Intimate partner violence (IPV) is increasingly being recognized as a major public health issue in the United States and internationally, representing a significant source of premature morbidity and mortality among women. Intimate partner violence adversely affects victims’ children and families and the communities in which they live. Women who experience intimate partner violence are at risk for unwanted pregnancies, sexually transmitted infections and HIV. Intimate partner violence against women increases long-term risks of various other adverse health conditions, including chronic diseases, physical disability, drug and alcohol abuse, and depression. The relationship between intimate partner violence and adverse health outcomes is direct, indirect and reciprocal.

The Debate around Screening for Intimate Partner Violence

Because of the growing body of evidence that intimate partner violence is a significant cause of morbidity and mortality, several medical care associations have recommended that healthcare professionals screen either all women, termed universal screening, or specific high-risk groups, termed targeted screening, for intimate partner violence. Thus, for example, the American College of Obstetricians and Gynecologists (ACOG) currently recommends that all pregnant women be screened for current experience of intimate partner violence; the American Medical Association (AMA) also currently recommends that health providers routinely inquire about

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family violence and be familiar with the available interventions to reduce its impact and/or to terminate the violence.\textsuperscript{13,14} Until recently, many accepted the proposition that screening for intimate partner violence “will increase identification of women who are experiencing violence, lead(ing) to appropriate interventions and support, and ultimately decreasing exposure to violence and its detrimental health consequences, both physical and mental.”\textsuperscript{15} However, whether screening for intimate partner violence is effective in reducing subsequent exposure to violence and therefore ought to be conducted in healthcare settings has become the subject of intense debate in recent years.\textsuperscript{15-32}

The first of two major review articles to question whether screening is effective was published in the British Medical Journal (BMJ) in 2002 and the second in the Journal of the American Medical Association (JAMA) in 2003.\textsuperscript{33,34} The JAMA article focused solely on whether evidence exists that interventions prevent future abuse from occurring. The BMJ review evaluated the same question and added two others: whether screening for IPV is acceptable to patients and whether valid screening instruments exist. The BMJ review concluded that while screening was acceptable to the majority of female patients (ranging from 50 to 75%) and screening programs improved identification rates, the evidence that interventions caused a reduction in the occurrence of violence was sparse. The BMJ review focused solely on healthcare setting-based interventions and could locate only six studies that met their review inclusion criteria. Of these six studies, only two used re-victimization as an outcome, with the better designed study finding that the intervention decreased rates of violence.\textsuperscript{35} The BMJ review concluded that implementation of screening programs could not be justified until further evidence of benefit and lack of harm from interventions was gathered.

The JAMA review article included perpetrator-focused (batterers intervention programs and criminal justice policies), victim-focused (shelter and healthcare system-based) and social intervention studies. Using similarly strict inclusion criteria as the BMJ review, just two healthcare system-based and victim-focused studies met the JAMA review’s inclusion criteria, only one of which was included in the BMJ review. Both of the studies reviewed found that interventions with pregnant women with a history of abuse resulted in less re-victimization at follow-up.\textsuperscript{36} However, both studies were, according to the review, methodologically flawed and therefore provided limited evidence of the effectiveness of interventions to prevent intimate partner violence. The JAMA review concluded that the lack of evidence of the benefits of interventions for intimate partner violence is due largely to a lack of well-designed studies. Overall, both reviews highlighted the poor quality of existing research evaluating programs designed to respond to women who have experienced intimate partner violence, and the use of randomized controlled clinical trials (RCT) to properly evaluate the impact of the interventions. Both reviews suggested improvements would include multiple sources of information on outcomes, such as police or medical record reports in addition to respondent self-reports.
USPSTF Recommendation on Screening for Intimate Partner Violence

In a report that was issued in early 2004 and cited the two review articles just described, the United States Preventive Services Task Force (USPSTF), a group of experts convened by the US Public Health Service to systematically review the evidence of effectiveness and develop recommendations for clinical preventive services, found insufficient evidence to recommend for or against screening for intimate partner violence. The USPSTF recommendation was based on the conclusion that there existed a lack of evidence that screening for intimate partner violence resulted in decreased disability and death; additionally, the report concluded that screening instruments for intimate partner violence have not been validated against “measurable outcomes” and the potential harm that screening may cause had not been adequately evaluated. The recommendation was similar to that issued by the agency in 1996, despite a significant increase in the number of studies that had been conducted and published assessing the acceptability, feasibility and effectiveness of screening and subsequent interventions, and the adoption of screening recommendations by several major medical associations (e.g., ACOG and AMA).

The USPSTF recommendation, which came on the heels of the JAMA and BMJ reviews, was consistent with the thrust of the two reviews; taken together the documents suggest that the recent trend to institute screening protocols for intimate partner violence in medical care is premature. This is in contrast to a growing movement over the past ten years to integrate systematic responses to intimate partner violence into the healthcare system via screening and referral protocols. This movement, developed jointly by healthcare providers who were concerned about the effects of intimate partner violence on their patients and battered women’s advocates who saw the healthcare system as a potentially powerful system to engage in their work to end intimate partner violence, began in the late 1970s and had made strong inroads into the healthcare system and medical establishment. Consequently, the recommendation and the review articles received a strong response from those who have been developing, implementing, studying and advocating for healthcare system-based interventions for women who experience intimate partner violence.

The Response to the USPSTF Recommendation

The JAMA and BMJ reviews and the USPSTF recommendation received numerous and vigorous responses via electronic and written mail. Several letters to the editor rebutted the evidence upon which they were based. The USPSTF recommendation, when it first appeared in the Annals of Internal Medicine, was accompanied by a compelling counter-argument by a practicing physician who argued that applying a medical screening model to the issue of intimate partner violence was ill-advised and that “robotic devotion to evidence-based medicine risks dehumanizing certain aspects of doctoring.” In addition, the Family Violence Prevention Fund (FVPF), an advocacy and research orga-
zation dedicated to eliminating family violence, published a document on its website authored by a group of healthcare professionals and researchers who are considered experts in the field of domestic violence and child maltreatment, and who were given the opportunity to review and comment on a draft version of the USPSTF recommendations. The paper critiqued point-by-point the bases for the lack of a recommendation for screening and pointed out that the recommendations were inconsistent with the USPSTF recommendations on similar social conditions that have profound health consequences, like alcohol, drug and tobacco use among adolescents.51

In terms of the validity of screening instruments, the FVPF expert-authored paper cited several studies that established the reliability and validity of various screening instruments as compared with the Conflict Tactics Scale, which has become something of a gold standard in the field where few can agree as to what exactly constitutes intimate partner violence; the authors also pointed out that less widely validated screening tools had been recommended by the USPSTF for behavioral health issues such as adolescent alcohol, drug and tobacco use.52-56 In addition, the USPSTF recommendations were based in part on the fact that “no studies have evaluated the performance of screening instruments using verified outcomes of reported intimate partner abuse”; yet, empirical data consistently reveals that few incidents of intimate partner violence come to the attention of the criminal justice or healthcare professionals.57,58 The suggestion that screening could potentially cause harm was particularly troubling to the group; the authors cited several studies that report that women are in favor of screening and wish that their providers would ask them about it.59 The group concluded that rather than causing harm, not asking about intimate partner violence represents missed opportunities to prevent further harm, citing a study of female homicide victims that found that over half of the women killed by their intimate partners had sought medical care in the year prior to their murders.

In terms of the sparse evidence of the effectiveness in reducing re-victimization, the authors criticized the USPSTF for placing undue emphasis on the evidence provided by RCTs, which are extremely difficult to justify conducting to ethics panels and institutional review boards who may have a hard time seeing how screening for or interventions to address intimate partner violence could ethically be denied any patient. In terms of what evidence does exist, the group suggested that the recommendations were made in the absence of data from at least one potentially important RCT, funded by the Agency for Healthcare Research and Quality, designed to assess the impact of screening for intimate partner violence on health outcomes, including reduced re-victimization. Finally, the group proposed that the “public health benefit” of screening be considered, as opposed to the immediate or even long-term impact it might have on any individual patient; they maintain that this is consistent, for example, with USPSTF recommendations that clinicians counsel patients about unintended pregnancy, where the clinician’s ability to influence the patient’s behavior is limited.
Alternative Screening Models: Implications for the USPSTF Recommendations

The USPSTF position is based on a medical screening model where the goal is to identify asymptomatic patients who have or are at risk for a specific disease or condition. The FVPF group of experts suggested that the USPSTF adopt standards that they currently apply to behavioral assessments, which would expand the outcomes examined from death and disability to include more intermediate ones, such as improved social support, improved relationships with children and/or decreased frequency or severity of violence. Alcohol misuse, for example, is associated with various health problems and premature mortality and while there is some evidence that brief interventions reduce the amount of alcohol consumed, there is little evidence that this translates into reduced morbidity or mortality. Despite this, the USPSTF recommends screening and behavioral counseling interventions to reduce alcohol misuse among adults. Yet even a behavioral screening model assumes that the patient has some degree of control over the behavior that leads to an adverse health outcome and may therefore directly reduce its occurrence. However, with intimate partner violence, the violence directed at a patient is most often not within the patient’s control; the patient may engage in some behaviors that reduce the chance of exposure to such violence, such as leaving the relationship or seeking shelter, but there is no behavior that the patient engages in that actually causes the violence.

The cause of the violence is external to the patient and resides in her environment, particularly her social environment. It is for this reason that I argue that a more appropriate application of a screening model to the issue of intimate partner violence would be a model that screened for environmental hazards, such as lead exposure. In this model, the exposure is an environmental toxin that may be detected via screening for biomarkers (e.g., blood lead levels) and/or behaviors (e.g., behavioral problems) and consequently limited or avoided with appropriate environmental or structural interventions and supports that are based largely in the community, but may involve some behavior change on the part of the patient. From this perspective, until the mother can remove her family from the contaminated apartment with the peeling leaded paint, she can attempt to keep the paint chips from reaching her child’s mouth. Similarly, until a woman who experiences intimate partner violence can leave a relationship or the partner has stopped enacting violence, she may engage in some behaviors that may increase her level of safety. But just as the tenant of substandard housing has no true control over when a piece of leaded paint peels and falls within reach of her child, a battered woman cannot actually control the source of the violence, be it her husband, lover or relative. Thus, applying either a medical or behavioral screen to the experience of intimate partner violence assumes that identifiable patient-level behavioral or sociodemographic factors predict the experience of violence. This assumption is in direct contrast to empirical research from two large case-control studies conducted in North American emergency rooms,
which revealed that risk factors for injury by intimate partners consisted largely of male partner characteristics, as opposed to female victim characteristics, such as history of arrest, substance abuse and low socioeconomic status.64,65

Conceptualizing intimate partner violence as an environmental hazard may reduce resistance to screening or identification by relieving the pressure that healthcare professionals feel to “cure” the problem of intimate partner violence. If it is communicated that their role is simply to identify patients and refer them to other agencies that are responsible for intervening at the environmental level, health care professionals may be less resentful of the burden that identification places on them. Further, framing intimate partner violence as a behavioral issue suggests that it is the behavior of the patient which causes the health problems; this encourages an extant attitudinal stance that many in our society take, healthcare providers included, which is to blame the victim of the violence for the violence or think that it is a private matter.66 While reframing the issue will not change the attitudes of healthcare providers who do believe that women who experience intimate partner violence are in some way responsible for it, it may encourage other providers, who are reluctant to screen due to time constraints or feelings of responsibility for all aspects of their patients lives to address the issue.

Finally, if an environmental screening model were applied to intimate partner violence, the USPSTF may be more likely to evaluate the evidence in such a way that they would recommend screening, as they have for elevated blood lead levels among children at increased risk of lead exposure. Despite similarly weak study designs and evidence of only moderate impacts of screening on clinical outcomes, the USPSTF has recommended that asymptomatic children at risk be screened.67 The recommendation is based “on a chain of evidence constructed from studies of weaker design.” Thus, because of the existence of both elevated lead levels in certain areas in the U.S. and reliable and “reasonably” valid blood lead level screening measures, in combination with the significant adverse effects on neurodevelopment that even low blood lead levels have, the USPSTF recommends screening asymptomatic children at high risk of exposure. This is despite their conclusion that the evidence of the effectiveness of interventions is limited; for example, “the quality of evidence supporting their effectiveness is weak and the beneficial effect on IQ or other clinical outcomes has not yet been demonstrated.” Thus, while chelation therapy is the standard of care for acute lead poisoning, the evidence of its long-term effects on blood level levels is weak; similarly, the USPSTF found weak evidence of the impact of residential lead hazard control and lead abatement on mean blood lead levels. Further, the USPSTF recognized that abatement has a limited effect due to the fact that at-risk families move so often.

Conclusions

Screening for intimate partner violence has become the center of a contentious debate for a variety of reasons. These include increased pressures on healthcare providers to address a wide range of biological and social issues, emphasis on
practicing evidence-based medicine, and the desire of the advocates in the battered women's movement to engage the powerful healthcare system in the fight to eliminate family violence. At the center of the debate is whether screening for such violence reduces subsequent violence and subsequently improves health outcomes. An important contributor to the centrality of this question is the approach one takes to the issue, whether one applies a medical, behavioral or environmental screening model. In this paper, I argue that applying an environmental hazard screening model is the best fit for the issue and may result in greater ease of adoption by reluctant healthcare professionals and increased likelihood of receiving recommendations from the USPSTF. From the perspective of an environmental hazard screening model, the illogic of proposing that mere screening for exposure actually causes a reduction in the amount of the toxin in the environment becomes apparent. Conceptualizing a patient's social environment as potentially full of hazardous exposures and accepting the limits of what identification of these exposures can achieve may be the key to moving away from a contentious and divisive debate and towards sound clinical practice.

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