



University of Kentucky
UKnowledge

CRVAW Faculty Journal Articles

Center for Research on Violence Against Women

12-2012

Transforming the Healthcare Response to Intimate Partner Violence and Taking Best Practices to Scale

Michele R. Decker
Johns Hopkins University

Shannon Frattaroli
Johns Hopkins University

Brigid McCaw
Kaiser Permanente

Ann L. Coker
University of Kentucky, ann.coker@uky.edu

Elizabeth Miller
University of Pittsburgh

See next page for additional authors

Right click to open a feedback form in a new tab to let us know how this document benefits you.

Follow this and additional works at: https://uknowledge.uky.edu/crvaw_facpub

 Part of the [Medicine and Health Sciences Commons](#), [Psychology Commons](#), and the [Sociology Commons](#)

Repository Citation

Decker, Michele R.; Frattaroli, Shannon; McCaw, Brigid; Coker, Ann L.; Miller, Elizabeth; Sharps, Phyllis; Lane, Wendy G.; Mandal, Mahua; Hirsch, Kelli; Strobino, Donna M.; Bennett, Wendy L.; Campbell, Jacquelyn; and Gielen, Andrea, "Transforming the Healthcare Response to Intimate Partner Violence and Taking Best Practices to Scale" (2012). *CRVAW Faculty Journal Articles*. 301.
https://uknowledge.uky.edu/crvaw_facpub/301

This Article is brought to you for free and open access by the Center for Research on Violence Against Women at UKnowledge. It has been accepted for inclusion in CRVAW Faculty Journal Articles by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

Authors

Michele R. Decker, Shannon Frattaroli, Brigid McCaw, Ann L. Coker, Elizabeth Miller, Phyllis Sharps, Wendy G. Lane, Mahua Mandal, Kelli Hirsch, Donna M. Strobino, Wendy L. Bennett, Jacquelyn Campbell, and Andrea Gielen

Transforming the Healthcare Response to Intimate Partner Violence and Taking Best Practices to Scale**Notes/Citation Information**

Published in *Journal of Women's Health*, v. 21, no. 12, p. 1222-1229.

This is a copy of an article published in the *Journal of Women's Health* © 2012 Mary Ann Liebert, Inc.; *Journal of Women's Health* is available online at: <http://online.liebertpub.com/loi/jwh>

Digital Object Identifier (DOI)

<http://dx.doi.org/10.1089/jwh.2012.4058>

Transforming the Healthcare Response to Intimate Partner Violence and Taking Best Practices to Scale

Michele R. Decker, Sc.D., M.P.H.,¹⁻³ Shannon Frattaroli, Ph.D., M.P.H.,^{3,4} Brigid McCaw, M.D., M.P.H., M.S.,⁵ Ann L. Coker, Ph.D.,⁶ Elizabeth Miller, M.D., Ph.D.,⁷ Phyllis Sharps, Ph.D., R.N.,^{2,8} Wendy G. Lane, M.D., M.P.H.,⁹ Mahua Mandal, M.P.H., Ph.D.,^{1,2} Kelli Hirsch, M.D., M.P.H.,^{1,2} Donna M. Strobino, Ph.D.,^{1,2} Wendy L. Bennett, M.D., M.P.H.,^{1,2,10} Jacquelyn Campbell, Ph.D., R.N.,^{3,8} and Andrea Gielen, Sc.D.^{3,11}

Abstract

Background: Intimate partner violence (IPV) is prevalent among adolescent and adult women, with significant physical, sexual, and mental health consequences. In 2011, the Institute of Medicine's Clinical Preventive Services for Women consensus report recommended universal screening for violence as a component of women's preventive services; this policy has been adopted by the Health Resources and Services Administration (HRSA). These policy developments require that effective clinic-based interventions be identified, easily implemented, and taken to scale.

Methods: To foster dialogue about implementing effective interventions, we convened a symposium entitled "Responding to Violence Against Women: Emerging Evidence, Implementation Science, and Innovative Interventions," on May 21, 2012. Drawing on multidisciplinary expertise, the agenda integrated data on the prevalence and health impact of IPV violence, with an overview of the implementation science framework, and a panel of innovative IPV screening interventions. Recommendations were generated for developing, testing, and implementing clinic-based interventions to reduce violence and mitigate its health impact.

Results: The strength of evidence supporting specific IPV screening interventions has improved, but the optimal implementation and dissemination strategies are not clear. Implementation science, which seeks to close the evidence to program gap, is a useful framework for improving screening and intervention uptake and ensuring the translation of research findings into routine practice.

Conclusions: Findings have substantial relevance to the broader research, clinical, and practitioner community. Our conference proceedings fill a timely gap in knowledge by informing practitioners as they strive to implement universal IPV screening and guiding researchers as they evaluate the success of implementing IPV interventions to improve women's health and well-being.

Introduction

OVER TWO DECADES OF FOUNDATIONAL RESEARCH confirm intimate partner violence (IPV) as a significant threat to women's health and well-being. The latest national survey data demonstrate that 28.8% of women report having had a

partner who was physically, sexually, or psychologically aggressive.¹ Compelling evidence exists that physical and sexual IPV have significant consequences for women's general, reproductive, sexual, and mental health, including long-term chronic illnesses.¹⁻¹⁰ The burden of IPV among adolescent and adult women, coupled with the estimated \$4

¹Johns Hopkins Bloomberg School of Public Health, Department of Population Family & Reproductive Health; Women's and Children's Health Policy Center; ²Johns Hopkins Women's Health Research Group; ³Johns Hopkins Bloomberg School of Public Health, Center for Injury Research and Policy, Baltimore, Maryland.

⁴Johns Hopkins Bloomberg School of Public Health, Department of Health Policy and Management, Baltimore, Maryland.

⁵Kaiser Permanente, Department of Internal Medicine, Richmond, California.

⁶University of Kentucky College of Public Health, Department of Epidemiology, Lexington, Kentucky.

⁷Children's Hospital of Pittsburgh/University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania.

⁸Johns Hopkins School of Nursing, Department of Community-Public Health, Baltimore, Maryland.

⁹University of Maryland School of Medicine, Department of Epidemiology and Public Health and Department of Pediatrics, Baltimore, Maryland.

¹⁰Johns Hopkins School of Medicine, Department of Internal Medicine, Baltimore, Maryland.

¹¹Johns Hopkins Bloomberg School of Public Health, Department of Health, Behavior and Society, Baltimore, Maryland.

billion spent annually in healthcare services related to IPV,¹¹ illustrate the need for a swift and effective national public health response.

Routine violence-related screening in the healthcare setting has been recommended since 1984.^{12–14} A recent review concluded that IPV screening can successfully identify survivors and, in some cases, can reduce abuse and improve clinical outcomes.¹⁵ There is a need to transform promising interventions for improving women's health into standard care. Ensuring the implementation of effective IPV screening efforts is both important and timely. In 2011, the Institute of Medicine (IOM) recommended universal IPV screening in their Clinical Preventive Services for Women consensus report.¹⁶ This recommendation was quickly adopted by the U.S. Department of Health and Human Services, making routine screening and counseling for IPV a covered preventive health service for women. Implementing these recommendations and assuring that they become standard care and reduce violence against women require careful consideration of the IPV screening and counseling literature as well as lessons learned in putting effective interventions into practice.^{15,17} The potential benefits of IPV screening and counseling are influenced by their implementation, yet to date, research concerning this translation process has been lacking (e.g., understanding why interventions succeed or fail, how to successfully implement screening and counseling, and how to monitor, identify, and respond to gaps in this process).

Against this backdrop, we convened a 1-day symposium, entitled "Responding to Violence Against Women: Emerging Evidence, Implementation Science, and Innovative Interventions," at the Johns Hopkins Bloomberg School of Public Health on May 21, 2012. The agenda featured a presentation on implementation science to guide our thinking about how to ensure the effective implementation of IPV screening into standard practice, followed by a panel of speakers who presented four approaches to healthcare-based screening. Over 100 practitioners and academics from seven states and the District of Columbia participated. We summarize the presentations and dialogue from this event and make the case for establishing, implementing, and evaluating a large-scale healthcare-based screening and intervention initiative as one response to violence against women.

What Can Implementation Science Do for Us?

Shannon Frattaroli, Ph.D., M.P.H.

Implementation is "the process of putting in place or taking the steps needed to realize evidence-based interventions."¹⁸ Implementation research, by extension, is the scientific study of strategies to realize the integration of evidence-based interventions into policy and practice.¹⁸ Implementation science draws from both behavioral and policy literatures. From a behavioral science perspective, the Diffusion of Innovations theory offers an explanation of how people and populations receive, process, and adopt new ideas and interventions. It posits that intervention uptake occurs only after an individual or group acquires knowledge, is persuaded to act, makes a decision, and acts on that decision.¹⁹ As applied to IPV screening, assuring that clinicians (screeners) are aware of the IPV problem, understand how screening can help their patients who are victims of violence, and envision a role for themselves in implementing a

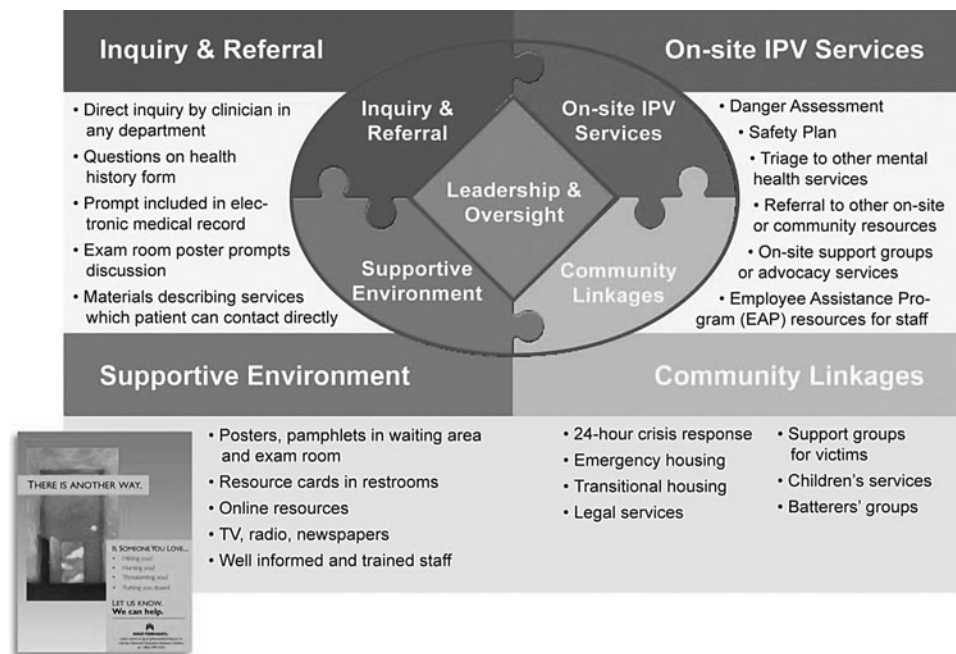
screening policy are steps in the implementation process that are needed to ensure that screening will actually occur. The policy implementation literature emphasizes complementary, systems-oriented aspects of the implementation process. For example, characteristics of the policy itself (e.g., does screening offer a viable solution to the problem?), the people involved in implementing (e.g., is the administrative leadership supportive of IPV screening?), and the context (does a system exist to assist women who screen positive?)²⁰ are key considerations emphasized in the policy implementation literature. Understanding and addressing these factors can ensure that IPV screening is well received by implementers and delivered in a way that will yield the positive outcomes demonstrated in the literature. Assessing whether and how an IPV screening intervention is implemented is essential; it allows evaluators to determine how and why interventions succeed or fail and provides guidance about how to make adjustments to increase positive impacts. By considering implementation processes in addition to impact, evaluators reduce the risk of drawing conclusions about an intervention that was poorly implemented or never implemented at all.

Concepts related to implementation science are illustrated well through an example of an initiative fielded in California that sought to implement the state's law prohibiting gun possession by respondents to domestic violence restraining orders. To implement and enforce this policy, the initiative first sought to raise awareness about the law among protected parties, respondents, law enforcement, and advocates and then to assure that a system was in place to allow for gun surrender. In two pilot counties, the research team collected process and impact data to generate an in-depth understanding of how the policy was implemented and enforced.²¹ Data collection occurred in real time, and evaluators and implementers communicated regularly so that findings could inform and refine the intervention.

In both counties, the impact data showed an increase in guns surrendered, suggesting that the policy was being translated into practice. However, examination of the process of implementation identified several opportunities to strengthen the intervention. In both counties, sheriffs' detectives staffed the intervention teams. As officers with authority to enforce criminal law, the detectives were able to use investigative techniques to follow up on information about respondents' access to guns. Typically, sheriffs' deputies within the civil division oversee restraining order service, and the scope of their civil authority does not allow them to investigate the individuals involved with the orders they serve. The intervention teams routinely followed up on information about respondents possessing guns; this strategy yielded surrendered guns. In contrast, civil deputies are not authorized to investigate the respondents to the restraining orders they serve, thus limiting their ability to enforce the gun prohibition. This enforcement challenge and the related recommendation to address it would not have been identified had the evaluation been limited to measures of impact.

This example offers lessons for implementing IPV screening in healthcare settings. First, understanding implementers' perspectives and the systems where IPV screening will be implemented is essential. California's gun possession prohibition was law for more than a decade before implementation action was taken in the two pilot counties. Before the intervention, there was little awareness of the law, no system in

FIG. 1. Systems Model for intimate partner violence prevention.



place to implement it, and no incentive to enforce the prohibition. Second, this example illustrates that implementation matters with regard to intervention impact. A change in policy did not precede the increase in surrendered guns from respondents; what changed was an awareness of the law and the means to assure the law was being upheld. Evaluations must include implementation measures to account for the processes involved in realizing IPV screening. The mere existence of a policy does not automatically lead to its implementation. In order to translate effective IPV screening interventions into standard practice, an understanding of the ways in which IPV screening policies are implemented and the barriers and facilitators to effective implementation is essential.

Panel of Innovative Interventions: What Works and Why?

Building from the implementation science framework, four panelists representing a range of healthcare-based IPV screening and intervention approaches were asked to briefly describe each intervention and its premise, provide insight on why and how it was successful, and reflect on the translation of the approach into standard practice. To achieve breadth, we purposefully selected a large-scale systems model and targeted interventions in family planning (FP), pediatric, and home-visiting settings.

Using a Systems Model Approach to Improving IPV Services in a Large Healthcare Organization

Brigid McCaw, M.D., M.P.H., M.S.

Premise

With 9 million members across nine states and the District of Columbia, Kaiser Permanente (KP) is the largest nonprofit health plan in the United States. KP's integrated system of care includes ambulatory and hospital services, extensive

experience in team-based care and chronic condition management, and a fully implemented electronic medical record (EMR). The KP Systems Model is designed to make use of the entire healthcare environment, facilitate change in clinical practice by "making the right thing easier to do," and integrate IPV screening into everyday care.

Intervention

The key components of the Systems Model ensure an effective clinical response to IPV regardless of where the patient accesses medical care (Fig. 1). A supportive environment provides easy access to information and encourages disclosure. Tools in the EMR support clinicians who offer routine inquiry and referral, asking patients about domestic violence (DV) in a sensitive manner and knowing how to respond when a patient discloses abuse. Their role is clear and limited: ask, affirm, assess, document, and refer. On-site services are provided by behavioral health clinicians who triage for mental health needs and begin the safety planning process. Robust community linkages ensure access to essential DV crisis and ongoing advocacy support services. At each medical center, a multidisciplinary team, led by a physician champion, provides leadership and oversight of systems model implementation. Quality improvement metrics, including IPV identification and referral rates, are communicated quarterly to departments and medical centers.

Findings

Implementation of the KP Systems Model has been associated with a 6-fold increase in IPV identification between 2000 and 2011 in KP's Northern California Region (Fig. 2). The majority of those identified received mental health follow-up care. Identification is occurring more often in ambulatory care rather than in the emergency department, suggesting that members are being recognized earlier and potentially before more serious injury occurs. Following this successful

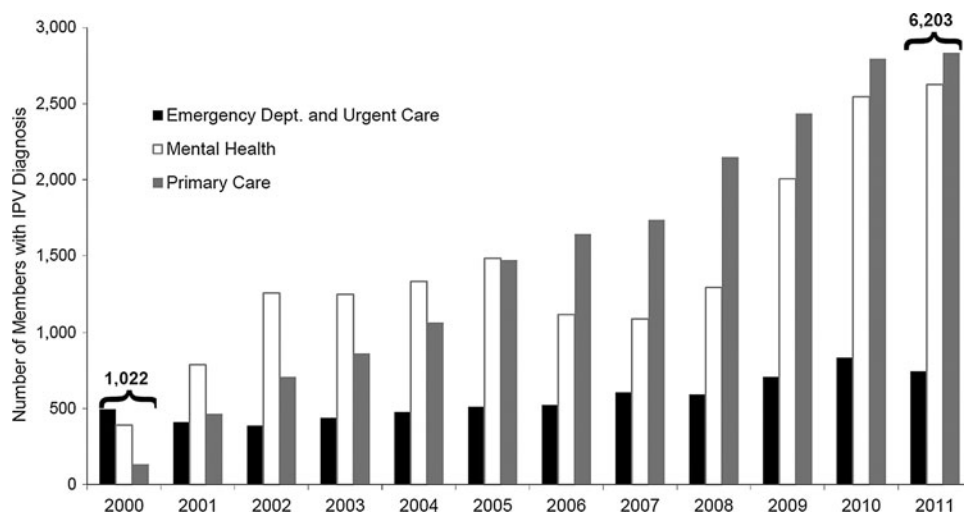


FIG. 2. IPV identification among patients in the Northern California Region from 2000 to 2011.

implementation in all northern California KP medical centers over the past decade, implementation is now underway in the other eight KP regions.

Lessons learned

Healthcare organizations can effectively implement IPV screening and intervention as part of routine healthcare services using a comprehensive coordinated Systems Model approach. Implementation is facilitated by tools that prompt screening, such as the EMR, a simple and consistent strategy for clinicians about how to respond to disclosure of IPV, and patient access to on-site IPV support services. Dissemination and scaling up are facilitated by a phased work plan, local teams led by a clinician champion and opportunities to share best practices, address challenges, and develop consistent training materials. Regular reporting of quality improvement indicators and aligning IPV prevention work with major healthcare initiatives, such as safety, service, and cost, are essential to gaining executive sponsorship and sustaining the work over time.

Making the Connection: Partner Violence, Reproductive Coercion, and Unintended Pregnancy

Elizabeth Miller, M.D., Ph.D.

Premise

IPV is associated with unintended pregnancy,^{22–27} in part through compromised sexual decision making and limited ability to enact contraceptive and condom use.^{25,28–33} Abusive partners' control of women's reproduction through condom refusal, pressuring women to get pregnant, and birth control sabotage is an increasingly recognized phenomenon, defined as reproductive coercion.^{34–36} Given these data, a targeted intervention was developed to integrate IPV screening within discussion of contraception and reproductive coercion in FP clinical settings.

Intervention

The Partner Abuse Intervention to Reduce Unintended Pregnancy (PAIR-UP) was designed collaboratively by

community-based practitioners, advocates, and researchers for implementation in routine FP clinical settings. The intervention includes (1) an integrated assessment for IPV and reproductive coercion that provides both screening and education, (2) discussion of harm reduction strategies to reduce risk for unintended pregnancy and IPV, and (3) supported referrals to IPV support services. Implemented by FP counselors whose role as lay professionals often lends them more familiarity with patients, the intervention focuses on making the link among IPV, reproductive coercion, and women's health. It is distinct from standard practice or direct screening in its emphasis on universal education in addition to direct routine inquiry (We are sharing this information with all our clients because so many women are affected by unhealthy relationships that can have serious impact on their health). The safety card provided to all patients reinforces these concepts and provides information about harm reduction strategies and national hotlines. During intervention training, providers meet personally with designated advocates at local support services to enhance the referral system. Finally, the emphasis on harm reduction and connection of FP clinics with IPV services underscores that the FP clinic is a safe place for all women to seek care for unhealthy relationships.

Findings

The pilot evaluation followed women for 4 months and identified a 71% reduction in pregnancy pressure (a key element of reproductive coercion) among women experiencing recent IPV.³⁷ Women receiving the intervention were also 60% more likely to end a relationship because it felt unhealthy or unsafe.³⁷ To build on these findings, a large 24 FP clinic cluster-randomized controlled trial is underway in Western Pennsylvania with the goal of enrolling 3600 women and following women for 12 months to assess intervention effects on unintended pregnancy and IPV.

Lessons learned

Scaling up the intervention from a small pilot study to broader implementation has been enhanced through identifying a champion (generally the office manager or lead nurse practitioner), the use of a safety card as a prompt for routine

inquiry with every clinical encounter, and through training of the entire FP clinic staff. The training provides a rationale for the intervention, in that clinic staff and providers recognize the immediate impact of abuse on women's reproductive decision making and are empowered to offer harm reduction options and referrals to IPV services. The ease of giving out the safety card (rather than asking one right question) facilitates a conversation about healthy and unhealthy relationships. Additionally, strategically placed IPV information (posters, local resources) throughout the clinic reinforces the message to patients that the clinic is a safe place for discussion of violence and reminds providers that IPV education and routine inquiry are important. Similar to the KP model, patients who disclose abuse can receive immediate support. Clinician comfort in making supported referrals is facilitated by introducing each site to their local domestic and sexual violence advocates through formal and informal staff meetings. By building clinician (implementer) comfort with how they can connect someone who discloses abuse, implementation and sustainability are promoted.

Screening for IPV in Pediatric Settings: Findings from A Safe Environment for Every Kid (SEEK)

Wendy G. Lane, M.D., M.P.H.

Premise

Child maltreatment (CM) is pervasive; poses large costs to individuals, families, communities, and society; and is strongly associated with IPV. Between 30% and 60% of families with child protective service reports for physical abuse have a history of IPV.^{38,39} Families with maternal IPV or forced sexual activity have nearly twice the odds of being reported to child protective services.⁴⁰ The pediatric profession has long recognized the role of the family and home environment in children's well-being; IPV screening and intervention may, therefore, be seen as a logical extension of well child care. Pediatric primary care providers are ideally suited to address IPV, as most children receive primary preventive care, particularly in the first few years of life, and pediatricians generally have positive relationships with families.

Intervention

The primary goal of the SEEK intervention is to reduce CM by targeting key associated risk and protective factors, including IPV. The intervention consists of training health providers to screen for CM risk and briefly assess and refer families to local community resources. It is implemented using a standardized Parent Screening Questionnaire (PSQ) to assess IPV and other risk factors; families are provided access to a social worker. The PSQ instrument assesses IPV through three validated questions pertaining to physical assault, sexual assault, and fear of partner; items are embedded with less sensitive topics for participant comfort.

Findings

The evaluation randomized 18 private pediatric practices in central Maryland, including a total of 101 pediatricians and pediatric nurse practitioners, to receive either standard care or the SEEK intervention. Among the 1119 families in the study,

mothers in the intervention group reported fewer instances of partner-to-mother physical assault at the 6-month and 12-month follow-up assessments. Findings from the SEEK model indicate that primary care pediatric practice is a feasible setting for addressing IPV.

Lessons learned

A standardized screening process coupled with training enables the physician to be comfortable with screening that is central to the success of this intervention. Timely access to a social worker for those who screen positive may also enhance physician comfort, as they have rapid assistance in the case of a positive screen. Linking IPV screening with CM prevention and health is an important concept, as pediatric primary care providers may be more willing to address IPV as part of a CM prevention program rather than a stand-alone intervention. Additional issues to be addressed include the availability and adequacy of services in other settings and if the program would be equally effective without a social worker. Families in this study were primarily middle class, suburban, and white; the SEEK IPV component was somewhat less effective when evaluated in an inner-city clinic setting. Additional efforts and resources may be needed to address IPV in inner-city pediatric clinics.

Integrating Violence Screening and Intervention into Perinatal Home Visiting

Phyllis Sharps, Ph.D., R.N.

Premise

The home visitation model of health promotion outside the clinical setting lends itself to interventions for such sensitive topics as IPV through the ongoing relationships and comfort established with home visiting nurses in the home setting. The Domestic Violence Enhanced Home Visitation (DOVE) intervention (R01 NR009093 NINR/NIH) was developed to build on the home visiting model⁴¹ to enhance child and family development and improve health and safety outcomes through integrated IPV identification, assessment, and prevention. Women are provided with education about the harmful effects of IPV, connected with support resources, and, when safe to do so, supported for healthy relationship promotion with fathers and other men.

Intervention

The DOVE intervention combines a structured IPV empowerment intervention with public health nurse perinatal home visitation. Violence-related screening, assessment, and education are provided through an interactive approach that emphasizes support and empathy and respect for women's disclosures of abuse. Screening and intervention are guided by a pamphlet that nurses review with the woman in an interactive manner so the mother or mother-to-be is encouraged to describe her experiences and choose personal safety options as they proceed. Nurses provide mothers with information about IPV, options in a violent relationship, and child development and build related skills, such as parenting, accessing violence support resources, and safety behaviors. Nurses also provide mothers with decision-making and problem-solving skills in an effort to enhance women's sense

of empowerment. Women receive the intervention over three prenatal and three postpartum (up to 12 weeks) sessions.

Findings

Evaluation of the DOVE model is currently underway in rural and urban settings. Qualitative data show that women whose violence was addressed early during the home visiting program are making positive choices to improve their lives and their children's lives by 24 months postdelivery. Women have also expressed that talking about the violence with the home visitor has been powerful. Preliminary findings show a promising trend of decreased mean scores on self-reported violence at 12, 18, and 24 months postpartum on two violence measures: the Conflict Tactics Scale and Severity of Violence Against Women. Further analyses will consider maternal and child health outcomes, including growth, development, and physical health.

Lessons learned

The DOVE intervention leverages the ongoing, supportive relationships established in the home visiting context for a safe and interactive IPV screening and intervention process. By building on the home visitor's role as a health promoter, it naturally extends the discussion from perinatal health strategies to violence-related safety and intervention skill building. Echoing lessons from other interventions, home visitor comfort in discussing IPV is central to implementation. The findings underscore the need for IPV-related support and training for implementing home visiting nurses. Given the need for training, buy-in from local public health administrators is central to sustainability of this program. Simultaneously evaluating this approach in both rural and urban settings enables an understanding of its integration into a broad range of settings and cultural contexts.

Discussion: Synthesis and Recommendations for Developing, Testing, and Implementing Healthcare-Based IPV Screening Interventions

In all the interventions presented, universal, in-person screening was paired with provider training. This combination supports provider comfort in screening and patient comfort in responding to screening, thus enabling both the implementation and positive impact of screening. The KP model illustrates that provider clarity about how to handle positive IPV screens empowers clinicians to implement screening.⁴² The DOVE and PAIR-UP interventions exemplify the patient comfort that can be achieved through the use of a conversational, educational approach that gives women an opportunity to respond to screening in a safe and supported environment, link their own health with abuse experiences, and receive information about support services regardless of their decision to disclose abuse. All interventions provided immediate access to services, either on-site in the case of SEEK and KP or supported referrals in the case of the DOVE and PAIR-UP. As illustrated by PAIR-UP, introducing clinic staff to IPV advocates at local support services facilitates provider familiarity with services and comfort in making referrals. Findings provide direction to providers seeking to implement universal screening: a conversational, educational approach, informed by provider training, with a clearly defined protocol

for referral to support services is recommended to maximize screening uptake, sustainability, and success. From an implementation science perspective, relevant process outcomes include provider comfort in screening and clarity in the process once a survivor is identified. Programmatically, and as the IOM screening recommendations are implemented nationally, the efficacy and availability of follow-up interventions must be confirmed before implementing screening.

When considered from the implementation science framework, results of the interventions also speak to the need for and guide the expansion of screening interventions to a range of health settings. The SEEK and DOVE studies illustrate the relevance of pediatric clinics and home visiting programs to identify and support survivors. Providing implementers with a rationale that is relevant to their specific healthcare setting and leveraging the links of violence with other negative outcomes, such as CM and unintended pregnancy, can emphasize the rationale for screening to implementers. In turn, implementation and sustainability are strengthened when providers recognize the value of screening in addressing clinical goals.

As evidenced in several recent trials, screening with minimal service provision is unlikely to influence well-being.^{43,44} Understanding the integration of screening with the support services that follow emerged as a central research gap. Short of the KP model, whose systems approach enables tracking patients after intervention and referral, little research exists on what happens for women after a positive screen, yet tracking this process is central to understanding the impact of screening, as many harm-reduction and safety enhancement steps occur outside of the clinical setting. Implementation research related to service availability, whether or not individuals seek services and why or why not, is likely to support a clearer understanding of the true impact of screening. Screening can be challenging in facilities that do not provide on-site violence support services but can be achieved through strong community partnerships. The relative effectiveness of on-site vs. community resources, what those resources need to include (e.g., legal, housing, counseling, child care), and who should provide them also need to be investigated.

The heterogeneity of outcomes assessed in violence-related trials challenges our ability to comparatively evaluate IPV screening interventions, echoing conclusions from a recent review.¹⁵ The process of reducing IPV can be lengthy, yet the limited follow-up periods supported in many trials compromise our ability to evaluate this end point. Both short-term and long-term outcomes are valuable; measures should be actionable, clinically meaningful, easily assessed, and facilitated if possible by the use of EMRs.¹⁷ Consistently assessing more proximal outcomes, such as contact with IPV support services and taking active harm reduction steps, will allow an understanding of women's trajectories towards the ultimate goals of safety and improved health. Qualitative research with patients to clarify their own perspectives on health and safety can complement quantitative findings to clarify causal pathways. The implementation science framework can help to identify and integrate appropriate process and fidelity outcomes for evaluation research. Adequate funding is necessary to ensure fidelity when successful interventions are implemented more broadly or in new settings. The iterative process of intervention implementation across settings, with refinements and enhancements for specific populations, must be monitored closely to avoid compromised fidelity.

Finally, in recognition of the need for a multidisciplinary approach to prevention, several additional research gaps were identified, including research on abusers and effective interventions for them, the role of social context and norms in abusive behaviors, and the role of other elements of the support system for women (e.g., housing and employment services) and how they may support resilience among women.

Conclusions

Findings from these promising and diverse innovative interventions, coupled with the implementation science framework, provide much needed direction for the implementation of clinic-based IPV screening interventions and the research agenda that will ensure their rigorous evaluation. The implementation science framework is one on which we should rely increasingly as effective pilot interventions are implemented at scale. We recommend multisite, long-term intervention trials that follow women beyond the healthcare setting to understand their use of support services and support development of recommendations for (1) short-term and long-term outcomes that can be harmonized across trials and (2) process outcomes. Finally, the new preventive services requirement for IPV screening and counseling provides an unparalleled opportunity for women's health researchers and advocates to come together to find, implement, and disseminate comprehensive screening and support services to reduce violence and improve women's quality of life. Such packages will have essential elements, such as the screening approaches described here, but will need to be tailored to the context in which the services are provided and the population being served. This is an ambitious agenda, but the proceedings from this conference offer both insights and optimism for moving forward and reducing the burden of IPV that threatens women's health, safety, and well-being.

Acknowledgments

Funding for this activity was made possible in part by the U.S. Department of Health and Human Services (HHS), Office on Women's Health. The views expressed in written materials or publications and by speakers and moderators at HHS-sponsored conferences, do not necessarily reflect the official policies of the Department of Health and Human Services; nor does the mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

Disclosure Statement

The authors have no conflicts of interest to report.

References

- Black MC, Basile KC, Breiding MJ, et al. The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report. Atlanta: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, 2011.
- Ellsberg M, Jansen HA, Heise L, Watts CH, Garcia-Moreno C. Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: An observational study. *Lancet* 2008;371:1165-1172.
- Campbell J, Jones AS, Dienemann J, et al. Intimate partner violence and physical health consequences. *Arch Intern Med* 2002;162:1157-1163.
- Campbell JC. Health consequences of intimate partner violence. *Lancet* 2002;359:1331-1336.
- Centers for Disease Control and Prevention. Adverse health conditions and health risk behaviors associated with intimate partner violence. Atlanta: CDC, 2005.
- Fergusson DM, Horwood LJ, Ridder EM. Partner violence and mental health outcomes in a New Zealand birth cohort. *J Marriage Fam* 2005;67:1103-1119.
- Coker AL, Davis KE, Arias I, et al. Physical and mental health effects of intimate partner violence for men and women. *Am J Prev Med* 2002;23:260-268.
- Maman S, Mbwambo JK, Hogan NM, et al. HIV-positive women report more lifetime partner violence: Findings from a voluntary counseling and testing clinic in Dar es Salaam, Tanzania. *Am J Public Health* 2002;92:1331-1337.
- Gielen AC, Ghandour RM, Burke JG, et al. HIV/AIDS and intimate partner violence: Intersecting women's health issues in the United States. *Trauma Violence Abuse* 2007;8:178-198.
- Breiding MJ, Black MC, Ryan GW. Chronic disease and health risk behaviors associated with intimate partner violence—18 U.S. states/territories, 2005. *Ann Epidemiol* 2008;18:538-544.
- National Center for Injury Control and Prevention. Costs of intimate partner violence against women in the United States Atlanta: Centers for Disease Control and Prevention, 2003.
- American Medical Association. Diagnostic and treatment guidelines concerning child abuse and neglect. Chicago: Council on Scientific Affairs, 1984.
- American Medical Association. Diagnostic and treatment guidelines on elder abuse and neglect. Chicago: Council on Scientific Affairs, 1992.
- Joint Commission on Accreditation of Healthcare Organizations. Accreditation manual for hospitals. Volume 1—standards. Oakbrook Terrace, IL: JC, 1992.
- Nelson HD, Bougatsos C, Blazina I. Screening women for intimate partner violence: A systematic review to update the U.S. Preventive Services Task Force recommendation. *Ann Intern Med* 2012;156:796-808.
- Institute of Medicine. Clinical preventive services for women: Closing the gaps. Washington, DC, The National Academies Press, 2011.
- McCaw B. Using a systems-model approach to improving IPV services in a large health care organization. Preventing violence against women and children. Workshop summary. Washington, DC: Institute of Medicine, 2011.
- National Institutes of Health. Dissemination and implementation research in health (R01). National Institutes of Health.
- Rogers EM. Diffusion of innovations, 5th ed. New York: Free Press, 2003.
- Hill MJ, Hupe PL. Implementing public policy: Governance in theory and practice. London, Thousand Oaks, CA: Sage, 2002.
- Wintemute GJ FS, Vittes KA, Claire BE, Wright MA, Webster DW. Firearms and domestic violence education and intervention project: final report of process and outcome evaluations. Sacramento: Violence Prevention Research Program, University of California, Davis, 2012.

22. Cripe SM, Sanchez SE, Perales MT, et al. Association of intimate partner physical and sexual violence with unintended pregnancy among pregnant women in Peru. *Int J Gynaecol Obstet* 2008;100:104–108.
23. Gao W, Paterson J, Carter S, Iusitini L. Intimate partner violence and unplanned pregnancy in the Pacific Islands Families Study. *Int J Gynaecol Obstet* 2008;100:109–115.
24. Silverman JG, Gupta J, Decker MR, Kapur N, Raj A. Intimate partner violence and unwanted pregnancy, miscarriage, induced abortion, and stillbirth among a national sample of Bangladeshi women. *Br J Obstet Gynaecol* 2007;114:1246–1252.
25. Stephenson R, Koenig MA, Acharya R, Roy TK. Domestic violence, contraceptive use, and unwanted pregnancy in rural India. *Stud Fam Plann* 2008;39:177–186.
26. Pallitto CC, O'Campo P. The relationship between intimate partner violence and unintended pregnancy: Analysis of a national sample from Colombia. *Int Fam Plann Perspect* 2004;30:165–173.
27. Lang DL, Salazar LF, Wingood GM, DiClemente RJ, Mikhail I. Associations between recent gender-based violence and pregnancy, sexually transmitted infections, condom use practices, and negotiation of sexual practices among HIV-positive women. *J Acquir Immune Defic Syndr* 2007;46:216–221.
28. Wingood GM, DiClemente RJ. The effects of an abusive primary partner on the condom use and sexual negotiation practices of African-American women. *Am J Public Health* 1997;87:1016–1018.
29. Williams CM, Larsen U, McCloskey LA. Intimate partner violence and women's contraceptive use. *Violence Against Women* 2008;14:1382–1396.
30. Sales JM, Salazar LF, Wingood GM, et al. The mediating role of partner communication skills on HIV/STD-associated risk behaviors in young African American females with a history of sexual violence. *Arch Pediatr Adolesc Med* 2008;162:432–438.
31. Silverman JG, McCauley HL, Decker MR, et al. Coercive forms of sexual risk and associated violence perpetrated by male partners of female adolescents. *Perspect Sex Reprod Health* 2011;43:60–65.
32. Teitelman AM, Ratcliffe SJ, Morales-Aleman MM, Sullivan CM. Sexual relationship power, intimate partner violence, and condom use among minority urban girls. *J Interpers Violence* 2008;23:1694–1712.
33. McFarlane J, Malecha A, Watson K, et al. Intimate partner sexual assault against women: Frequency, health consequences, and treatment outcomes. *Obstet Gynecol* 2005;105:99–108.
34. Miller E, Decker MR, Reed E, et al. Male partner pregnancy-promoting behaviors and adolescent partner violence: Findings from a qualitative study with adolescent females. *Ambul Pediatr* 2007;7:360–366.
35. Miller E, Decker MR, McCauley HL, et al. Pregnancy coercion, intimate partner violence and unintended pregnancy. *Contraception* 2010;81:316–322.
36. Moore AM, Frohwirth L, Miller E. Male reproductive control of women who have experienced intimate partner violence in the United States. *Soc Sci Med* 2010;70:1737–1744.
37. Miller E, Decker MR, McCauley HL, et al. A family planning clinic partner violence intervention to reduce risk associated with reproductive coercion. *Contraception* 2011;83:274–280.
38. Appel AE, Holden GW. The co-occurrence of spouse and physical child abuse: A review and appraisal. *J Fam Psychol* 1998;12:578–599.
39. Edleson JL. The overlap between child maltreatment and woman battering. *Violence Against Women* 1999;5:134–154.
40. Parrish JW, Young MB, Perham-Hester KA, Gessner BD. Identifying risk factors for child maltreatment in Alaska: A population-based approach. *Am J Prev Med* 2011;40:666–673.
41. Sharps PW, Campbell J, Baty ML, Walker KS, Bair-Merritt MH. Current evidence on perinatal home visiting and intimate partner violence. *J Obstet Gynecol Neonatal Nurs* 2008;37:480–490.
42. McCaw B, Berman WH, Syme SL, Hunkeler EF. Beyond screening for domestic violence: A systems model approach in a managed care setting. *Am J Prev Med* 2001;21:170–176.
43. Wathen CN, MacMillan HL. Health care's response to women exposed to partner violence: Moving beyond universal screening. *JAMA* 2012;308:712–713.
44. Klevens J, Kee R, Trick W, et al. Effect of screening for partner violence on women's quality of life: A randomized controlled trial. *JAMA* 2012;308:681–689.

Address correspondence to:

Michele R. Decker, Sc.D., M.P.H.

Johns Hopkins Bloomberg School of Public Health

615 N Wolfe Street, E4142

Baltimore, MD 21205

E-mail: mdecker@jhsph.edu