Women's Health Issues 24-6 (2014) 584–593

WOMEN'S HEALTH ISSUES
www.whijournal.com

Original article

Intimate Partner Violence and Safety Strategy Use: Frequency of Use and Perceived Effectiveness

Elizabeth M. Parker, PhD, MHS [a,*], Andrea C. Gielen, ScD, ScM [b]

[a] Department of Mental Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland
[b] Johns Hopkins Center for Injury Research and Policy, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland

Article history: Received 11 December 2013; Received in revised form 29 July 2014; Accepted 7 August 2014

A B S T R A C T

Background: There is a need for effective interventions that enable women in current or past violent relationships to reduce their risk of revictimization. One approach that can be taken is safety planning, where advocates and women talk about strategies that theoretically increase the women's safety. Although this process is common, there is little empirical research focusing on the effectiveness of the safety strategies.
Methods: This systematic review examines the frequency with which women report using safety strategies and their effectiveness at reducing risk of revictimization.
Results: Nine studies reviewed confirm prior research, namely, that women in intimate partner violence situations are using a variety of safety strategies at varying frequencies to protect themselves. Results from two studies looking at whether use of safety strategies reduces a woman's risk of future violence provide modest support for a greater risk of revictimization among women who used resistance strategies. Seven studies examined the perceived helpfulness of the strategies. Women who involved other individuals reported that interaction as helpful. There are several limitations to this review, including the focus on perceived helpfulness. What is reported here is not an objective assessment of safety strategy effectiveness. We were also not able to determine whether strategies women reported using were actually discussed during safety planning.
Conclusion: There is a dearth of literature focusing on the effectiveness of safety strategies. Women and advocates talk about safety strategies we know very little about. Additional research examining the consequences of using safety strategies is needed because what is known now is preliminary and limited.

Intimate partner violence (IPV) is a significant and widespread public health problem, with important physical health, mental health, and social consequences that affect not only the victims but also their families and the community. The idea that women are passive recipients of IPV was discounted in the 1980s (Walker, 1984). Since this time, numerous studies have demonstrated that women actively work to protect themselves from IPV through the use of safety strategies (Coker, et al., 2012; Nurius, Macy, Nwabuzor, & Holt, 2011), which are actions that women can take if they plan to stay with their abuser, are planning to leave, or have already left their abuser.

Abused women respond to violence in ways that range from private strategies to control the abuse to more public help seeking (Goodman, Dutton, Weinfurt, & Cook, 2003). Safety strategies can be categorized into six different types, including 1) placating, which consists of strategies meant to change the abuser's behavior without confronting him (e.g., trying not to cry during violence), 2) resistance, which consists of strategies meant to change the abuser's behavior as well as shift the balance of power by challenging his perception of control (e.g., fighting back physically), 3) safety planning, which consists of strategies meant to increase resources and choices for leaving or reducing the risk of future violence (e.g., working out an escape plan), 4) legal, which consists of strategies meant to alter the abuser's behavior by using the legal system (e.g., calling police), 5) formal network, which consists of strategies meant to alter the abuser's behavior or increase resources and choices for leaving through the use of public agencies (non-legal; e.g., staying in a shelter), and 6) informal network, which consists of strategies meant to increase resources and choices for leaving or reducing the risk of future violence (e.g., talking with family; Goodman et al., 2003).

* Correspondence to: Elizabeth M. Parker, PhD, MHS, Department of Mental Health, Johns Hopkins Bloomberg School of Public Health, 624 N Broadway, Baltimore, MD 21205. Phone: (443) 287-8271.
E-mail address: emparker@jhsph.edu (E.M. Parker).

1049-3867/$ - see front matter Copyright © 2014 by the Jacobs Institute of Women's Health. Published by Elsevier Inc.
http://dx.doi.org/10.1016/j.whi.2014.08.001

Women use multiple strategies throughout the duration of their abusive relationships (McFarlane, Groff, O'Brien, & Watson, 2006; McFarlane et al., 2004), in part because safety is a dynamic process, not static.

Prior research has illustrated the need for effective interventions that enable women to prevent revictimization in current or past relationships (Black et al., 2011; Dutton et al., 2006). One approach that can be taken is safety planning, where advocates discuss a set of strategies (with women) that women may use protect themselves and their children physically and emotionally from an abusive partner. One advocate described a safety plan as a tailored and realistic plan to help women avoid threatening situations and know how to react when in danger (The National Domestic Violence Hotline, 2013). A plan should include strategies that help women to stay safe while in the relationship, planning to leave, or after they have left (The National Domestic Violence Hotline, 2013).

Safety planning is an essential component to helping abused women in crisis find safety for themselves (Lindhorst, Nurius, & Macy, 2005). It is a process in which women are able to gather information, evaluate their current situations, decide on the type of advocacy or help they need, and make strategic decisions regarding how they are going to respond (Campbell, 2001; Davies, Lyon, & Monti-Catania, 1998). Most advocates engage in safety planning when working with women in IPV situations; however, not all women in danger reach out to official domestic violence programs for help (Campbell, 2004). For example, the 12-city femicide study found that a majority of the women killed or who were almost killed did not access a shelter or other domestic violence advocacy organization in the year before the incident (Campbell et al., 2003). In comparison, almost half the women were seen by the health care system for something (even unrelated to abuse experienced) during the year prior (Campbell et al., 2003). For this reason, calls to have safety planning available in all systems—criminal justice and health care systems as well as other nontraditional systems—have been made (Campbell, 2004). Yet, although the advocacy community works to increase women's access to safety planning services, there is not agreement on which strategies should be discussed and there is very little empirical research focusing on the effectiveness of the strategies.

Much of the empirical literature has focused on intervention programs targeting victims of IPV, perpetrators of IPV, or both, including criminal justice interventions (e.g., protective orders, mandatory arrest), batterer intervention programs, and health care–based programs (i.e., screening for IPV in clinical settings). Several studies have confirmed that protective orders have a protective effect for women who are victims of partner violence (Kothari et al., 2012; Logan & Walker, 2009, 2010). Although evaluations of batterer invention programs have produced less promising results (Babcock, Green, & Robie, 2004). In comparison, it has been reported that screening women of reproductive age (14–46 years) for IPV is associated with "moderate" health improvements resulting from the reduction of exposure to physical violence, sexual abuse, and psychological abuse (Moyer, 2013).

A review examining what is known about safety strategies, focusing specifically on their effectiveness and perceived helpfulness at reducing risk for revictimization, is needed. Understanding what women in IPV situations do to increase their safety and how effective those strategies are may influence how advocates talk with women about safety strategy use and individual safety strategies. Therefore, the aims of this review are to describe the safety strategies women use, to describe the frequency with which they are used, and to examine the effectiveness or perceived helpfulness of the safety strategies.

Methods

Search Strategy

Systematic methods were used to search CINAHL, Embase, PsychInfo, PubMed, Scopus, and Sociological Abstracts from their start dates through August 2012. A reference librarian was consulted before initiating the search to develop the search strategy. The search strategy was based on two main terms: IPV and safety strategies. Terms related to IPV including domestic violence, battered women, or partner abuse, and terms related to safety strategies including help seeking, helping behavior, or seeking to end violence were also used. Different variations of search terms were used based on the database being searched.

Eligibility Criteria

Eligible studies included those that examined the frequency of safety strategies used by women to protect themselves, as well as the effectiveness of those safety strategies (i.e., perceived helpfulness or effectiveness at reducing risk of revictimization). Additionally, for inclusion, studies had to 1) focus on women in situations of IPV (i.e., victims/survivors), 2) be based in the United Sates, 3) be published in a peer-reviewed journal, 4) be written in English, and 5) present individual-level data. Focus was placed on studies conducted in the United States because of the importance of context when examining safety strategy use. Results or progresses in one country may not be generalizable to other regions or countries where there are differing cultural, political, and religious systems (Sev'er, Dawson, & Johnson, 2004).

Study Selection and Data Extraction

The initial search yielded 2,610 articles. The search was intentionally broad; because of this, many articles were either duplicates or were not relevant. After removal of duplicates, 1,620 articles were retained. Based on a screening of titles and abstracts by one abstractor (E.M.P.) for words or phrases related to women in situations of IPV and safety strategy use, 1,441 articles were deemed ineligible because they did not address the research questions, which focused on the frequency of strategy use and effectiveness or perceived helpfulness of the safety strategies. Full-text articles were obtained for 179 articles that seemed to be eligible based on the title and abstract review.

One abstractor (E.M.P.) read those 179 articles in full and made a determination of inclusion or exclusion. The final review narrowed the set of articles to nine. Figure 1 presents the flow of information through the review phases. Reasons for exclusion included 1) study did not focus on female victims or survivors only ($n = 5$; e.g., male victims/survivors included in sample population), 2) study not based in United States ($n = 55$), 3) article not written in English ($n = 1$); 4) individual-level data not presented ($n = 11$), and 5) frequency and effectiveness/perceived helpfulness data not reported ($n = 30$). Data from the nine articles were abstracted by one author (E.M.P.) using a data abstraction form developed before the full-text review phase that included information on the study objective, study population, methods, results, and limitations. Given the range of studies included in this systematic review, a method similar to

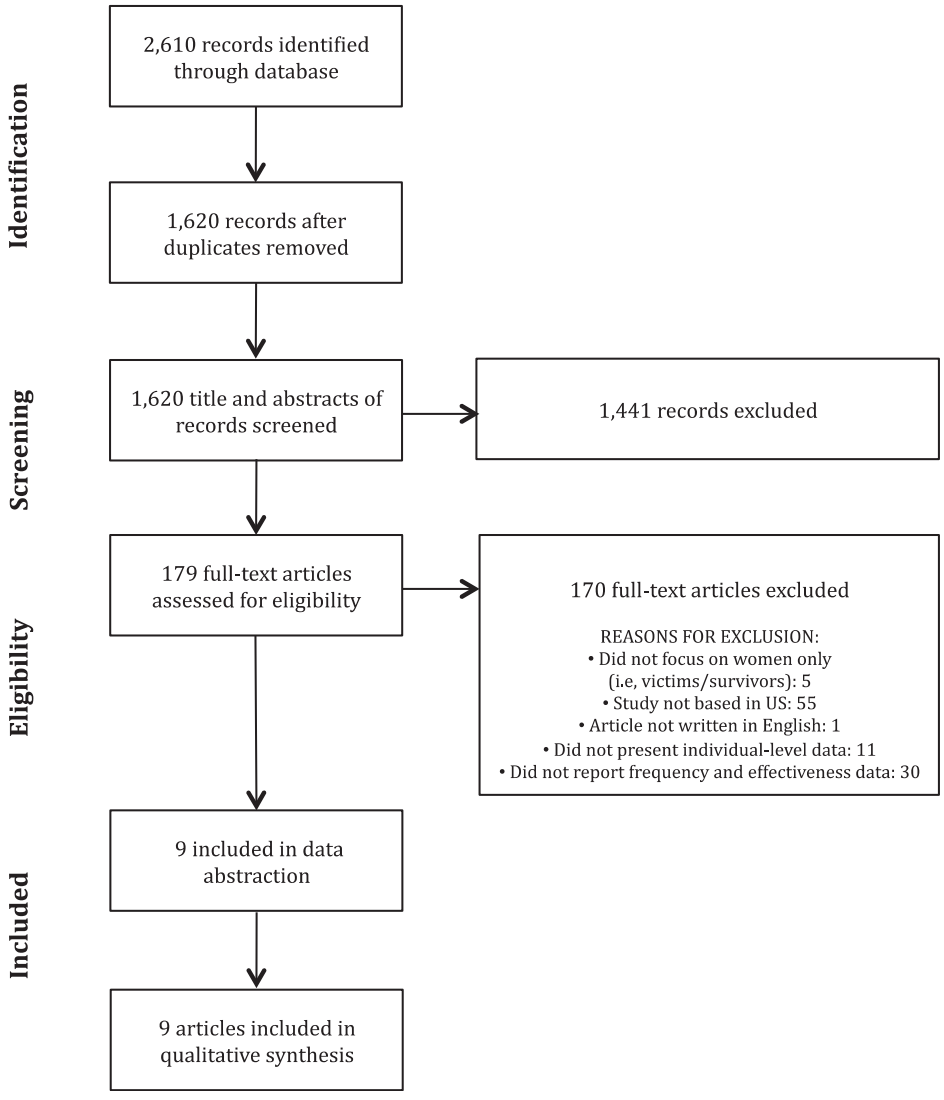

Figure 1. Flow of information through stages of review.

the narrative synthesis technique was used, which allowed for the synthesis of various types of quantitative and qualitative data (Popay et al., 2006). The review was organized and managed using EndNote X3.

Results

Sample Composition

Table 1 presents details of the nine included studies. The studies used research methods that were quantitative (n = 7) and mixed methods (n = 2). The majority of studies were cross-sectional (n = 8) and one study was longitudinal. Sample sizes for the nine studies ranged from 160 to 757. All studies included women who had experienced physical, sexual, or psychological violence. Five studies recruited women from shelters, organizations providing services to women in IPV situations, and medical centers or clinics. Five studies recruited women from court (i.e., filing for protective orders, civil and criminal divisions, domestic violence units). One study recruited women through random-digit dialing.

Measurement of Safety Strategy Use

Use of safety strategies was measured primarily through surveys, which were conducted by telephone, mail, or in person. Safety strategy use was measured using the Intimate Partner Violence Strategies Index (El-Khoury et al., 2004; Goodman, Dutton, Vankos, & Weinfurt, 2005; Goodman et al., 2003), Community Agencies Assessment (Wiist & McFarlane, 1998), or by providing a list of safety strategies and asking women to indicate those they had used (Coker, Derrick, Lumpkin, Aldrich, & Oldendick, 2000; Davies, Block, & Campbell, 2007; Goodkind, Sullivan, & Bybee, 2004; Logan, Shannon, Cole, & Walker, 2006; O'Campo, McDonnell, Gielen, Burke, & Chen, 2002; Shannon, Logan, Cole, & Medley, 2006).

Frequency of Safety Strategy Use

Safety strategies may be categorized into six domains: formal network, informal network, legal, placating, resistance, and safety planning (Goodman et al., 2003). This categorization is used throughout the text. Seven studies examined formal

Table 1
Review of Studies on Intimate Partner Violence, Frequency of Safety Strategy Use, Effectiveness, and Perceived Helpfulness

Study	Sample and Design	Safety Strategy Measure (Time Frame)	Results	
			Frequency of use	Effectiveness/perceived Helpfulness
Coker, 2000	Study design: Cross-sectional, telephone survey Population/source: N = 313, of which n = 55 (20%) women reported ever experiencing physical or sexual IPV • Sociodemographics (n = 55): Age: 18-64 y Race/ethnicity: White: 67%; Black: 33% • Random-digit dial	Definition: Contact with mental or physical health providers or community-based agencies for IPV victims	Among victims of physical or sexual IPV, percent of women who talked with someone about IPV: 87.3% Percent of women who sought help from: • Family member: 69.1% • Friend: 74.5% • Doctor/nurse: 36.4% • Someone at the health department: 7.3% • Mental health counselor/therapist: 45.5% • Support group: 16.4% • DV shelter staff: 10.9%	Of those seeking help from source, percent found source helpful: • Talking to someone: 81.4% • Family member: 71.1% • Friend: 92.7% • Doctor/nurse: 85% • Someone at the health department: 75% • Mental health counselor/therapist: 80% • Support group: 100% • DV shelter staff: 66.7%
Davies, 2007	Study design: Cross-sectional, survey Population/source: N = 500 • Women who reported at least one incident of physical violence or threat of violence at the hands of an intimate partner in the previous year: Less severe: 41%; Severe/life threatening: 57% • Sociodemographics Age: 18-64 Race/ethnicity: African American: 69%; Latina: 21%; Non-Latina White: 8% • Recruited from medical centers	Definition: Seeking help from informal sources (friends, family), counselors or agencies, medical practitioners, and criminal justice system (past year)	By maximum severity of incident(s) in past year, percent of women who contacted police: • Less severe: 21.4% • Severe or life threatening: 40.4%	Among those having police contact, percent who reported police as: • Helpful: 63% • Not helpful: 28% • Helped some and hurt some: 1% • Never received any help: 8%
El-Khoury, 2004	Study design: Cross-sectional, interview or questionnaire (complete onsite or mail-in) Population/source: N = 376 • Battered women • Sociodemographics Average age: 32.5 Race/ethnicity: African American: 86%; Caucasian: 14% • Recruited from domestic violence civil court, domestic violence criminal court, shelter for battered women	Measure: Intimate Partner Violence Strategies Index – formal domain Definition: Formal network—talked to doctor or nurse about abuse, called a mental health counselor, tried to get help from clergy (ever)	Percent of women sought help from: • Doctor/nurse: 35% (African American: 33%; Caucasian: 44%) • Mental health counselor: 29% (African American: 26%; Caucasian: 48%) • Clergy member: 27% (African American: 26%; Caucasian: 35%) • Prayer: 88% (African American: 90.7%; Caucasian: 76.5%)	Mean helpfulness rating on a scale from 1 to 5, where 1 is not at all helpful and 5 is very helpful: • Doctor/nurse (African American: 3.11; Caucasian: 3.01) • Mental health counselor (African American: 3.10; Caucasian: 3.00) • Clergy member (African American: 2.92; Caucasian: 2.78) • Prayer (African American: 4.35; Caucasian: 3.71)

(*continued on next page*)

Table 1 (*continued*)

Study	Sample and Design	Safety Strategy Measure (Time Frame)	Results	
			Frequency of use	Effectiveness/perceived Helpfulness
Goodkind, 2004	Study design: Cross-sectional, in-person interview Population/source: N = 160 • Women had experienced some type of physical violence from an intimate partner or ex-partner in the prior 4 months • Sociodemographics: Average age: 32 Race/ethnicity: Non-Hispanic White: 45%; African American: 38%; Hispanic/Latina: 7% • Recruited from a First Response Agency, Personal Protection Order office, two local DV victim services agencies, an agency offering legal assistance to low-income individuals, and courts	Definition: Strategies employed to proactively keep themselves and their children safe from the abuser's violence	• Of the 28 possible strategies, women reported using an average of 16.19 (range: 6-26, SD: 4.38) • Safety strategy domains assessed include placating, resistance, formal, informal, emergency escape plan, and other (see article for details) Most frequently used strategies by domain. Percent of women who used: • Placating strategies (Tried to avoid abuser at certain times: 90%; did whatever abuser wanted: 81%) • Resistance strategies (Fought back physically: 83%; put weapon where she could get it to protect herself: 48%) • Formal strategies (Contacted police: 92%; talked with someone at a DV program, shelter, or hotline: 68%) • Informal strategies (Talked with family or friends: 73%; stay with family or friends: 67%) • Emergency escape plan strategies (Hid money: 75%; kept important phone numbers to use: 61%) • Other (Tried to talk to abuser about violence: 94%; tried to end relationship: 89%)	Among those using the strategy, percent of women who found it made the situation better: • Placating strategies (Tried to avoid abuser at certain times: 42%; did whatever abuser wanted: 50%) • Resistance strategies (Fought back physically: 24%; put weapon where she could get it to protect herself: 30%) • Formal strategies (Contacted police: 42%; talked with someone at a DV program, shelter, or hotline: 72%) • Informal strategies (Talked with family or friends: 40%; stay with family or friends: 45%) • Emergency escape plan strategies (Hid money: 75%; kept important phone numbers to use: 55%) • Other (Tried to talk to abuser about violence: 28%; tried to end relationship: 35%)
Goodman, 2005	Study design: Longitudinal, in-person and mail-in survey with follow-up every 3 months for a year Population/source: N = 329 • Women who experienced physical violence from their current or former male partner • Sociodemographics Average age: 33 Race/ethnicity: African American: 81%; White: 14%; Other: 6% • Recruited from crisis shelter for women, District Court, Civil Division District Court, Domestic Violence Criminal Docket	Measure: Intimate Partner Violence Strategies Index Definition: Range of strategies women use to deal with the violence in their lives; placating, resistance, informal help sources	Mean number of placating strategies used (3 strategies assessed, including "tried to keep things quiet for him"): 0.7 (SD = 0.4) Mean number of resistance strategies used (6 strategies assessed, including "Fought back physically"): Mean: 0.8 (SD = 0.2)	• High use of resistance strategies associated with an increased risk of reabuse • Resistance strategies contributing to reabuse involved direct confrontation: Fought back physically = OR: 3.2 Slept separately = OR: 1.9, Refused to do what he said = OR: 2.5 Used a weapon = OR: 1.8
Logan, 2006	Study design: Cross-sectional, in person survey Population/source: N = 389 • Women who experienced moderate (26%; no stalking) or severe physical violence (37%; no stalking) or severe physical violence and stalking (37%) in the past year • Sociodemographics Average age: 31 Race/ethnicity: White: 79%; African American: 16%; Other: 5% • Recruited women who had received a DVO against a male intimate partner from four court jurisdictions	Definition: Use of formal, informal, or criminal justice resources (past year)	Percent of women sought help from: • Criminal justice system: 91% (Moderate violence: 90.2%; severe violence: 90.1%; severe violence plus stalking: 94.5%) • Informal resources: 86% (Moderate violence: 89.2%; severe violence: 82.4%; severe violence plus stalking: 88.3%) • Formal resources: 53% (Moderate violence: 48%; severe violence: 55.6%; severe violence plus stalking: 55.9%) See article for details on other safety strategies assessed	Mean effectiveness rating of the protective order on a scale from 0 to 4, where 0 is not at all and 4 is extremely: • Moderate violence: 3.2 • Severe violence: 3.3 • Severe violence plus stalking: 2.8 See article for details on the helpfulness ratings of other safety strategies assessed.
O'Campo, 2002	Study design: Mixed-methods, quantitative interviews and qualitative one-on-one interviews	Definition: What women did to try to keep themselves safe	Percent of women who responded to abusive episode by: Fighting back: 60%;	• Among women who sought medical care for their injuries, few received reactive

	Population/source: N = 390 • Women who reported having experienced any physical or sexual abuse from an intimate partner sometime after 18 years of age • Sociodemographics Age: 18-40+ Race/ethnicity: African American: 95% • Recruited from hospital-based obstetrics and gynecology clinic; outpatient drug treatment center; homeless shelter for women; Healthy Start; and hospital-based HIV primary care clinic		running and hiding: 7.5%; other: 13%; did nothing: 19% Percent of women who received help for abusive episode from: Agencies: 14%; Family: 21%; Friends: 15% Percent of women who received help to leave abusive relationship by: Family: 65%; Friends: 52%; Police: 49%; Agencies: 12%; Welfare: 5%	advice from the help care provider. If advice was given, it was vague. • Among women who called a hotline, few reported helpful experiences, primarily because of the space shortage in shelters • Among those women who sought help from the police, a few reported benefiting from the involvement, while others reported the interactions to be less helpful
Shannon, 2006	Study design: Mixed methods, face-to-face interview with open and closed ended questions Population/source: N = 757 • Women who obtained a protective order against a male intimate partner within 6 years before study entry Severe physical abuse: Rural: 92%; Urban: 86% • Sociodemographics Average age: 32 Race/ethnicity: Majority White (98% rural; 67% urban) • Recruited from court	Definition: Formal and informal resources women may use in dealing with IPV	Percent of women who used criminal justice resources: • Police: Rural: 76%; Urban: 87% • Victims advocate: Rural: 37%; Urban: 70% • Lawyer: Rural: 40%; Urban: 24% Percent of women who used informal resources: • Talked with family: Rural: 76%; Urban: 74% • Talked with friends: Rural: 64%; Urban: 78% Percent of women who used formal resources: • Talked with medical personnel: Rural: 24%; Urban: 22% • Clergy/church: Rural: 18%; Urban: 21% • Women's shelter: Rural: 18%; Urban: 13% • Support groups: Rural: 10%; Urban: 8% • Crisis line: Rural: 5%; Urban: 9% See article for details on other safety strategies assessed.	Mean helpfulness rating on a scale from 0 to 4, where 0 is not at all helpful and 4 is extremely helpful: • Criminal justice resources: Rural: 2.78; Urban: 2.96 • Informal resources: Rural: 2.65; Urban: 2.79 • Formal resources: Rural: 2.61; Urban: 2.56 Criminal justice resources: • Police: Rural: 2.38; Urban: 2.59 • Victims advocate: Rural: 2.86; Urban: 2.93 • Lawyer: Rural: 2.80; Urban: 3.20 Informal resources: • Talked with family: Rural: 2.57; Urban: 2.67 • Talked with friends: Rural: 2.86; Urban: 2.91 Formal resources: • Talked with medical personnel: Rural: 2.43; Urban: 2.70 • Clergy/church; Rural: 2.40; Urban: 2.52 • Women's shelter: Rural: 3.35; Urban: 2.52 • Support groups: Rural: 2.74; Urban: 2.66 • Crisis line: Rural: 3.39; Urban: 2.60 See article for details on the helpfulness ratings of other safety strategies assessed.
Wiist, 1998	Study design: Cross-sectional, in-person interview Population/source: N = 329 • Women who had been abused in the year before or during the current pregnancy by their current or former male partner (punched: 40%; choked: 27%; beat up: 19%) • Sociodemographics Age: 15-42 Race/ethnicity: Hispanic: 100% Recruited from a maternity clinic	Measure: Community Agencies Assessment Definition: Use of resources, e.g. women used 10 different types of community agencies for dealing with abuse (past 12 months)	Women sought help from: • Police: 23% • Church/clergy: 6% • Battered women's group: 3% • Shelter: 3% • Social services: 1% • Legal resources: 1%	Among those who contacted the police, the percent of women who found that the: • Police had been very effective in helping reduce the violence: 51% • Police were somewhat effective: 21% • Police were not effective: 11% • Police made the violence worse: 17%

Abbreviations: DV, domestic violence; DVO, domestic violence order.

network strategies and estimates of their use ranged from 1% to 68% (Coker et al., 2000; El-Khoury et al., 2004; Goodkind et al., 2004; Logan et al., 2006; O'Campo et al., 2002; Shannon et al., 2006; Wiist & McFarlane, 1998). Strategies assessed included talking to a doctor, nurse, counselor, or clergy member; calling a hotline; reaching out to an IPV program/shelter; and participating in a support group. Six studies examined legal strategies and estimates of their use ranged from 1% to 95% (Davies et al., 2007; Goodkind et al., 2004; Logan et al., 2006; O'Campo et al., 2002; Shannon et al., 2006; Wiist & McFarlane, 1998). Legal strategies examined in these studies included contacting police or contacting a lawyer. Five studies examined informal network strategies and estimates of their use ranged from 15% to 89% (Coker et al., 2000; Goodkind et al., 2004; Logan et al., 2006; O'Campo et al., 2002; Shannon et al., 2006). Specific strategies studied included only two—talking to family and talking to friends. Use of resistance strategies was examined in three studies and their use ranged from 8% to 89% (Goodkind et al., 2004; Goodman et al., 2005; O'Campo et al., 2002). Examples of the strategies assessed included fighting back physically, putting a weapon where she could get it to protect herself, trying to end the relationship, and running and hiding. Two studies examined placating strategies and their use ranged from 81% to 90% (Goodkind et al., 2004; Goodman et al., 2005). The strategies examined included trying to avoid the abuser at certain times, doing whatever the abuser wants, and trying to keep things quiet from the abuser. Only one study examined safety planning strategies and use ranged from 61% to 94% (Goodkind et al., 2004). The strategies assessed included hiding money or keeping important phone numbers to use (Table 1).

Effectiveness of Safety Strategies

Risk of revictimization

Two studies examined risk of future violence associated with engaging in safety strategies (Table 1). In the first study, the objective was to examine the strategies battered women use to reduce their risk of future violence and to understand the consequences of employing those strategies (Goodkind et al., 2004). After interviewing 160 women, it was reported that women used on average 16 of the 28 strategies presented to protect themselves (Goodkind et al., 2004). Women who said they had used specific strategies were then asked to report the consequence of their use. The strategies that made the situation better included contacting a domestic violence victim service program (72% said it "made the situation better") and staying at a domestic violence shelter (79% said it "made the situation better"; Goodkind et al., 2004). The strategy that made the situation worse was fighting back physically (52% said it "made the situation worse"; Goodkind et al., 2004). Formal help seeking and escape plan strategies were effective for more than half the women interviewed (Goodkind et al., 2004).

In the second study, the objective was to explore the relationship between women's material and emotional resources and safety strategies and staying safe over time (Goodman et al., 2005). Among 329 women interviewed, it was reported that high use of resistance strategies was associated with an increased risk of reabuse. The specific resistance strategies that contributed to reabuse involved direct confrontation, including fighting back physically (odds ratio [OR], 3.2), sleeping separately (OR, 1.9), refusing to do what he says (OR, 2.5), and using a weapon (OR, 1.8; Goodman et al., 2005).

Perceived helpfulness

Seven studies explored perceived helpfulness of the safety strategies, from the perspectives of the women who had used them (Table 1).

Formal network strategies. Four studies explored the helpfulness of formal network strategies. Shannon and associates (2006) asked women to report on the helpfulness of clergy members, support groups, and medical personnel. Comparing women living in urban settings with women in rural settings, the authors found that women in rural settings believed formal network resources overall were more helpful (mean, 2.61) compared with women in urban settings (mean, 2.56). O'Campo and colleagues (2002) assessed the helpfulness of medical personnel. They found that, among women who sought medical care for their IPV-related injuries, few women said they received advice, and when advice was offered, it was often vague. This contradicts the findings from two studies that also explored helpfulness of medical personnel. First, a study conducted by Coker and associates (2000) reported that 85% of women who spoke with a doctor or nurse found it helpful. Similarly, El-Khoury and co-workers (2004) examined perceived helpfulness of talking to a doctor or nurse and compared African-American help seekers with Caucasian help seekers. Although both groups of women reported the exchange as help, the authors found that African-American women reported talking to a doctor or nurse as more helpful (mean of 3.11 vs. 3.01, respectively; El-Khoury et al., 2004). The helpfulness of talking to a mental health counselor was assessed in two studies; one study found that 80% of women said talking to a counselor was helpful (Coker et al., 2000), and the second study found that African-American women reported talking to a mental health counselor as more helpful than did Caucasian women (mean of 3.10 vs. 3.00, respectively; El-Khoury et al., 2004).

The helpfulness of several other formal network resources was also examined. For example, Coker and associates (2000) asked women about the helpfulness of talking to a support group and 100% reported it as helpful, and talking to domestic violence shelter staff and 67% reported it as helpful. El-Khoury and colleagues (2004) asked women to report on the helpfulness of talking to a clergy member. They found that African-American women viewed clergy members as more helpful than Caucasian women (mean of 2.92 vs. 2.78, respectively). O'Campo and associates (2002) found that, among women who called a hotline, few women said the experience was helpful, specifically because there was a shortage of space in the shelters.

Legal strategies. Five studies examined the perceived helpfulness of legal safety strategies. Three of the five studies assessed the perceived helpfulness of the police specifically and the findings indicate a range of experiences. For example, O'Campo and co-workers (2002) found that, among women who sought help from the police, some believed they benefited from police involvement, whereas others found the interactions to be less helpful. Similarly, Wiist and McFarlane (1998) reported that, among women who had used the police, 51% found them very effective in helping reduce the violence, whereas 17% believed the police made the violence worse. Davies and co-workers (2007) reported comparable results; among those women having police contact, 63% found them helpful and 28% found them not helpful.

Other legal strategies examined include general criminal justice resources and protective orders. For example, the study

by Shannon and associates (2006) looked at perceived helpfulness of criminal justice resources and compared abused women living in urban and rural settings. It was reported that women in urban settings found the resources to be slightly more effective (mean, 2.96) than women in rural settings (mean, 2.78; Shannon et al., 2006). Logan and colleagues (2006) explored the perceived effectiveness of protective orders and found that women experiencing severe violence found protective orders the most effective (mean, 3.3) compared with women experiencing moderate violence (mean, 3.2) or severe violence and stalking (mean, 2.8; Logan et al., 2006).

Informal network strategies. Two studies explored helpfulness of informal network strategies. In the study by Shannon and co-workers (2006), perceived helpfulness of informal networks was examined, and it was reported that women living in urban settings found informal networks more helpful (mean, 2.79) compared with women living in rural settings (mean, 2.65). Similarly, in a study by Coker and associates (2000), it was reported that 71% of women interviewed said talking to a family member was helpful, whereas 93% said talking to a friend was helpful.

Discussion

Through the synthesis of existing literature, we have examined and started to answer three research questions that focus on the safety strategies women in current/past violent relationships use to protect themselves from revictimization, the frequency with which safety strategies are used, and the effectiveness or perceived helpfulness of the safety strategies at reducing risk of revictimization. In some cases, as few as 1% of women reported using a particular strategy, such as contacting social services (Wiist & McFarlane, 1998), whereas close to 100% of women reported using another strategy, including talking to the abuser about the violence (Goodkind et al., 2004). Across nine studies, the most frequently examined strategies included those from the formal network domain, followed by the legal domain and informal network domain. The placating, resistance, and safety planning domains were examined less frequently, in comparison.

The results from the two studies looking at whether use of safety strategies reduces a woman's risk of future violence provide modest evidence, suggesting that resistance strategies do not protect women and may put them at increased risk. These strategies highlighted in the articles involve direct confrontation and include fighting back physically, refusing to do what the abuser says, sleeping separately, and using a weapon. In the only longitudinal study meeting inclusion criteria, Goodman and colleagues (2005) reported resistance as a risk factor for reabuse, even after controlling for severity of violence, use of placating strategies, individual resources, and social resources. Similarly, although the evidence from the study by Goodkind and co-workers (2004) is cross-sectional and descriptive, women interviewed reported that the strategy most likely to make the situation worse was fighting back physically. There are limitations to both of these studies that make the results less generalizable. In the study by Goodman and associates (2005), there was significant loss to follow-up with 19% of the original sample not included in the final interview (time 5). This is particularly important because this group had more severe histories of violence compared with women who were not lost to follow-up. In the study by Goodkind and co-workers (2004), the results are limited by the inclusion criteria (i.e., self-identified battered women with children between the ages of 5–12 years who were recruited from locations where they were receiving assistance).

Seven studies examined the perceived helpfulness or effectiveness of the different safety strategies. Based on the results of the reviewed articles, many women who involved other individuals (i.e., formal network, informal network strategies), including family, friends, doctor or nurse, support group members, or mental health counselor or therapist, reported those interactions as helpful (Coker et al., 2000; El-Khoury et al., 2004; Shannon et al., 2006). In comparison, women who called the police or involved the criminal justice system (i.e., legal strategies) had experiences that varied in terms of their helpfulness. For instance, O'Campo and associates (2002) reported that, among women who sought help from the police, few said they benefited from involving them, whereas others said the interactions were not helpful. In comparison, among the women having police contact who were interviewed by Davies and associates (2007), 63% said they were helpful and 28% said they were not helpful. Women's reports of strategy helpfulness are expected to be dependent on context, specifically the one-on-one interactions. Individual experiences are challenging to account for in a cross-sectional study and likely accounts for part of the variation in reports of helpfulness. Furthermore, women are likely using multiple strategies at one time, which makes determining strategy helpfulness difficult.

During safety planning, women and advocates talk about safety strategies that we know very little about. More research is needed to examine the consequences of using safety strategies because what is known now is preliminary and limited. Furthermore, little is known about the duration of use of safety strategies, the strategies actually discussed with women during safety planning, or whether women use multiple strategies at the same time, which further complicates examining strategy effectiveness. What we have described is a reflection of the current state of the literature; the existing literature does not allow us to make recommendations regarding safety planning or how advocates should talk with women about the strategies.

Limitations

This review is subject to publication bias. It is possible that studies with positive findings are more likely to be published, thereby biasing the results of any systematic review. It is also subject to bias based on the way the studies were selected for inclusion. It is probable that, had the inclusion criteria not been imposed, the number and range of articles included would have been much greater. These excluded articles may have had different findings. The definition of and instruments used to measure safety strategy use were not consistent across studies, which made comparisons challenging. Also, seven of the nine studies examined perceived helpfulness, so what is reported in this review is not an objective assessment of safety strategy effectiveness. Although we talk about safety strategies in the context of safety planning, we were not able to determine whether the strategies women reported using in the included studies were actually discussed during safety planning. Furthermore, women likely used multiple safety strategies at one time (McFarlane et al., 2006; McFarlane et al., 2004), which makes understanding individual strategy effectiveness difficult. Finally, the time frame in which women were using the safety strategies or, more specifically, the time frame in which safety strategy use was measured (e.g., past year, ever, or unspecified),

is another methodological limitation that complicates across study comparisons.

Research Implications

This review has led to several considerations that should be made when designing future studies. First, prospective studies are needed to explore the relationship between safety strategy use and risk of revictimization. We may be talking about safety strategies with women that increase their risk for future violence. Second, the findings from this review relate primarily to a specific subpopulation of women in IPV situations and cannot be generalized to other victims. Many of the studies recruited select populations (e.g., women in shelters, courts). This represents an important subsample of the women using safety strategies, but it overestimates the amount of help seeking women reported. Next, studies examining advocate perspectives on safety strategies, including strategies they believe work for women, as well as strategies they actually discuss during safety planning. This will enable us to understand safety planning and its content from another perspective.

Implications for Policy and/or Practice

This review illustrates the importance of understanding the ways women can act to reduce or escape violent relationships. Advocates should continue to tailor their safety planning conversations to women's individual circumstances and needs. The transtheoretical model may be a relevant theory to use when developing the safety planning interventions in health care settings or at domestic violence service agencies (Prochaska & DiClemente, 1982, 1983). The transtheoretical model would enable advocates to systematically assess a woman's readiness to change and subsequently tailor the safety planning discussions (Burke, Gielen, McDonnell, O'Campo, & Maman, 2001).

The issue of tailoring should be particularly salient given that in 2011, under the authority of the Affordable Care Act, Department of Health and Human Services Secretary Kathleen Sebelius issued new preventive health services guidelines, which included screening and counseling for interpersonal and domestic violence. The United States Preventive Services Task Force later released an update to their 2004 statement, recommending clinicians screen women of childbearing age for IPV, and provide or refer women who screen positive to intervention services (Moyer, 2013). Clinicians may identify women in IPV situations, particularly those who may not have visible signs of the violence they are experiencing, and provide counseling and/or referrals to existing services in the community (Illangasekare & Gielen, 2013). Advocates may also need to be prepared to work with an increased number of women seeking assistance, and they need information on effective ways women can protect themselves.

In conclusion, this review represents the first attempt to summarize the body of literature examining the effectiveness and perceived helpfulness of safety strategies used by women to protect themselves from future violence. In doing so, we have highlighted the limitations of the methodologies found in the existing literature as well as the complex nature of examining safety strategy use and its effectiveness. Although women use a variety of strategies to protect themselves and their children from violence, they should not be expected to stay safe without the help of others. Given this, we would like to recognize the tireless work of advocates, organizations, criminal justice system, and the survivors themselves.

Acknowledgments

This work was supported by the T32 Ruth L. Kirschstein National Service Award Institutional Training Grant (grant no.: HD064428), National Institute of Child Health and Human Development.

References

Babcock, J. C., Green, C. E., & Robie, C. (2004). Does batterers' treatment work? A meta-analytic review of domestic violence treatment. *Clinical Psychology Review*, 23(8), 1023–1053.

Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., et al. (2011). *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.

Burke, J. G., Gielen, A. C., McDonnell, K. A., O'Campo, P., & Maman, S. (2001). The process of ending abuse in intimate relationships: A qualitative exploration of the transtheoretical model. *Violence Against Women*, 7(10), 1144–1163.

Campbell, J. C. (2001). Safety planning based on lethality assessment for partners of batterers in intervention programs. *Journal of Aggression, Maltreatment & Trauma*, 5(2), 129–143.

Campbell, J. C. (2004). Helping women understand their risk in situations of intimate partner violence. *Journal of Interpersonal Violence*, 19(12), 1464–1477.

Campbell, J. C., Webster, D., Koziol-McLain, J., Block, C., Campbell, D., Curry, M. A., et al. (2003). Risk factors for femicide in abusive relationships: Results from a multisite case control study. *American Journal of Public Health*, 93(7), 1089–1097.

Coker, A. L., Derrick, C., Lumpkin, J. L., Aldrich, T. E., & Oldendick, R. (2000). Help-seeking for intimate partner violence and forced sex in South Carolina. *American Journal of Preventive Medicine*, 19(4), 316–320.

Coker, A. L., Smith, P. H., Whitaker, D. J., Le, B., Crawford, T. N., & Flerx, V. C. (2012). Effect of an in-clinic IPV advocate intervention to increase help seeking, reduce violence, and improve well-being. *Violence Against Women*, 18(1), 118–131.

Davies, J., Lyon, E., & Monti-Catania, D. (1998). *Safety planning with battered women: Complex lives/difficult choices*, Vol. 7. Thousand Oaks, CA: Sage.

Davies, K., Block, C. R., & Campbell, J. (2007). Seeking help from the police: Battered women's decisions and experiences. *Criminal Justice Studies: A Critical Journal of Crime, Law & Society, 20* (1), 15–41.

Dutton, M. A., Green, B. L., Kaltman, S. I., Roesch, D. M., Zeffiro, T. A., & Krause, E. D. (2006). Intimate partner violence, PTSD, and adverse health outcomes. *Journal of Interpersonal Violence*, 21(7), 955–968.

El-Khoury, M. Y., Dutton, M. A., Goodman, L. A., Engel, L., Belamaric, R. J., & Murphy, M. (2004). Ethnic differences in battered women's formal help-seeking strategies: A focus on health, mental health, and spirituality. *Cultural Diversity and Ethnic Minority Psychology*, 10(4), 383–393.

Goodkind, J. R., Sullivan, C. M., & Bybee, D. I. (2004). A contextual analysis of battered women's safety planning. *Violence Against Women*, 10(5), 514–533.

Goodman, L., Dutton, M. A., Vankos, N., & Weinfurt, K. (2005). Women's Resources and Use of Strategies as Risk and Protective Factors for Reabuse Over Time. *Violence Against Women*, 11(3), 311–336.

Goodman, L., Dutton, M. A., Weinfurt, K., & Cook, S. (2003). The intimate partner violence strategies index. *Violence Against Women*, 9(2), 163–186.

Illangasekare, S. L., & Gielen, A. C. (2013). Preventing repeat intimate partner violence. In J. Rippe (Ed.), *Lifestyle medicine*. (2nd ed.) Tufts, MA: Wiley-Blackwell.

Kothari, C. L., Rhodes, K. V., Wiley, J. A., Fink, J., Overholt, S., Dichter, M. E., et al. (2012). Protection orders protect against assault and injury a longitudinal study of police-involved women victims of intimate partner violence. *Journal of Interpersonal Violence*, 27(14), 2845–2868.

Lindhorst, T., Nurius, P., & Macy, R. J. (2005). Contextualized assessment with battered women: Strategic safety planning to cope with multiple harms. *Journal of Social Work Education*, 41(2), 331–352.

Logan, T. K., Shannon, L., Cole, J., & Walker, R. (2006). The impact of differential patterns of physical violence and stalking on mental health and help-seeking among women with protective orders. *Violence Against Women*, 12(9), 866–886.

Logan, T. K., & Walker, R. (2009). Civil protective order outcomes violations and perceptions of effectiveness. *Journal of Interpersonal Violence*, 24(4), 675–692.

Logan, T. K., & Walker, R. T. (2010). Civil protective order effectiveness: justice or just a piece of paper? *Violence and Victims*, 25(3), 332–348.

McFarlane, J., Groff, J. Y., O'Brien, J. A., & Watson, K. (2006). Secondary prevention of intimate partner violence: a randomized controlled trial. *Nursing Research*, 55(1), 52–61.
McFarlane, J., Malecha, A., Gist, J., Watson, K., Batten, E., Hall, I., et al. (2004). Increasing the safety-promoting behaviors of abused women. *American Journal of Nursing*, 104(3), 40–50.
Moyer, V. A. (2013). Screening for intimate partner violence and abuse of elderly and vulnerable adults: A US Preventive Services Task Force Recommendation Statement. *Annals of Internal Medicine*, 158(6), 478–486.
Nurius, P. S., Macy, R. J., Nwabuzor, I., & Holt, V. L. (2011). Intimate partner survivors' help-seeking and protection efforts: A person-oriented analysis. *Journal of Interpersonal Violence*, 26(3), 539–566.
O'Campo, P., McDonnell, K., Gielen, A., Burke, J., & Chen, Y. (2002). Surviving physical and sexual abuse: what helps low-income women? *Patient Education & Counseling*, 46(3), 205–212.
Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., et al. (2006). Guidance on the conduct of narrative synthesis in systematic reviews. A product from the ESRC Methods Programme. Retrieved June 2, 2014, from http://www.lancaster.ac.uk/shm/research/nssr/research/dissemination/publications/NS_Synthesis_Guidance_v1.pdf.
Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrated model of change. *Psychotherapy: Theory, Research and Practice*, *19*, 276–288.
Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology*, 51, 390–395.
Sev'er, A., Dawson, M., & Johnson, H. (2004). Guest editor's introduction: Lethal and nonlethal violence against women by intimate partners: Trends and prospects in the United States, the United Kingdom and Canada. *Violence Against Women*, 10(6), 563–577.
Shannon, L., Logan, T., Cole, J., & Medley, K. (2006). Help-seeking and coping strategies for intimate partner violence in rural and urban women. *Violence and Victims*, 21(2), 167–181.
The National Domestic Violence Hotline. (2013, April 10, 2013). What is safety planning? Retrieved February 28, 2014, from http://www.thehotline.org/2013/04/what-is-safety-planning/.
Walker, L. (1984). *The battered women's syndrome*. New York: Springer.
Wiist, W. H., & McFarlane, J. (1998). Utilization of police by abused pregnant Hispanic women. *Violence Against Women*, 4(6), 677–693.

Author Descriptions

Elizabeth M. Parker, PhD, MHS, is a postdoctoral research fellow in the Department of Mental Health at the Johns Hopkins Bloomberg School of Public Health. Her areas of interest include injury prevention and substance use.

Andrea C. Gielen, ScD, ScM, is a Professor in the Department of Health, Behavior and Society and Director of the Johns Hopkins Center for Injury Research and Policy at the Johns Hopkins Bloomberg School of Public Health. Her research expertise is in injury prevention and the development and evaluation of community and clinic-based programs that address health behavior problems.