQHC and HBC policy as it applies to audience
- Specific resources within attendee’s clinics (e.g., behavioral health, social workers, legal aid)
- Referral resources in the community

**Handout (given to clinicians to help facilitate conversations with patients, also available to all clinic staff)**
- Safety planning options
- Legal rights as a survivor of IPV in Chicago
- Dynamics of IPV
- Local domestic violence resources
### Table 1: Demographics and Training Background of Clinicians Who Completed the Preintervention Survey

| Characteristic                  | Number of Clinicians n* (%) |
|--------------------------------|-----------------------------|
| **Age in Years**               |                             |
| 20-29                          | 19 (35)                     |
| 30-39                          | 21 (39)                     |
| 40-49                          | 7 (13)                      |
| >50                            | 7 (13)                      |
| **Gender**                     |                             |
| Male                           | 16 (30)                     |
| Female                         | 38 (70)                     |
| **Average Number of Patients Seen in Clinic by Clinician per Week** |                             |
| <20                            | 6 (11)                      |
| 20-39                          | 23 (43)                     |
| 40-49                          | 13 (24)                     |
| 50-59                          | 2 (4)                       |
| 60+                            | 10 (19)                     |
| **Hours of Previous IPV Training** |                             |
| 0-5                            | 32 (59)                     |
| 6-10                           | 9 (17)                      |
| 11+                            | 13 (24)                     |

Abbreviation: IPV, intimate partner violence.
* Total number of responding clinicians: N=54.
**Age: continuous mean for age=35.4 years, SD=9.1.

### Table 2: Clinicians Who Completed PREMIS and Educational Intervention

| Clinician Type                  | PREMIS Preintervention (n) | Clinician Educational Intervention (n) | PREMIS 1 Month Postintervention (n) | PREMIS 6 Months Postintervention (n) |
|---------------------------------|-----------------------------|----------------------------------------|-------------------------------------|--------------------------------------|
| Faculty physician               | 19                          | 18                                     | 11                                 | 18                                   |
| Resident physician              | 25                          | 15                                     | 15                                 | 12                                   |
| Nurse practitioner/ certified nurse midwife | 9                            | 4                                      | 6*                                 | 6*                                   |
| **Total**                       | 53/73, 72%                  | 37/73, 51%                             | 32/37, 86%                         | 36/37, 97%                           |

Abbreviation: PREMIS, Physician Readiness to Manage Intimate Partner Violence Survey.
* Two nurse practitioners/certified nurse midwives completed the postintervention surveys but failed to complete the attendance sheet.
Table 3: Comparison of Preintervention Mean Scores to the 1-Month and 6-Month Postintervention Mean Scores

|                         | Mean Score (SD) | % Increase | P Value |
|-------------------------|-----------------|------------|---------|
|                         | Preintervention | Postintervention |         |
| Preparedness Score      |                 |             |         |
| Pre vs 1 month post     | 3.48 (±1.34)    | 4.68 (±1.15) | 34      | <.01    |
| Pre vs 6 month post     | 3.48 (±1.34)    | 4.45 (±1.33) | 28      | <.01    |
| Perceived Knowledge Score|                |             |         |
| Pre vs 1 month post     | 3.76 (±1.36)    | 4.81 (±1.20) | 28      | <.01    |
| Pre vs 6 months post    | 3.76 (±1.36)    | 4.65 (±1.29) | 24      | .07     |
| Actual Knowledge Score  |                 |             |         |
| Pre vs 1 month post     | 18.03 (±3.44)   | 19.55 (±1.86) | 8       | .07     |
| Pre vs 6 months post    | 18.03 (±3.44)   | 19.5 (±2.22)  | 8       | .05     |
| Practice Issues Score   |                 |             |         |
| Pre vs 1 month post     | 16.97 (±6.46)   | 20.31 (±6.96) | 20      | .19     |
| Pre vs 6 months post    | 16.97 (±6.46)   | 22.37 (±10.23)| 32      | .15     |

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