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Development of an Innovative Treatment Paradigm for Intimate Partner Violence Victims With Depression and Pain Using Community-Based Participatory Research

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Abstract

Intimate partner violence (IPV) is a public health issue with complex physical health, mental health and social consequences that can exacerbate survivors' barriers to health care engagement and support. Furthermore, health care professionals are often unaware of or feel ill-equipped to address survivors' complex needs. Depression and chronic pain are particularly prevalent co-occurring problems for survivors and can impede engagement and outcomes in traditional health care. This study's purpose was to understand what interventions might be more responsive to survivors' myriad needs, particularly those with depression and pain. Survivors were involved with the design, execution, analysis, and interpretation of results, based on community-based participatory research principles. Intervention development happened in two phases: the first consisted of focus groups with survivors to inform the intervention and the second included intervention design, informed by a community advisory board (CAB). Thirty-one survivors participated in Phase 1, and they reported preferring a range of support including formal help-seeking, informal coping strategies, and spirituality. In Phase 2, the CAB (comprised of survivors, health care professionals, and researchers) identified three distinct aspects of a comprehensive IPV intervention: (a) education regarding both the complex health issues and available local resources; (b) an integrated consultation service for providers to seek recommendations for responding to the full spectrum of survivors' needs; and (c) a trauma-informed, accessible clinic. Academic medical centers could not have designed this intervention in isolation; survivors and providers played an integral part of this process, and continue to inform our current work.

Keywords

intervention/treatment; domestic violence; mental health and violence; anything related to domestic violence

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Introduction

Intimate Partner Violence (IPV), Pain, and Depression

More than one in five women is affected directly by IPV (Black et al., 2011). A joint initiative of the Violence Against Women Office and the Centers for Disease Control and Prevention reported the lifetime prevalence of rape, physical violence, and/or stalking by an intimate partner is 35.6% for women (Black et al., 2011). The morbidity and mortality associated with IPV is an enormous national public health issue, costing more than US\$8 billion annually in direct and indirect costs (Max, Rice, Finklestein, Bardwell, & Leadbetter, 2004). These cost estimates fail to take into account many of the “hidden costs” of IPV, such as case adjudication, the intergenerational effects on children, unknown implications for the workplace, and the stress of IPV on family and friends of the perpetrators and survivors. The resultant health and economic toll rank IPV as a significant national and international public health issue (World Health Organization, 2003).

IPV victims frequently experience chronic pain conditions (Campbell, 2002; Coker et al., 2002; Dienemann et al., 2000; Stein & Kennedy, 2001; Straus et al., 2009; Wuest et al., 2010; Poleshuck, 2006). A broad range of pain conditions, including headaches, back pain, pelvic and abdominal pain, and fibromyalgia all have been found to occur at high rates among women who have been abused (Campbell et al., 2002; Plichta, 2004; Poleshuck et al., 2005; Shei, 1990; Walling et al., 1994; Wuest et al., 2008). Interestingly, the health effects of IPV last for many years, even after the abuse has ended (Cerulli, Poleshuck, Raimondi, Veale, & Chin, 2012), and the health care costs continue to be higher than expected up to 3 years after the violence has stopped (Fishman, Bonomi, Anderson, Reid, & Rivara, 2010).

Women with IPV histories are more likely than those without to experience depression (Dienemann et al., 2000; Dutton, 2009; Stein & Kennedy, 2001; Zlotnick, Johnson, & Kohn, 2006). Between 35% and 70% of U.S. women with IPV experiences report clinically significant depressive symptoms (Cavanaugh, Messing, Del-Colle, O’Sullivan, & Campbell, 2011; Devries et al., 2013; Dienemann et al., 2000; McCauley et al., 1995; Petersen, Gazmararian, & Clark, 2001; Rodriguez et al., 2010; Stein & Kennedy, 2001). In addition, IPV is reported by more than 90% of women psychiatric in-patients with suicidal intent (Heru, Stuart, Rainey, Eyre, & Recupero, 2006), with 35% of abused women indicating that they had made previous suicide attempts (PicoAlfonso et al., 2006).

In addition to the high prevalence of depression and pain among IPV victims, they have long-term difficulty in several domains of their lives. These difficulties include impairment in relationship and social functioning (Bonomi et al., 2006), paucity of social support (Kulkarni, Bell, & Wylie, 2010; Levendosky et al., 2004), difficulty obtaining employment, and reduced ability in completing household tasks and parenting. Together, these studies highlight the complexity and comorbidity of difficulties that frequently converge and cause significant impediments to effective functioning in the lives of IPV victims with depression and pain (DiMatteo, Lepper, & Croghan, 2000; Rhodes et al., 2007).

Need for Comprehensive Interventions

... [I]t took me a while to get to that point where I was comfortable and secure and felt safe talking to somebody. But once I did, it was like you just get that weight off your chest just letting it out.

The abundance of debilitating depression and pain afflicting IPV victims results in multiple health care appointments and demanding treatment regimens. Yet, these co-occurring difficulties cause problems with completing simple activities of daily living. As a result, IPV victims often have difficulty with adherence to medical treatment (DiMatteo et al., 2000). Complicating the barriers, the majority of providers are neither aware of their patients' IPV experiences (Rhodes et al., 2007) nor prepared to address the implications of IPV. This lack of awareness and inability to address IPV-related issues on the part of providers often leads to disjointed and unintentionally insensitive care. IPV victims often delay or completely postpone seeking necessary treatment (Cerulli, Edwardsen, Duda, Conner, & Caine, 2010). Moreover, existing IPV services often neglect addressing health. Intervention approaches for IPV victims largely include mandatory arrest, pro-prosecution and specialty courts, shelters, and the newly developing family justice centers. Although each serves an important role, these programs focus on the immediate safety needs of victims and generally fail to identify and address mental and physical health needs such as depression and pain.

There are many barriers that interfere with IPV victims' ability to connect and engage with needed services. These barriers are practical, cultural, environmental, symptom related, and system related in nature, and prevent IPV victims' access to care even after the violence ends. Practical barriers include economic problems, lack of insurance, transportation, child care, competing priorities and limited time, and inaccessible clinic locations (Armstrong, Ishiki, Heiman, Mundt, & Womack, 1984; Diamond & Factor, 1994; Maynard, Ehreth, Cox, Peterson, & McGann, 1997; Wilson, Silberberg, Brown, & Yaggy, 2007). Cultural barriers include clinicians' lack of knowledge or awareness about the consequences of IPV, IPV victims' distrust of the health care system, disapproval of others if they do seek treatment, and stigma and negative beliefs about depression and depression treatment (Brown, Abe-Kim, & Barrio, 2003; Corrigan, 2004; Nicolaidis et al., 2010; Overstreet & Quinn, 2013; Petersen, Moracco, Goldstein, & Clark, 2005; Rodriguez, Valentine, Son, & Muhammad, 2009; Snowden, 2001). Symptom barriers include anhedonia and related depressive symptoms, avoidance and other anxiety-related symptoms, physical discomfort when traveling to appointments, poor concentration, medications that interfere with cognitive function and memory, and previous negative experiences with services and providers (McKay, McCadam, & Gonzales, 1996; Nicolaidis et al., 2010). Environmental and systems barriers include laws, rules, insurance payment plans, accreditation, professional training that affects access (Berwick, 2002; Bloom, 2002), lack of IPV-informed providers, overworked clinicians, long wait lists for appointments, and few evidence-based interventions for IPV-sensitive care (McGlynn, Norquist, Wells, Sullivan, & Liberman, 1988; Pagels et al., 2014). Professional obstacles include well-intended attorneys advocating for the avoidance of mental health treatment for fear of making their clients appear as unstable witnesses or inept parents (Markham, 2003). Yet, mental health treatment may help improve IPV victims' adherence with court-ordered requirements and physicians' treatment recommendations, ability to parent and engage in future healthy relationships, and improve

overall mental health and function. Any program that hopes to improve the health of IPV victims must consider the range of challenges that influence their treatment needs and their ability to engage in and respond to care.

IPV victims routinely are screened out of research studies on depression and pain because of the complexities and safety concerns posed by the presence of IPV. As a population, IPV victims present significant challenges for research teams. These challenges include consideration of IPV victims' safety, and the highly transient nature of this population. As a result, very little is known about "what works" for this population. In sum, IPV, depression, and pain are each highly prevalent and devastating problems that commonly co-occur in women who are victims of IPV. The barriers created for IPV victims who experience IPV-related consequences, chronic pain, and depression exacerbate functional impairment, impede engagement in treatment, and compromise treatment outcomes. Victims of IPV report more physician visits compared with women who reported no abuse in the previous year (Kovac, Klapow, Kroenke, Spitzer, & Williams, 2003). Meanwhile, physical and mental health providers often are not aware of their patients' IPV experiences, and struggle to provide effective care for their complex and comorbid difficulties. Although IPV victims who recently ended their relationships or are going through domestic violence court may seek services for their immediate safety needs, these initial supports may not be as helpful over time and IPV victims find they are left to navigate their needs alone. Evidence-based psychotherapies are effective for improving depression severity, yet remission rates are low, and relapse is common, particularly among those with chronic and recurrent depression (Fava, Ruini, & Belaise, 2007; Gaynes et al., 2009; Thase et al., 1992). Although psychotherapy can be helpful, it alone is often not sufficient for treating depression among those with chronic, complex, and comorbid needs (Fava et al., 2007; Gaynes et al., 2009; Manber et al., 2008; Thase et al., 1992). Consequently, patients and providers feel discouraged with poor adherence and outcomes, which can lead to inefficient use of health care (e.g., emergency department and urgent care clinic visits, multiple physician visits, not taking medications as prescribed, multiple missed appointments).

There is an urgent need to develop and assess a comprehensive intervention program for IPV victims with depression and pain based on existing, evidence-based models that addresses multiple barriers to care for IPV victims and includes IPV victims as key collaborators. By developing an integrated treatment program informed by, and tailored for, the needs of IPV victims, we aim to improve initiation and adherence to treatment, reduce the presence of depressive symptoms, reduce debilitation related to chronic pain, and improve overall function and health care utilization for IPV victims.

Project Aims

The purpose of the current study was to develop innovative intervention approaches to meet the complex, multifaceted needs of IPV victims with depression and pain. Qualitative and community-based participatory research (CBPR) approaches (Israel, Enge, Schulz, Parker, & Becker, 2001) were used as they were considered best suited to answer this question. This study implemented CBPR principles with inclusion of IPV survivors in all stages of the study. This included the design, implementation, analysis, and dissemination of study

findings. The study describes two distinct phases in our intervention development. The first phase consisted of focus groups conducted with survivors to inform the intervention. Phase 2 included the intervention design and implementation, informed by a community advisory board (CAB) to inform all aspects of the intervention.

Method

Phase 1: Focus Group Study

A community-based organization comprised of IPV survivors identified the goal of improving access to, and quality of, services in our community responsive to the unique needs of IPV victims and survivors with depression and pain. We conducted five focus groups with IPV survivors. Participants discussed trauma, pain, and mood symptoms that persisted long after the violence ended (Cerulli, Poleshuck, Raimondi, Veale & Chin, 2012).

We recruited a diverse group of women with IPV experiences from a local women's shelter, a halfway house for recently incarcerated women, a local family court domestic violence docket, and community providers. Inclusion criteria were women 18 years or older, who were able to speak English, and not currently in a violent relationship or living with their former perpetrator. The authors have long-standing partnerships with stakeholders from community agencies, advocacy groups, and health care clinics. Through several years of discussions, we identified the goal of improving services for victims and survivors with depression and pain, and consequently gained access to individuals willing to share their perspectives and experiences to advance the study goals. For more on the methods, see Cerulli, Poleshuck, Raimondi, Veale & Chin, 2012.

The focus groups were co-facilitated by the senior author, an attorney with a PhD and 27 years of IPV advocacy and the lead author, a clinical psychologist, present at all but one group. The facilitators utilized the same field guide and provided each participant with information about the study. Participants received a gift card to a local supermarket. Two digital audio recorders captured the information and a professional transcriptionist transcribed the recordings, and de-identified them into written transcripts for data analysis. The University of Rochester Institutional Review Board approved all aspects of this study.

Focus group prompts relevant for this article included the following:

1. What strategies might one employ to reduce or ameliorate the pain? The depression? Both?
2. Do you have any recommendations that might help people working in this field?
3. What interventions might be helpful? Where should they be located? When?

An interdisciplinary team comprised of the co-facilitators, an information analyst, a marriage and family therapy graduate student, and a psychology undergraduate reviewed the transcripts using a framework approach (Pope, Ziebland, & Mays, 2000) to categorize potential interventions to address comorbid pain and depression. The goal of this phase of the project was to create a potential intervention based on patient preferences because such

interventions are more successful than those conceived without input from a potential patient population (Sormanti, Pereira, El-Bassel, Witte, & Gilbert, 2001).

Team members worked independently to read the transcripts and sort data across a framework of participants' internal and external approaches to addressing IPV and pain. The team resolved differences through consensus. The team utilized Atlas.ti (Muhr, 1993–2010), a software program that helps researchers organize, code, and sort data. The team ran a sweep of the identified codes of internal and external approaches using Atlas.ti (Muhr, 1993–2010), and we identified a total of 86 codes regarding participants' approaches to ameliorating their pain and discomfort. Following our analysis, we met with a CAB consisting of IPV survivors and advocates, health care professionals, and other stakeholders to ensure the external validity and seek respondent verification. The team also provided the findings and information to a group comprised of survivors in isolation of other parties present. The goal was to see whether the interpretations were correct and what potential intervention might support the approaches survivors were using that were helpful and promoted wellness.

Phase 2: Intervention Development

The goal of the next phase was to understand what survivors, providers, and other stakeholders felt should comprise an intervention that would better meet the physical and mental health care needs of IPV survivors. The research team created an executive committee to coordinate a CBPR process of bringing stakeholders together to address the identified issue. The committee included five women: (a) the executive director of a community-based organization that provides a comprehensive continuum of care to IPV clients; (b) the director of an advocacy group of IPV survivors; (c) the director of the Laboratory of Interpersonal Violence and Victimization, an academic group studying issues related to IPV; (d) the director of the Women's Behavioral Health Service, a clinical service offering psychotherapy to women's health patients; and (e) the project coordinator. The committee met biweekly for 6 months at a local coffee shop and developed a mission statement, policies, and procedures, read existing literature, and developed common definitions and language. The executive committee then convened the CAB consisting of IPV survivors, physical and mental health professionals, academics, and policy makers to use CBPR approaches to develop a more effective treatment option for IPV survivors with pain and depression (Figure 1). The executive committee nominated representatives for the perspectives of various stakeholders, and sent invitation letters inviting them to attend four 90-min evening meetings. Over the course of the CAB meetings, the executive committee continued to meet to plan meetings, and debrief after each CAB meeting.

The agendas for the four meetings were as follows:

Meeting 1: Introductions, goals, and discussion of four questions:

- a. What do you view as the general needs of IPV survivors in our community?
- b. What are the mental and physical health needs?
- c. What are the perceived barriers and resources?

- d. What are your hopes and goals for the CAB experience?

Meeting 2: Description of CBPR and discussion of the following questions:

- a. What resources does our community already have in place to offer to IPV survivors?
- b. What initial thoughts do you have as to what we can do to improve accessible, integrated health care to IPV survivors in our community?

Meeting 3: Continuation of discussion about what interventions are needed for IPV survivors and what do providers need to be able to deliver them.

Meeting 4: Discussion and feedback on preliminary model and review of the CAB experience.

Results

Phase I: Focus Group

Thirty-one women comprised a diverse sample including White (74%, $n = 23$) and African American (26%, $n = 8$) participants. Twenty-two women (61%) had graduated beyond high school and 13% had received high school diplomas or the equivalent ($n = 4$). Five participants (16%) had not received a high school degree. Although many participants faced economic hardship and were underemployed, 77% ($n = 24$) had access to health care and health insurance.

The team attained consensus coding for 86 quotes as “intervention” for pain and IPV, and further refined those codes into three themes: formal help-seeking, informal coping, and spirituality.

Participants described their interactions with formal help-seeking as diverse and mostly positive. There were 15 mentions of formal psychotherapy, such as Dialectical Behavioral Therapy, mental health groups, and medical attention.

... yeah right now, I'm seeing a mental health therapist and I and she's gonna set me up with a psychiatrist too she said. I need to see a psychiatrist ...

I mean one of the things that I feel for me that has been most advantageous has been attending what's called a DBT class which is Dialectical Behavioral Therapy.

... I would say the counseling helps a lot of people, I'm not saying I'm promoting myself there but (laughter). No, ... I mean I think that you're right being able to talk about it and figure out a lot that's going on. I know that a lot of people find that helpful ...

The participants discussed formal mental health help as a range from formal one-on-one services with a psychologist or psychiatrist, “I go to a private therapist and um the skills group has been phenomenal and my therapist ...,” to group activities, such as self-help groups and skills group. In one of the focus groups, all participants were part of a 12-step program, which was also noted in the other four groups. One theme that was robust across

all the groups was the notion that talking about the pain and IPV helps—especially when one feels understood:

These are things that it's just ... sometimes ... simply being able to talk it out and someone to understand that when you're in pain it can make you a little crazy at times. And having somewhere you can go to talk about that. And all the crazy things that we think or feel and that it's okay to talk about it, it's okay to feel that way. And it's okay to say you know what I just wanta lay down and die because you're in so much pain but it doesn't mean you're suicidal it means you hurt. And it's so that helps having that place to just go and spill.

In addition to formal help-seeking from trained providers, participants also discussed reaching out in informal ways to other people to break their isolation. Many noted the importance of family, “I baby sit my grandbabies who have given me all kinds of joy ...” Others expressed the desire to help others, “Mine was helping other people.” In some ways, volunteering to help others helped the participants make meaning in their lives. “I like helping people. I like to make sense out of what I've been through you know it's important for if I can help somebody else in some way and I've been through a lot.” Although not trained mental health providers, some mentioned their physical trainers as being incredibly helpful and that exercise restored their sense of empowerment. “No that's as a matter of fact where I worked out and the trainer is absolutely awesome cause I was quite fearful of the idea throughout all kinds of levels and he was just absolutely wonderful.” Once participants had experienced that kind of feeling, they missed it when it was absent in their lives. “I've been saying at least for the last six months is that I need to get back in weight training again.” Pets were also noted as source of joy. “I was just gonna say, I bought a cat and it was so much love.”

Other ways participants noted feeling love was through their spirituality. Many women noted their faith was paramount in helping them heal. “I'm very active in church and ... just my spirituality, just at home with me and whom I choose to call God. Prayer.” Overall, 10 of 86 codes referenced God or spirituality. For some, they reach that peace of mind through meditation yoga, and surrender.

That's what I do, I do a lot of the aroma therapy. I'm big on bubble baths.
Meditation, stretching, I tend to like try to do things to center myself emotionally and to work my way from the in out.

These techniques were also complemented by steps for deep breathing, lighting candles, and self-reward. “A pat on your back for being out of the relationship, you know.” These types of self-affirmation were consistent across all groups. “Breathing exercises. Lighting candles. Rewarding yourself when you do accomplish something you know whether it be a short-term or a long-term goal. Seeking the medical attention that you need to help with the pain. So things like that.”

Despite the overwhelming pain and trauma experienced by the participants, they largely remained positive and consistently tried to improve their situation. For some, having a positive attitude was very important.

I just try to in my mind, if not on paper, just list all the stuff I have to be grateful for and focus on the good stuff because there's always gonna be bad stuff. And then I um try to you know get my exercising in and do things with people, do things that I enjoy, be around people that I've loved.

Given the complex needs connected to IPV victims' comorbid diagnoses, and the diversity among remedies victims believe work, any intervention must leave room for patient preference and an understanding that non-traditional options are important to many victims.

Phase 2: Intervention Design

After the participating IPV victims shared their perceptions and ideas, our next task was to convene the CAB and begin to digest the data. Our CAB consisted of two men and eight women and included people from a range of backgrounds, such as IPV survivors, physicians, psychotherapists, insurance company representatives, nurses, and researchers (many team members identified as belonging to more than one category). Their main job was to hear about the focus group findings, what IPV victims stated they wanted, and what worked for them.

CAB conceptualization of a model intervention.

Extensive discussions took place describing the themes that emerged from the focus groups and from the CAB members' personal and professional experiences. Consensus was obtained as to what factors appeared most critical for a comprehensive, multidimensional approach to meeting the complex health care needs of IPV survivors (Figure 2). For example, the importance of providing integrated support for psychosocial concerns, incorporating skills and resources already used by victims, access to IPV-informed providers, and providing flexible treatment options were evident from the focus groups. The CAB aimed to incorporate as much of the feedback as possible, and agreed the proposed plan was ambitious. The CAB thought that much of the proposed design could be implemented with few additional resources and reported a willingness to continue assisting with development of the program.

First, it was determined that education of survivors, providers, and the general community is needed to disseminate information about the overlap between IPV and physical health and mental health, and to make local resources available. Opportunities for education would include presentations and in-services in academic settings to professionals who encounter IPV in their practices; educational brochures to be distributed in court, physicians' offices, faith-based organizations; an annual conference tailored for all stake-holders with updates on the current state of the related literature and policy; and a referral network of local providers with specialization in providing trauma-sensitive care for IPV victims.

Second, the CAB found that health care providers often feel overwhelmed and underequipped to understand and meet IPV survivors' unique and complex needs. It was decided that a consultation service for providers would be made available. An interdisciplinary team of IPV specialists, including mental health, primary care, legal, and social experts, would be available for case reviews or patient consultation. Providers could schedule their patients for an in-person appointment or call in themselves for a consultation

Finally, IPV survivors felt that a women-centered physical health care-focused approach would be the most accessible and least stigmatizing approach. Although battered women's shelters, churches, and schools were all considered, they felt that women's health clinics would be acceptable to the broadest range of women. Thus, they proposed a specialized integrated clinic for IPV survivors with chronic physical and mental health concerns. All providers would be well trained in trauma-sensitive care, and considerations of safety and accessibility. Such a clinic would be held in an existing women's health clinic, and would be funded via existing insurance reimbursement streams.

In addition to these three initiatives, services would be made available to the general community. This would include a crisis line to provide emergency support and information about local resources, an online moderated blog for individuals to share their experiences and resources, and group support for survivors to reduce their experiences of isolation and frustration. IPV survivors, who have successfully managed to overcome significant physical and mental health difficulties, would be available to provide outreach, support, and assistance with treatment engagement.

Discussion

Now I have to deal with a lot more stuff, so I am glad that ... I do have a mental health person, even though I knew for years that I needed someone you know.

... I thank God that I have one now cause I have to now deal with all these emotions, and things from my past, and my abuse....

The focus group and CAB participants reported high levels of satisfaction overall with their experiences. Attendance remained strong for all four CAB meetings, and discussion was vigorous. Feedback from all participants included that they found the process "enriching," "insightful," "interesting, stimulating and quite worthwhile," "hopeful," "enlightening, inspiring, energizing," and "exciting."

Both the CAB and focus group participants were in agreement that a paradigm shift is needed for the ways in which IPV is addressed that more directly incorporates its impact on physical and mental health. Existing IPV resources tend to ignore the health concerns of survivors. In addition, the medical model of treating the patient's "symptoms" with therapy, medication, or referrals to community agencies, often does not include how IPV influences how an IPV victim might present or express her difficulty. The proposed alternative model emphasizes that IPV survivors have a diversity of experiences, and needs. In addition, IPV survivors are often in contact with myriad providers, and require a comprehensive, tailored approach. The integrated comprehensive model proposed by this study addresses victim and provider needs by use of one-on-one care for victims, education for victims and providers, as well as interdisciplinary case conferencing.

Historically, professionals have tended to work in silos to address IPV, with attorneys, health care providers, social service providers, and consumer advocates rarely at the same table. Barriers to collaboration include confidentiality and privacy concerns, legal restrictions and agendas, and competing practice philosophies such as healing the patient versus keeping her

safe. In addition, advocates who work with IPV victims are often not necessarily trained in mental health symptom recognition. The proposed model creates a paradigm shift that supports a new system of care that integrates the many different needs of IPV survivors. Nationally, high-risk, interdisciplinary teams are being implemented to address IPV victim safety in cases of extreme lethality. Teams comprised of law enforcement, advocates, and prosecutors meet to create safety plans that include perpetrator detention, electronic monitoring, and even sending the victim underground should that be necessary. However, such teams still do not have medical and mental health providers at the table. High-risk teams see the primary focus as victim safety and perpetrator accountability. Yet, is it possible for safety to occur in the absence of health? A victim suffering from depression or posttraumatic stress disorder (PTSD) may not be able to create or implement a safety plan if her mental health symptoms interfere with her ability to help-seek.

Testing innovative models of care presents us with a portfolio of research questions that begins with CBPR at the early stages, and integrates community stakeholders' insight throughout the process. New funding sources, such as the health-oriented Patient Centered Outcomes Research Institute (PCORI), insist patients be at the table as an equal partner sharing in the research agenda from conceptualization, to design and implementation. Perhaps federal violence intervention funding could consider that same requirement—that service providers include survivors' voices in their planning stages. Of note, the proposed model potentially could be applied to victims with many conditions (e.g., Type 2 diabetes, PTSD). As we move forward with testing the model, its generalizability and adaptability should be evaluated as well.

The first intervention project to arise from this foundational work, Project ROSE (Realizing Opportunities for Self-Empowerment), responds to the call for an integrated clinic and is funded by PCORI. The design integrates interdisciplinary care teams, intensive case review, and patient navigators. By incorporating universal screening and patient prioritization in a community setting, Project ROSE sets the course to implement the important focus group and CAB data findings. This innovative model never could have been designed by researchers alone. IPV survivors were key in this model's design. Future work will measure the success of our new approach to meeting the biopsychosocial needs of survivors, with the ultimate goal of improving health and insuring safety.

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Kelly Bellenger is a health project coordinator at the University of Rochester Medical Center. She has served as study coordinator on various studies within the Department of Psychiatry. This research has focused on treatment for women with depression and chronic conditions such as pain, intimate partner violence, and socioeconomic disadvantage. She has also worked on various Veterans Affairs partnerships for vets with suicidality and posttraumatic stress disorder (PTSD) to establish the effectiveness of safety planning and mindfulness meditation.

Christina Raimondi is an administrative assistant in Surgery Central Administration at the University of Rochester Medical Center. Her prior research work within the Laboratory of Interpersonal Violence and Victimization focused on exploring ways to increase safety and quality of life for intimate partner violence victims.

Jennifer Thompson Stone, MA, is an associate in the Department of Psychiatry at the University of Rochester Medical Center. Her work in the Laboratory of Interpersonal Violence and Victimization has focused on providing written content, editorial assistance, and research and dissemination support for a variety of projects. Her primary interests include bridging systems—particularly civil legal aid and medicine—to promote health among vulnerable populations, and innovative intimate partner violence intervention and prevention efforts.

Catherine Cerulli, JD, PhD, is director of the Laboratory of Interpersonal Violence and Victimization, as well as the Susan B. Anthony Center for Women's Leadership at the University of Rochester. The National Institute of Mental Health awarded her a 5-year grant to implement a trial study in Family Court to assess whether enhanced mental health services enable intimate partner violence victims to better navigate safety. She was also a co-principal investigator on a National Institute of Justice award to assess whether victim participation in prosecution impacts subsequent safety. She is currently working with the National Domestic Violence Hotline to explore the intersection between suicide and intimate partner violence.

References

- Armstrong HE, Ishiki D, Heiman J, Mundt J, & Womack W (1984). Service utilization by black and white clientele in an urban community mental health center: Revised assessment of an old problem. *Community Mental Health Journal*, 20, 269–281. [PubMed: 6518740]
- Berwick DM (2002). A user's manual for the IOM's "quality chasm" report. *Health Affairs (ProjectHope)*, 21, 80–90.
- Black MC, Basile KC, Breiding MJ, Smith S, Walters ML, Merrick MT, ... Mark SR (2011). The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 summary report. Atlanta, GA: National Center for Injury Prevention, Control Centers for Disease Control and Prevention.
- Bloom BS (2002). Crossing the quality chasm: A new health system for the 21st century. *Journal of the American Medical Association*, 287, 646–647.
- Bonomi AE, Thompson RS, Anderson M, Rivara FP, Holt VL, Carrell D, & Martin DP (2006). Ascertainment of intimate partner violence using two abuse measurement frameworks. *Injury Prevention*, 12, 121–124. [PubMed: 16595428]
- Brown C, Abe-Kim JS, & Barrio C (2003). Depression in ethnically diverse women: Implications for treatment in primary care settings. *Professional Psychology : Research and Practice*, 34(1), 10–19.
- Campbell JC (2002). Health consequences of intimate partner violence. *The Lancet*, 359, 1331–1336.
- Campbell J, Jones AS, Dienemann J, Kub J, Schollenberger J, O'Campo P, ... Wynne, C. (2002). Intimate partner violence and physical health consequences. *Archives of Internal Medicine*, 162, 1157–1163. [PubMed: 12020187]
- Cavanaugh CE, Messing JT, Del-Colle M, O'Sullivan C, & Campbell J (2011). Prevalence and correlates of suicidal behavior among adult female victims of intimate partner violence. *Suicide & Life-Threatening Behavior*, 41, 372–383. [PubMed: 21535096]
- Cerulli C, Edwardsen E, Duda J, Conner K, & Caine E (2010). Proposed coordinated health care response for order of protection petitioners. *Violence Against Women*, 16, 679–690. [PubMed: 20445078]
- Cerulli C, Poleshuck E, Raimondi C, Veale S, & Chin N (2012). "What fresh hell is this?" Victims of intimate partner violence describe their experiences of abuse, pain, and depression. *Journal of Family Violence*, 27, 773–781. [PubMed: 23226694]
- Coker AL, Davis KE, Arias I, Desai S, Sanderson M, Brandt HM, & Smith PH (2002). Physical and mental health effects of intimate partner violence for men and women. *American Journal of Preventive Medicine*, 23, 260–268. [PubMed: 12406480]
- Corrigan P (2004). How stigma interferes with mental health care. *The American Psychologist*, 59, 614–625. doi:10.1037/0003-066X.59.7.614 [PubMed: 15491256]
- Devries KM, Mak JY, Bacchus LJ, Child JC, Falder G, Petzold M, ... Watts CH (2013). Intimate partner violence and incident depressive symptoms and suicide attempts: A systematic review of longitudinal studies. *PLoS Medicine*, 10(5), e1001439.
- Diamond RJ, & Factor RM (1994). Treatment-resistant patients or a treatment-resistant system? *Hospital & Community Psychiatry*, 45, 197. [PubMed: 8188188]

- Dienemann J, Boyle E, Baker D, Resnick W, Wiederhorn N, & Campbell J (2000). Intimate partner abuse among women diagnosed with depression. *Issues in Mental Health Nursing*, 21, 499–513. [PubMed: 11261074]
- DiMatteo MR, Lepper HS, & Croghan TW (2000). Depression is a risk factor for noncompliance with medical treatment: Meta-analysis of the effects of anxiety and depression on patient adherence. *Archives of Internal Medicine*, 160, 2101–2107. [PubMed: 10904452]
- Dutton MA (2009). Pathways linking intimate partner violence and posttraumatic disorder. *Trauma, Violence & Abuse*, 10, 211–224.
- Fava GA, Ruini C, & Belaise C (2007). The concept of recovery in major depression. *Psychological Medicine*, 37, 307–317. doi:10.1017/S0033291706008981 [PubMed: 17311684]
- Fishman PA, Bonomi AE, Anderson ML, Reid RJ, & Rivara FP (2010). Changes in health care costs over time following the cessation of intimate partner violence. *Journal of General Internal Medicine*, 25, 920–925. [PubMed: 20414736]
- Gaynes BN, Warden D, Trivedi MH, Wisniewski SR, Fava M, & Rush AJ (2009). What did STAR*D teach us? Results from a large-scale, practical, clinical trial for patients with depression. *Psychiatric Services*, 60, 1439–1445. doi:10.1176/appi.ps.60.11.1439 [PubMed: 19880458]
- Heru AM, Stuart GL, Rainey S, Eyre J, & Recupero PR (2006). Prevalence and severity of intimate partner violence and associations with family functioning and alcohol abuse in psychiatric inpatients with suicidal intent. *The Journal of Clinical Psychiatry*, 67, 23–29.
- Israel B, Enge E, Schulz A, Parker E, & Becker A (2001). Community-based participatory research: Policy recommendations for promoting a partnership approach in health research. *Education for Health*, 14, 182–197. [PubMed: 14742017]
- Kovac SH, Klapow JC, Kroenke K, Spitzer RL, & Williams JBW (2003). Differing symptoms of abused versus nonabused women in obstetric-gynecology settings. *American Journal of Obstetrics and Gynecology*, 188, 707–713. [PubMed: 12634645]
- Kulkarni S, Bell H, & Wylie L (2010). Why don't they follow through? Intimate partner survivors' challenges in accessing health and social services. *Family & Community Health*, 33, 94–105. doi: 10.1097/FCH.0b013e3181d59316 [PubMed: 20216352]
- Levendosky AA, Bogat GA, Theran SA, Trotter JS, von Eye A, & Davidson WS (2004). The social networks of women experiencing domestic violence. *American Journal of Community Psychology*, 34, 95–109. [PubMed: 15495797]
- Manber R, Kraemer HC, Arnow BA, Trivedi MH, Rush AJ, Thase ME, ... Keller ME (2008). Faster remission of chronic depression with combined psychotherapy and medication than with each therapy alone. *Journal of Consulting and Clinical Psychology*, 76, 459–467. doi: 10.1037/0022-006X.76.3.459 [PubMed: 18540739]
- Markham D (2003). Mental illness and domestic violence: Implications for family law litigation. *Journal of Polity Law and Policy*, 37, 23–35.
- Max W, Rice D, Finklestein E, Bardwell R, & Leadbetter S (2004). The economic toll of intimate partner violence against women in the United States. *Violence and Victims*, 19, 259–272. [PubMed: 15631280]
- Maynard C, Ehreth J, Cox GB, Peterson PD, & McGann ME (1997). Racial differences in the utilization of public mental health services in Washington state. *Administration and Policy in Mental Health*, 24, 411–424. [PubMed: 9239945]
- McCauley J, Kern DE, Kolodner K, Dill L, Schroeder AF, DeChant HK, ... Derogatis LR (1995). The "battering syndrome": Prevalence and clinical characteristics of domestic violence in primary care internal medicine practices. *Annals of Internal Medicine*, 123, 737–746. [PubMed: 7574191]
- McGlynn EA, Norquist GS, Wells KB, Sullivan G, & Liberman RP (1988). Quality-of-care research in mental health: Responding to the challenge. *Inquiry: A Journal of Medical Care Organization, Provision and Financing*, 25, 157–170.
- McKay MM, McCadam K, & Gonzales JJ (1996). Addressing the barriers to mental health services for inner city children and their caretakers. *Community Mental Health Journal*, 32, 353–361. [PubMed: 8840078]
- Muhr T (1993-2010). *Atlas.ti 6.0: User's manual for ATLAS. ti*. Berlin, Germany: Scientific Software Development GmbH.

- Nicolaidis C, Timmons V, Thomas MJ, Waters AS, Wahab S, Mejia A, & Mitchell SR (2010). "You don't go tell White people nothing": African American women's perspectives on the influence of violence and race on depression and depression care. *American Journal of Public Health*, 100, 1470–1476. doi:10.2105/AJPH.2009.161950 [PubMed: 20558811]
- Overstreet NM, & Quinn DM (2013). The intimate partner violence stigmatization model and barriers to help seeking. *Basic and Applied Social Psychology*, 35, 109–122. [PubMed: 23524454]
- Pagels P, Kindratt TB, Reyna G, Lam K, Silver M, & Gimpel NE (2014). Establishing the need for family medicine training in intimate partner violence screening. *Journal of Community Health*, 40(3), 508–514.
- Petersen R, Gazmararian J, & Clark KA (2001). Partner violence: Implications for health and community settings. *Women's Health Issues*, 11, 116–125. [PubMed: 11275515]
- Petersen R, Moracco KE, Goldstein KM, & Clark KA (2005). Moving beyond disclosure: Women's perspectives on barriers and motivators to seeking assistance for intimate partner violence. *Women & Health*, 40, 63–76.
- PicoAlfonso MA, GarciaLinares MI, CeldaNavarro N, BlascoRos C, Echeburua E, & Martinez M (2006). The impact of physical, psychological, and sexual intimate male partner violence on women's mental health: Depressive symptoms, posttraumatic stress disorder, state anxiety, and suicide. *Journal of Women's Health*, 15, 599–611. doi:10.1089/jwh.2006.15.599
- Plichta SB (2004). Intimate partner violence and physical health consequences: Policy and practice implications. *Journal of Interpersonal Violence*, 19, 1296–1323. [PubMed: 15534333]
- Poleshuck E, Dworkin R, Howard F, Foster D, Shields C, & Tu X (2005). Multidimensional assessment of the roles of physical and sexual abuse in women with chronic pelvic pain. *Journal of Reproductive Medicine*, 50, 91–100. [PubMed: 15755045]
- Poleshuck E, Giles DE, & Xin T (2006). Chronic pain and depressive symptoms among financially disadvantaged women's health patients. *Journal of Women's Health*, 15, 182–193.
- Pope C, Ziebland S, & Mays N (2000). Analysing qualitative data. *British Medical Journal*, 320, 114–116. doi:10.1136/bmj.320.7227.114 [PubMed: 10625273]
- Rhodes KV, Frankel RM, Levinthal N, Prenoveau E, Bailey J, & Levinson W (2007). "You're not a victim of domestic violence, are you?" Provider patient communication about domestic violence. *Annals of Internal Medicine*, 147, 620–627. [PubMed: 17975184]
- Rodriguez MA, Valentine J, Ahmed SR, Eisenman DP, Sumner LA, Heilemann MV, & Liu H (2010). Intimate partner violence and maternal depression during the perinatal period: A longitudinal investigation of Latinas. *Violence Against Women*, 16, 543–559. [PubMed: 20388930]
- Rodriguez M, Valentine JM, Son JB, & Muhammad M (2009). Intimate partner violence and barriers to mental health care for ethnically diverse populations of women. *Trauma, Violence & Abuse*, 10, 358–374. doi:10.1177/1524838009339756
- Shei B (1990). Psycho-social factors in pelvic pain. *Acta Obstetrica Et Gynecologica Scandinavica*, 69, 67–71. [PubMed: 2346082]
- Snowden LR (2001). Barriers to effective mental health services for African Americans. *Mental Health Services Research*, 3, 181–187. [PubMed: 11859964]
- Sormanti M, Pereira L, El-Bassel N, Witte S, & Gilbert L (2001). The role of community consultants in designing an HIV prevention intervention. *AIDS Education and Prevention*, 13, 311–328. [PubMed: 11565591]
- Stein MB, & Kennedy C (2001). Major depressive and post-traumatic stress disorder comorbidity in female victims of intimate partner violence. *Journal of Affective Disorders*, 66, 133–138. [PubMed: 11578665]
- Straus H, Cerulli C, McNutt LA, Rhodes KV, Conner KR, Kembal RS, ... Houry D (2009). Intimate partner violence and functional health status: Associations with severity, danger, and self-advocacy behaviors. *Journal of Women's Health*, 18, 625–631.
- Thase ME, Simons AD, McGeary J, Cahalane JF, Hughes C, Harden T, & Friedman E (1992). Relapse after cognitive behavior therapy of depression: Potential implications for longer courses of treatment. *The American Journal of Psychiatry*, 149, 1046–1052. [PubMed: 1636804]

- Vives-Cases C, Ruiz-Cantero MT, Escriba-Aguir V, & Miralles JJ (2011). The effect of intimate partner violence and other forms of violence against women on health. *Journal of Public Health*, 33, 15–21. doi:10.1093/pubmed/fdq101 [PubMed: 21196478]
- Walling MK, Reiter RC, O’Hara MW, Milburn AK, Lilly G, & Vincent SD (1994). Abuse history and chronic pain in women: Prevalences of sexual abuse and physical abuse. *American Journal of Obstetrics & Gynecology*, 84, 193–199.
- Wilson KS, Silberberg MR, Brown AJ, & Yaggy SD (2007). Health needs and barriers to healthcare of women who have experienced intimate partner violence. *Journal of Women’s Health*, 16, 1485–1498.
- World Health Organization. (2003). *Implementing the recommendations of the world report on violence and health*. Geneva, Switzerland: World Health Organization.
- Wuest J, Ford-Gilboe M, Merritt-Gray M, Wilk P, Campbell JC, Lent B, ... Smye V (2010). Pathways of chronic pain in survivors of intimate partner violence. *Journal of Women’s Health*, 19, 1665–1674.
- Wuest J, Merritt-Gray M, Ford-Gilboe M, Lent B, Varcoe C, & Campbell JC (2008). Chronic pain in women survivors of intimate partner violence. *The Journal of Pain*, 9, 1049–1057. [PubMed: 18701353]
- Zlotnick C, Johnson DM, & Kohn R (2006). Intimate partner violence and long-term psychosocial functioning in a national sample of American women. *Journal of Interpersonal Violence*, 21, 262–275. [PubMed: 16368765]

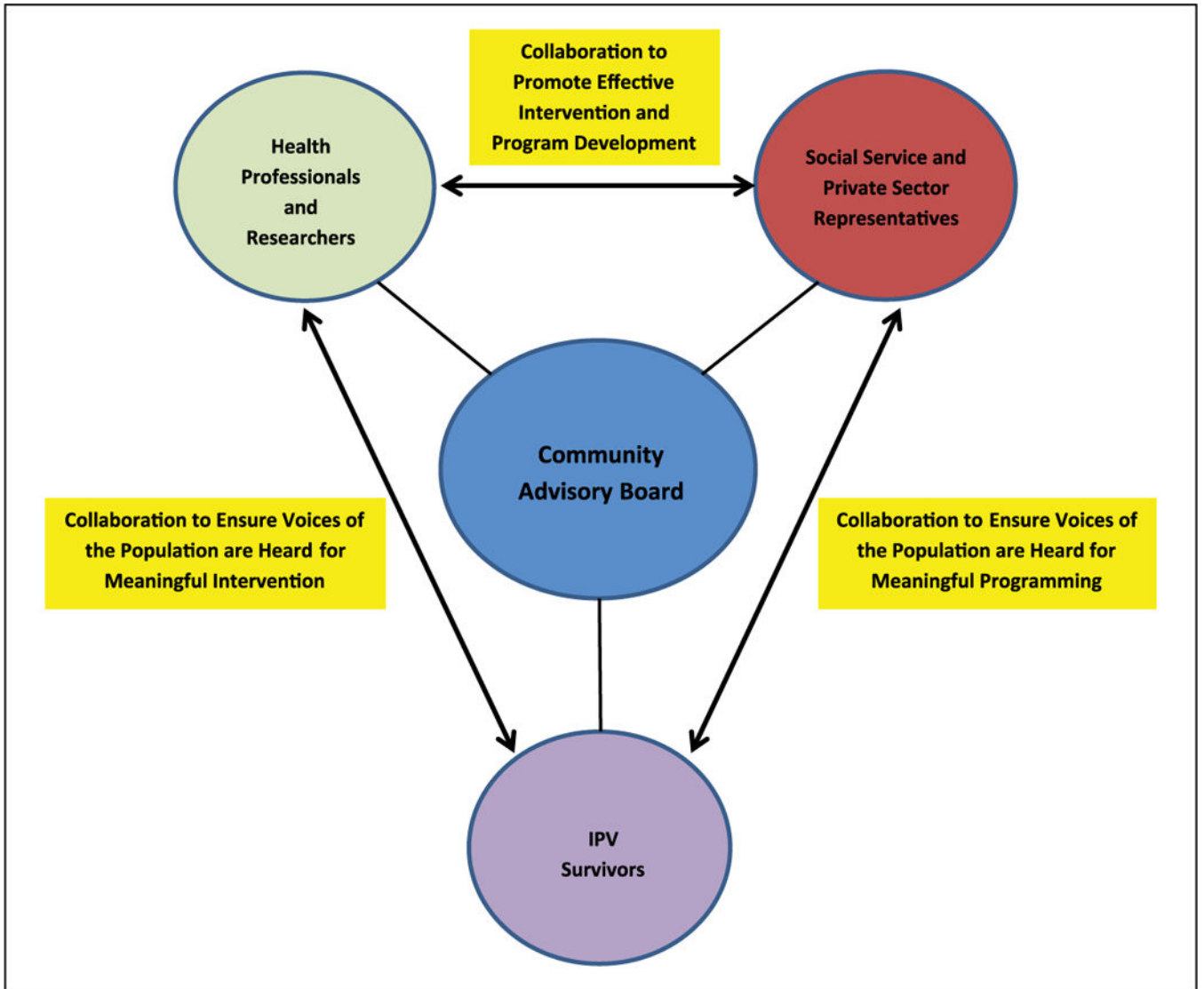


Figure 1. Community advisory board structure and exchange.

Note. IPV = intimate partner violence.

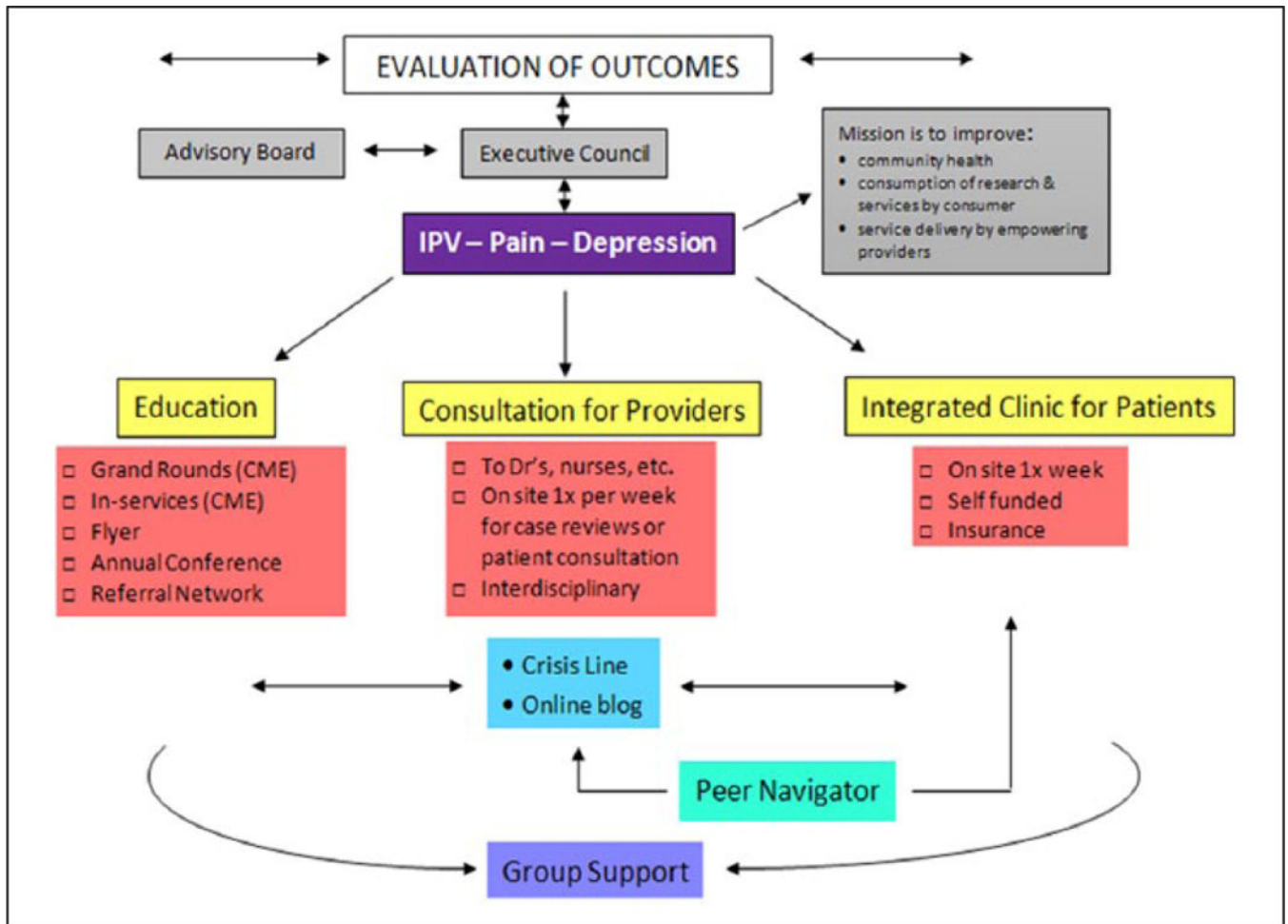


Figure 2. Comprehensive model to meet IPV victims’ myriad needs.
 Note. IPV = intimate partner violence. CME = continuing medical education.